# Profile of Teaching Departments

As On March 2017



# Central University of Haryana

Jant-Pali, Mahendergarh, Haryana

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Designed and Printed by : Deeya Media Art

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## **CENTRAL UNIVERSITY OF HARYANA**

#### **SCHOOLS AND DEPARTMENTS**

No.	Schools	Departments	Page
1	School of Arts, Humanities and Social Sciences	i. Political Science	01
		ii. Economics	10
		iii. Education	20
		iv. History and Archeology	36
		v. Psychology	39
		vi. Sociology	42
2	School of Language, Linguistics, Culture and Heritage	i. English & Foreign Languages	51
		ii. Hindi & Indian Languages	68
		iii. Tourism & Hotel Management	77
3	School of Law, Governance, Public Policy and	i. Management Studies	87
	Management	ii. Commerce	98
		iii. Law	104
4	School of Chemical Sciences	i. Chemistry	111
5	School of Computer Science and Informatics	i. Library & Information Science	129
		ii. Computer Science	131
6	School of Physical and Mathematical Sciences	i. Physics	139
		ii. Statistics	156
		iii. Mathematics	162
7	School of Earth, Environment and Space Studies	i. Environmental Sciences	173
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8	School of Journalism, Mass Communication and Media	i. Journalism & Mass Communication	191
9	School of Interdisciplinary and Applied Life Sciences	i. Biochemistry	199
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10	Deen Dayal Upadhyay Kaushal Kendra		231
11	School of Engineering and Technology		241

# SCHOOL OF ARTS, HUMANITIES AND SOCIAL SCIENCES

Department of Political Science
Department of Economics
Department of Education
Department of History and Archeology
Department of Psychology
Department of Sociology

# > SCHOOL OF ARTS, HUMANITIES AND SOCIAL SCIENCES

- Department of Political Science
- Department of Economics
- Department of Education
- Department of History and Archeology
- Department of Psychology
- Department of Sociology

#### **Department of Political Science**

The Department of Political Science was established in the year 2009. It is a part of School of Arts Humanities and Social Sciences. The Department is offering M. Phil. and Ph.D. since 2009 and M.A. since 2014. The department focuses on interdisciplinary studies especially in the area of Public Policy, Environment and Development, Peace and Conflicts, Gender studies, Human Rights, New world order and offers several interdisciplinary courses such as Political Economy of India, Political Sociology, Research methodology (for social sciences), Introduction to Public Administration, Indian National Movement. The interdisciplinary focus of the department is reflected in its research output.

Centre for Interdisciplinary Research on Federalism and Decentralization (CIRFED)

The Department has established a Research Centre: Centre for Interdisciplinary Research on Federalism and Decentralization (CIRFED). Its Inaugural Conference was held on 30<sup>th</sup> Sept and 1<sup>st</sup> October 2016. The Research Centre will operate in collaboration with Political Scientists and Economists based at the University of Edinburgh, Scotland, U.K. and German Institute of Global and Area Studies (GIGA), Hamburg Germany.

#### **Programme Offered and Number of Seats**

The Department is offering M. Phil. and Ph.D. since 2009 and M.A. since 2014. The programme-wise Student -Teacher ratio for M.A., M.Phil. and Ph.D. is 25: 3; 10: 3 and 12: 3 respectively. M.A.: 25 seats; M.Phil. 10 seats; PhD: as and when vacant.

#### **Scheme of the Course**

#### M.A. (Political Science)

#### Semester- I

Sr. No.	Paper code	Paper Name	Credit	Core/Elective
1	SSH POS01(101)C5005	Political Theory-I	5	Core
2	SSH POS01(102) C5005	Western Political Thought-I	5	Core
3	SSH POS01(103) C5005	Comparative Political Analysis	5	Core
4	SSH POS01(104) C5005	Indian Political System	5	Core
5		To be taken from other Department		Generic Elective

#### Offered to other Departments:

6	SSH POS01(105)GE4004	Indian National Movement	4	Generic Elective
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#### **Semester -II**

SI NO	Paper code	Paper Name	Credit	Core/Elective
7	SSH POS01(106) C5005	Political Theory-II	5	Core
8	SSH POS01(107) C5005	Western Political Thought-II	5	Core
9	SSH POS01(108) C5005	Comparative Political Institutions	5	Core
10	SSH POS01(109) C5005	Contemporary Issues in Indian Politics	5	Core
11	SSH POS01(110)GE2002	Introduction to Indian Constitution (compulsory)	02	Generic Elective
12	SSH POS01(111)E4004	(choose any one) (i) Political Economy of India (ii) Foreign Policy of India (iii) Introduction to Public Administration	04	Elective

### Offered to other Departments:

	13	SSH POS01(110)GE2002	Introduction to Indian Constitution	02	Generic Elective
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#### Semester -III

Sl.	Paper code	Paper Name	Credit	Core/Elective
NO				
14	SSH POS01(112) C5005	International Relations	5	Core
15	SSH POS01(113) C5005	Research Methodology	5	Core
16	SSH POS01(114) C5005	Political Ideologies	5	Core
17	SSH POS01(115)E2002	Seminar Paper (compulsory)	2	Elective
18	SSH POS01(116)E4004	(choose any one) (iv) Federalism in India (v) Local Self-Government in India (vi) Political Sociology (vii) Indian Political Thought	4	Elective
19		To be taken from other Department		Elective

#### Offered to other Departments:

20	SSH POS01(117)GE4004	Politics in India	4	Generic Elective
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#### Semester- IV

Sl. NO	Paper code	Paper Name	Credit	Core/ Elective
21	SSH POS01(118)C240024	Dissertation	24	Core

#### M.PHIL / PH.D PROGRAMME

#### **Course Work – 12 Credits; Dissertation – 12 Credits**

Sl. NO	Paper code	Paper Name	Credit	Core/Optional
1	SSHPOS02 (201) C6006	Theory and Methods of Research in Social Sciences	6	Core
2	SSHPOS02 (202) C6006	Political Science: Text, Boundaries and Critical Challenges	6	Core

#### **Admission Criteria and Procedure**

The admission criteria are uniform across all the departments of the university. The students are selected on the basis of score of CUCET examination

#### **Brief Faculty Profile**

#### 1. Prof. Satish Kumar Singh

Qualification: M.A., M.Phil, Ph.D (JNU) Experience: 15 years of regular teaching Specialization: International Relations

D 1.C.1	Ph.D	07
Research Guidance	M.Phil	10
Book		04
Monograph	01	
Chapters in Books	08	
Paper in seminar Proceedings	04	
Research Articles	40	
Popular Articles(in newspaper ar	2000	
Invited Lectures	07	
International Seminar	15	
National Seminar		20

#### 2. Dr. Chanchal Kumar Sharma

Assistant Professor, Dept. of Political Science

**Qualification:** M.A. M.Phil., Ph.D. (JNU and KUK)

**Experience:** 19 years of regular service (2.5 years as Associate Professor) **Specialization:** India's Political Economy, Federalism and Party System

Number of papers published in peer reviewed journals (national / international)	25
Chapters in Books	05
Books with ISBN with detail of publishers Signed contract with Palgrave MacMillan, U.K. for writing book on Indian Politics	01
Number listed in International Database (For e.g. Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.)	12
Invited Lectures	22
Citations	260
Impact Factor - range / average	2.34
h-index	07

# Citation indices (Google Scholar) as on 19.10.2016

	All	2008-13	2009-14	2011-15
Citations	260	141	134	180
h-index	7	6	6	7
i 10-index	7	5	5	7

#### Research Projects/Fellowships

#### ICSSR sponsored Major Research Project (Rs. 10 Lakh)

Project Title: Regional Disparities and Intergovernmental Transfers in the era of Economic Reforms and Coalition Government

#### **International Project (U.K.)**

Partner and Co-investigator in Leverhulme International Network Grant (U.K.) on Continuity and Change in Indian Federalism through the University of Edinburgh, Scotland (U.K.). The project financed trips to Edinburgh, Bristol, Brighton, and Glasgow (travel grant including food and accommodation).

#### GIGA Fellowship for Research on India (Hamburg, Germany), 2017

Awarded GIGA research fellowship for research on India from January to June 2017 at German Institute of Global and Area Studies.

#### **Major Contributions to the Literature**

*Dr. Sharma* has introduced two new concepts of Public Finance: Vertical Fiscal Difference and Vertical Fiscal Asymmetry (published by Blackwell, Oxford, in its journal *Public Administration*). He has also proposed a 'Discursive Dominance Theory of Economic Reform Sustainability' (published by Routledge, U.K. in its journal *India Review*). In his forthcoming paper, he has attempted to test theories of Pork Barrel Politics in Indian context. The findings of this paper add to the existing debates on core *versus* swing voting hypotheses.

#### Professional Services to Journals as Guest Editor, Reviewer and Editorial Board Member

- 1. Guest Editor of the forthcoming Special Issue of India Review (Taylor and Francis & Routledge)
- 2. Canadian Journal of P.olitical Science, Cambridge University Press
- 3. Asian Social Science, Canada;
- 4. Journal of Political Science, Pakistan
- 5. South Asian Journal of Socio-Political Studies, India;
- 6. Aryabhatta Journal of Mathematics and Informatics, India.

#### **Invited Academic visits abroad**

- 1. Invited for a workshop at the Institute of South Asian Studies, University of Edinburgh, Scotland, U.K. May 2014
- 2. Invited by Department of Political Science, G.C. University Lahore, Pakistan to deliver Keynote Address and Chair a technical session at International Conference on 'Representation of Local Power in South Asia' 14 November 2014.
- 3. Invited to present a paper and Chair a technical session at University of Bristol, December 2015.
- 4. Invited to present paper as a Panelist in the PSA Conference, University of Brighton, March 2016.
- 5. Invited as a Guest Researcher (Post-Doctoral Researcher) for research on India by GIGA, Hamburg, Germany (from Jan 2017 to June 2017).

#### 3. Dr Rajeev Kumar Singh

**Assistant Professor** 

Qualification: M.A. Ph.D. (BHU)

**Experience:** 5 years of Teaching & two years as Post-Doctoral Fellow (ICCSR) **Specialization:** Minority Politics, International Relations, Social exclusion

Number of papers published in peer reviewed journals (national / international)		
Chapters in Books	04	
Book with ISBN with details of publishers	01	
Invited lecture	02	
Seminar/Conference (national/international)	25	

#### **Research Projects**

ICSSR sponsored Major Research Project (Rs.8.0 Lakh): Project Title: Human Security and Conflict: A comparative study of Mahendergarh and Soanbhadra district of Haryana and Uttar Pradesh"

#### **Invited Academic visits abroad**

Attended one-week training program on "Leadership in Higher Educational Institute', leadership foundation, Birmingham U.K. under UKIERI project

#### 4. Dr. Raghvendra Pratap Singh

Qualification: M.A. Ph.D. (DDU, GKP U GKP & LUL)

**Experience:** 7 years of Teaching Experience

**Specialization:** Indian Government and Politics, New Role of the Supreme Court of India, Indian

Political Thought

Number of papers published in Research journals (National / International)	15
Chapters in Books	03
Study Material Prepared: On "Indian Government and Politics"	01
Invited lecture	01*
Seminar/Conference (National/International)	12

Invited to present paper as a Panelist in the National Seminar on "Integral Humanism in Indian Thought," India Foundation, New Delhi, September 2016.

#### **Departmental Infrastructure**

The department has well equipped, classrooms and faculty rooms with computer, internet and printing facility. One room is dedicated for research activities of the Centre for Interdisciplinary Research on Federalism and Decentralization (CIRFED).

#### **Research Thrust Area of Department (Details of Research Scholars and Areas of interest)**

#### M. Phil. (Political Science)

Sr. No.	Roll No	Session	Name	Supervisor	Research Topic	Submitted / Awarded
1.	2007	2009-10	Ruchika	Dr. Ravindra   Implementation of MNREGS: A		Awarded
				Singh Case Study of Bhiwani District		
2.	1901	2012-13	Satrughan	Dr. Satish	Implementation of Right to	Awarded
				Kumar	Education Act, 2009 under Sarva	
					Shiksha Abhiyan: An analytical	
					study of Mahendergarh District,	
					Narnaul Block	
3.	2502	2009-10	Jyoti Sharma	Dr. Ravindra	Socio-Economic Profile of Women	Awarded
				Singh	Sarpanches: A Case Study of Alwar	
					District in Rajasthan	
4.	1202	2011-12	Sneh Lata	Dr. Satish	Participation of Women in	Awarded
				Kumar	Panchayati Raj Institutions: A Study of Gurgaon District	
5.	1902	2012-13	Anu Mehta	Dr. Satish	Public Health System in NRHM:	Awarded
٥.	1902	2012-13	And Wichta	Kumar	Bawal Block of Rewari District	Awarded
6.	1203	2011-12	Javid Ahmad	Dr. Satish	Erosion of State Autonomy over the	Awarded
0.	1203	2011 12	Ganai	Kumar	Years in Jammu & Kashmir	7 IW di ded
7.	1903	2012-13	Ravinder	Dr. Satish	Indian-Nepal Relations: Recent	Awarded
, .			Raghav	Kumar	Trends and Challenges	
8.	1904	2012-13	Rakesh	Dr. Satish	India-China Relations during UPA	Awarded
				Kumar	Regime	
9.	1905	2012-13	Ravikant	Dr. Satish	Naxal Problems: Recent Trends and	Awarded
				Kumar	Challenges	
10.	4205	2013-14	Kusum	Dr. R.K.Singh Role of social networking site in		Awarded
			Lata		political awareness of youth: A	
					study of Gurgaon District	

Sr. No.	Roll No	Session	Name	Supervisor	Research Topic	Submitted / Awarded
11.	4201	2013-14	Kundan Kumar	Dr. C.K.Sharma	NRHM: A Study of Mahendergarh Block of Haryana	Awarded
12.	4202	2013-14	Usha	Dr. R.P.Singh	Relevance of Gandhian Thought of Swaraj in Contemporary Indian Politics	Awarded
13.	4203	2013-14	Swati Soam	Dr. Satish Kumar	India's Central Asia Policy (New Perspective and Challenges)	Awarded
14.	4206	2013-14	Pankaj Sharma	Dr. Satish Kumar	None of the Above "NOTA": A Study of Delhi State Election 2013	Awarded
15.	5091	2014-15	Arun Kumar	Dr. R.P.Singh	Role of Identity in Naxal Politics: A Case Study of Aurangabad District in Bihar	Awarded
16.	5092	2014-15	Ashiq Hassan Malik	Dr. C.K.Sharma	Democratic Decentralization in Kashmir : A Case Study of 2011 Panchayat Election	Awarded
17.	5094	2014-15	Pratik Kumar Singh	Dr. R.K.Singh	Development and Exclusion :A Case of Southern Haryana	Awarded
18.	5095	2014-15	Shabir Ahmed Bhat	Dr. C. K. Sharma	Separatism in Kashmir: A Historical Prespective	
19.	6013	2015-16	Siddharta Ray	Dr. C. K. Sharma	Conflict, Autonomy and Ethnofederalism: A Case Study of Separatism in Kashmir	Submitted
20-	6011	2015-16	Amit Kumar	Dr. C. K. Sharma	Idealism, Realism and Security Predicament: A Study of India- European Union Strategic Partnership	Submitted
21.	6008	2015-16	Rajkumar Yadav	Dr. C. K. Sharma	भारतीय संघात्मक व्यवस्था में राज्यपाल की भूमिकाःएक विशलेषणात्मक अध्ययन	Submitted
22.	6045	2015-16	Hanumant Singh	Dr. R. K. Singh	पंचायती राज में महिला नेतृत्वःएक अध्ययन अलवर (राजस्थान) जिले के विशेष सन्दर्भ में	Submitted
23.	6007	2015-16	Kalpana Shukla	Dr. R. K. Singh	नगरीय स्थानीय सुशासन में महिला प्रतिनिधियों की समस्यायें: विशेष अध्ययन आगरा नगर-निगम	Submitted
24.	6012	2015-16	Monu Bai	Dr. R. K. Singh	भारत में महिलाओं के प्रति घरेलू हिंसाः महेन्द्रगढ़ जिले के विशेष सन्दर्भ में अध्ययन	Submitted
25.	6044	2015-16	Aashutosh Kumar Aahire	Dr. R. P. Singh	h State, Civil Society and Social Subradice in India: A Study of Dalit Movement After Ambedkar	
26.	6010	2015-16	Rashmi Kumari Meena	Dr. R. P. Singh	Gender Discrimination and State Intervention (A Case Study of Mewat region in Haryana)  Submit	
27.	6009	2015-16	Ravi	Dr. R. P. Singh	भू-मंडलीकरण के दौर में भारत में सुशासन	Submitted
28.	6043	2015-16	Kanshi Ram	Dr. R. P. Singh	2016 के हिमाचल प्रदेश पंचायतीराज चुनाव में मतदान व्यवहार का अध्ययन (जिला-चुम्बा, ब्लाक-चुवाड़ी, ग्रामपंचायत-थुलेल के विशेष सन्दर्भ में)	Submitted

#### **Ph.D.** (Political Science)

Sr. No	Roll No	Session	Name	Supervisor's Name	Research Topic	Submitted/ Awarded
1.	2017	2009-10	Sarita Devi	Dr. Satish Kumar	Role of Gram Sabha in Decentralized Governance: A Case Study of Jhajjar District (Haryana)	Awarded
2.	2008	2009-10	Shilpa	Dr. Satish Kumar	Accountablity in Governance through RTI Act: A Case Study of Bhiwani District in Haryana	Awarded
3.	127	2010-11	Manjeet Singh	Dr. R.K. Singh	Implementation of JNURM: A Study of Haryana	Submitted
4.	129	2010-11	Kavita Devi	Dr. RK. Singh	Total Sanitation Campaign in Haryana: An Evaluation	Registered
5.	130	2010 -11	Suresh Kumari	Dr. C.K. Sharma	A Study of Self Help Groups Under SGSY in Haryana	Awarded
6.	1126	2011-12	Madhukar Sharma	Dr. Satish Kumar	Impact of Social Networking on Political Processes: A Study of National Capital Territory of Delhi	Awarded
7.	1127	2011- 12	Ram Sharan	Dr. C.K. Sharma	Political Awareness Among Dalits and Non-Dalits	Awarded
8.	1128	2011 -12	Ruchika	Dr. R.P.Singh Dr.Satish Kumar	Transparency and Accountability in Implementation of MNREGS: A Study of Haryana	Awarded
9	1651	2012- 13	Sanju Yadav	Dr. R.P.Singh	RTI as a tool for inclusive democracy with special reference of Rewari Town in Haryana	Registered
10.	1653	2012-13	Rajesh Kumar	Dr. C.K. Sharma	Empowerment of Women Through PRIs: A case study of the Sant Kabir Nagar District	Awarded
11.	1654	2012-13	Sneh lata	Dr. R.K. Singh, Dr.Satish Kumar	Gender Discrimination and Sports: A study of Haryana	Awarded
12.	126	2010-11	Sanjeet Kumar	Dr. Satish Kumar	Indo-Pak Relations in Twenty First Century	Awarded
13.	5055	2014-15	Ms.Tushma Devi	Dr. C.K.Sharma	Role of I.A.S.in Centre-State Interactions during Coalition Era (1999-2014)	Registered
14.	5054	2014-15	Mr.Sohan Lal	Dr. R.k.Singh	Eurozone crises and its impact on India	Registered
15.	5052	2014-15	Mr. Rakesh Kumar	Dr. R.P.Singh Dr. R.K.Singh	गाँधी और अम्बेडकर के राजनितिकएवं सामाजिक विचारों काएक तुलनात्मक अध्ययन	Registered
16.	5051	2014-15	Ms.Krishna Arya	Dr. R.P.Singh	Socio-Political Dimensions of Alternative Dispute Resolution in India: A Case Study of Delhi	Registered
17.	6691	2015-16	Ms. Stuti Saxena	Dr. C.K. Sharma	Election contestants' profiling and NOTA: A case study on the Bihar Legislative Assembly Elections-2015 vis-à-vis General Elections, 2014	
18.	6699	2015-16	Ms. Swati Soam	Dr. C.K. Sharma	Dalit Assertion in India: A Case Study of Punjab	Registered

#### **Events Organised**

S. No.	Date	Title of the Seminar/Workshop/ Conference	Guest Speaker(s)/Resource Person(s)
1	9 October 2015	Public Administration and Policy Making in India	Prof. Sushma Yadav, Pro Vice Chancellor, IGNOU
2	24 November 2015	Research in Social Sciences: Appearances, Reality and Social Scientific Knowledge	Prof. Ujjawal Kumar Singh, Delhi University
3	19 February 2016	Federal Principles in Action: Lessons for India from Switzerland	Mr. Volker Pabst, Foreign Editor of NZZ, the largest Swiss News daily
4	2 March 2016 Democracy and Development: A Theoretical Discourse with Application to India  Prof. B.C. Upreti, Rajasthan University, Jaipur		
5	5 March 2016	Internal Security and Administrative Issues: Naxalism, Separatism and Terrorism	Prof. Sanjay Pandey, Centre for Russian and Central Asian Studies, Jawaharlal Nehru University Prof. Anjana Rani, Dept. of Public Administration Maharishi Dayanand University
6	27 April 2016	India's Relations with SAARC Neighbourhood	Ambassador Achal Kumar Malhotra (former Ambassador to Armenia and Georgia and Permanent Representative of India to U.N.)
7	30 May 2016	Rethinking State Politics in India	Ashutosh Kumar, Professor, Department of Political Science, Panjab University
8	30 Sept. and 1 October, 2016	CIRFED Inaugural Conference on Federalism and Decentralization in India	Professors: M. P. Singh (DU), Ajay Kumar Singh (CFS) Amarjit S Narang (IGNOU) Ash Narain Roy (ISS), V. N. Alok (IIPA), Nupur Tiwari (IIPA), Kumar Suresh (NUEPA), Ajay K. Mehra (PU) Sanjay Pandey (JNU), Ashutosh Kumar (PU), Tanvir Aizaz (DU).

#### **Highlights and Achievements**

The Department has established a Research Centre-- Centre for Interdisciplinary Research on Federalism and Decentralization (CIRFED). Its Inaugural Conference was held on 30<sup>th</sup> Sept and 1<sup>st</sup> October 2016. The faculty members have attracted international projects and collaborations (see profiles). The department dedicates itself to teaching students, supervising research and training students for various competitive examinations. We conduct remedial classes as well as classes for UGC-NET/JRF and other competitive examinations such as the UPSC (Civil Services Examination).

#### Research Projects, MOU, Consultancy, Awards, Collaborations, Academic Projects

Centre for Interdisciplinary Research on Federalism and Decentralization (CIRFED) is in process of drafting MOUs and terms of collaboration with the Centre for South Asian Studies, University of Edinburgh, Scotland, U.K. and German Institute of Global and Area Studies (GIGA), Hamburg Germany. For other points refer to profiles of the faculty members.

#### **Future Roadmap**

To improve support structure for research scholars.

To produce substantial research contributions especially as part of the output of our specialized research Centre: CIRFED.

To collaborate with national and international research centres or departments of reputed universities for students and faculty exchange programmes.

As part of future plan, the department has submitted a proposal for faculty development centre for research on India under Madan Mohan Malviya Scheme.

# **Department of Economics**

The Department was established under ages of School of Arts, Humanities and Social Sciences in 2009. The Department offers three courses, viz. Ph.D., M. Phil and M.A in Economics Programmes Offered: M.A., M.Phil., Ph.D.

#### **Programme Outcome**

Apost-graduate student in Economics would be able to apply logical approach using relevant tools of economics tool to economic issues and to reach to a fitting decision at micro and/or macro levels that would facilitate him or her to make a good career.

#### **Programmes and Number of Seats Offered**

M.A. : 30

M.Phil. : (as per eligible supervisor availability)Ph.D. : (as per eligible supervisor availability)

#### **Scheme of Programme**

M.A. Economics: Course Structure

	Semester I						
S.No.	Paper Nomenclature	Course Code	L	T	P	Credit	
1.	Microeconomic Theory-I	SAHS ECO 01 101 C 3104	3	1	0	4	
2.	Macroeconomic Theory- I	SAHS ECO 01 102 C 3104	3	1	0	4	
3.	Economic Growth and Development-I	SAHS ECO 01 103 C 3104	3	1	0	4	
4.	Mathematics for Economic Analysis	SAHS ECO 01 104 C 3104	3	1	0	4	
5.		To be taken from other department	3	1	0	4	
		Semester II					
1.	Microeconomic Theory-II	SAHS ECO 01 201 C 3104	3	1	0	4	
2.	Macroeconomic Theory- II	SAHS ECO 01 202 C 3104	3	1	0	4	
3.	Economic Growth and Development-II	SAHS ECO 01 203 C 3104	3	1	0	4	
4.	Statistical Methods	SAHS ECO 01 204 C 3104	3	1	0	4	
5.	Public Economics-I	SAHS ECO 01 205 C 3104	3	1	0	4	
6.	Any one of the following two co	ourses (Electives)	3	1	0	4	
	Agricultural Economics	SAHS ECO 01 201 DCEC 3104					
	Labour Economics	our Economics SAHS ECO 01 202 DCEC 3104					
	Semester III						
1.	International Economics-I	SAHS ECO 01 301 C 3104	3	1	0	4	
2.	Econometrics-I	SAHS ECO 01 302 C 3104	3	1	0	4	
3.	Public Economics-II	SAHS ECO 01 303 C 3104	3	1	0	4	

4.	Contemporary Issues in Indian Economy	SAHS ECO 01 305 GE 3104	3	1	0	4
5.	Seminar Paper (Compulsory)	SAHS ECO 01 304 DCEC 0202	0	2	0	2
6.		To be taken from other department	3	1	0	4
7.	Any one of the following two co	ourses	3	1	0	4
	Environmental Economics	SAHS ECO 01 305 DCEC 3104				
	Industrial Economics	SAHS ECO 01 306 DCEC 3104				
		Semester IV				
1.	Skill Enhancement Elective Co	urse (Compulsory and Exclusively for Ec	onomics	Students)		
2.	International Economics-II	SAHS ECO 01 401 C 3104	3	1	0	4
3.	Econometrics-II	SAHS ECO 01 402 C 3104	3	1	0	4
4	Dissertation	SAHS ECO 01 404 C 0012	0	0	0	16
5	Any one of the following two co	ourses				
	Research Methodology	SAHS ECO 01 405 DCEC 3104	3	1	0	4
	Advanced Econometrics	SAHS ECO 01 406 DCEC 3104	3	1	0	4
List of	Generic Elective Course (GEC)  Paper Nomenclature	offered by the department to students of Course Code	other depa	artments	P	Credit
No.	Paper Nomenciature	Course Code	L	1	r	Credit
		Offered in Semester I				
1.	Basic Economics	SAHS ECO 01 101 GE 3104	3	1	0	4
2.	Indian Economy	SAHS ECO 01 102 GE 3104	3	1	0	4
		Offered in Semester III				
1.	History of Economic Thought	SAHS ECO 01 301 GE 3104	3	1	0	4
2.	Development Economics	SAHS ECO 01 302 GE 3104	3	1	0	4

#### M.Phil./Ph.D Course work Structure:

S. No.	Paper Nomenclature	Course Code	L	T	P	Credit
1.	Research Methodology	SAHS ECO 02 101 C 10 (for M.Phil)/ SAHS ECO 03 101 C 10 (for Ph.D)	5	1	0	6
2.	Economic Theory & Policy	SAHS ECO 02 102 C 10 (for M.Phil)/ SAHS ECO 03 102 C 10 (for Ph.D)	5	1	0	6

#### **Admission Criteria/ Eligibility Conditions**

#### **M.A. Economics:**

- (i) Bachelor's degree, with economics as one of the subject, from a recognised Indian or foreign university (foreign recognition to be as per AIU list) with a minimum of 50% aggregate marks or equivalent grade. OR
- (ii) 55% or more marks in Graduate/Post Graduate degree in any other discipline or subject from a recognised Indian or foreign university (foreign recognition to be as per AIU list)

#### M.Phil. Economics

A candidate shall be eligible for admission to M.Phil Programme, if he/she:

- (i) Has qualified Master's Degree in the subject concerned/allied / cognate subjects with at least 55% marks, in aggregate from the University and/or a degree recognized by the University for this purpose as its equivalent.
- (ii) The cases of students who have passed examination outside the Indian Universities system and who may not have obtained a Master's degree may be considered for admission to the 32 programme subject to the condition that each case shall be examined on its own merit by the Admission Committee and in accordance with recommendations of the Equivalence Committee.

Note: The candidates shall appear CUCET to be conducted by the concerned Department, which shall carry weightage of 80% and 20% respectively. Candidates who have cleared NET/JRF/SET/Teacher Fellowship or who have teaching/research experience of more than two years on regular basis shall be exempted from the written test. In such cases the interview shall carry 100% weightage.

#### Ph.D. Economics

A candidate shall be eligible for admission to the Ph.D. programme, if he/she has qualified Master's Degree in the subject concerned /allied/ cognate subjects with at least 55% marks, in aggregate.

**Important Note:** The candidates shall appear for a written test conducted by the University to be followed by an interview to be conducted by the concerned Department, which shall carry weightage of 80% and 20% respectively. The candidates who have qualified UGC/CSIR/JRF/NET/SLET or are Teacher Fellowship holders or have passed M. Phil programme with course work recognized by the U.G.C. as per UGC Regulations (Minimum Standards and Procedure for award of M.Phil. /Ph.D. Degree, 2009) shall be exempted from appearing for the written test. Such applicants will, however, be required to appear for the personal interview. In case of the candidates exempted from the written test, the interview shall carry 100% weightage.

#### **Brief Faculty Profile**

#### 1. Dr. Ranjan Aneja

Qualifications: MA, MPhil, Ph.D., NET

Experience: 09 Years

Research Interest: Economics Modelling and Policy Analysis

#### **Research Publications (Top five out of total 30)**

- 1. The link between budget deficit and current account deficit in India Economy published in Jindal Journal of Business Research, SAGE India 4 (1&2) 1–10.
- 2. Regional Divergence in Economic Growth of Haryana: A District Level Analysis published in Journal of Income and Wealth (CSO). Vol. 37 (1), p.p 21-28.
- 3. Climate change and food security: An analysis of environment on the wheat production of Rajasthan, Published in Research Issues in Applied Economics, McGraw Hill Publishers, p.p. 283-295.
- 4. Regional Disparities and Economic growth in Haryana: Testing of Williamson Curve Hypothesis Published in 'Infrastructure Policy and Microfinance', Macmillan Publishers India Ltd, pp. 421-429. June, 2010.
- 5. Regional Divergence in Growth in India: A Post Reform Period Study Published in Asian Economic Review, Vol. 51, No. 2, August, 2009

#### Research Guidance (Awarded Only): Ph.D: 02 and M.Phil: 09

#### **Peer Recognitions & Achievements (Not more than Ten)**

- 1. Teacher-In-Charge, Department of Economics, Central University of Haryana
- 2. Member School Board, School of Arts, Humanities and Social Science, Central University of Haryana
- 3. Chairperson, Board of Studies, Department of Economics, Central University of Haryana
- 4. Chairperson, Departmental Research Committee, Department of Economics, Central University of Haryana
- 5. Nodal Officer, Unnat Bharat Abhiyan
- 6. Assistant Dean Student Welfare, Central University of Haryana
- 7. Member, Internal Quality Assurance Cell (IQAC), Central University of Haryana
- 8. Member, Research Promotion Cell, Central University of Haryana
- 9. Member, Equal Opportunity Cell, Central University of Haryana
- 10. Member, University Investment Committee, Central University of Haryana

#### **Research Projects**

Sr. No	Title of Project	Funded by	Amount	Status
1.	A Study of Regional Divergence in Growth of Haryana: A District Level Analysis (As Project Director)	Indian Council of Social Science and Research, New Delhi	5,50,000/-	On Going

#### 2. Ms. Rashmi Tanwar

Qualification: M.A, UGC-NET, Ph.D (Pursuing)

Experience: 2 Years 9 Months

Research Area/ Interest: Development and Planning

#### **Research Publication (Best Five)**

- Published paper entitled "Health status of women in Haryana: A challenge before NRHM" in edited book Maternal and child health in India policies and challenges, ISBN:93-80574-73-8
- 2. Published paper entitled "Human Recourse Development in ASEAN Countries" Journal of Central University of in Haryana, Vol.1, No.1, ISSN: 2348-3377
- 3. Published paper entitled "Urbanization in Haryana", in national conference Haryana School of business (GJU Hissar).
- 4. Published a paper entitled "Growth of Urbanization in State Haryana: An Appraisal" in vision international research Journal of Management and Commerce.
- 5. Published paper entitled "Role of Good Governance for Inclusive Growth in India" in pramana journal, vol.3, pp: 653-659.

#### Committee Membership/Posts held

- 1. Member, Earn While You Learn scheme of university.
- 2. Member of Prospectus committee for 2016-17.
- 3. Committee Member of Centre for Innovation, Skill, Entrepreneurship Development.
- 4. Have been member of various organizing committees of the University for organizing different events like Independence Day, Republic Day, Youth Festivals, university admission committee, convocation in the university.

- 5. Member, Centre for community development and UBA.
- 6. Member, Equal Opportunity Cell.
- 7. Member, Yoga, Trekking and Adventure club.

#### Achievements

- 1. Participated in a meeting of Innovation Club as an Innovation Member of club on innovation fair organized by President of India on 15<sup>th</sup> March 2016 in President House.
- 2. Participated in five days International workshop organized by UK India Education and Research Initiative (UKIERI) on Leadership in Higher Education from 08 to 12 February 2016 in Delhi.
- 3. Participated in five days International workshop organized by UK India Education and Research Initiative (UKIERI) on Leadership in Higher Education from 25 to 29 April 2016 in Birmingham (UK).

#### 3. Ms. Renu

Qualification: M.A, M.Phil, UGC-NET, Ph.D (Pursuing)

Experience: 3 Years

Research Area/ Interest: Agricultural Economics, Rural Economics

#### **Research Publication (Best Five)**

- 1. Indebtedness of Farmer Households: A State Analysis (2012), published in edited book Sustainable Rural Development, ISBN: 978-81-7487-761-1, Radha Publications, Darya Gani, Delhi
- 2. Changing Scenario of Unemployment among Youth in India (2012), published in Asian Journal of Research in Social Science and Humanities (Peer Reviewed International Journal of Asian Research Consortium), Vol. 2, Issue: 5, pp 218-234, ISSN: 2249-7315, Yamuna Nagar, Haryana.
- 3. How Geography Matters For Economic Development (2012), published in Radix International Journal of Research in Social Science (Journal of Radix International Educational and Research Consortium (Peer Reviewed International Journal), Vol. 1, Issue: 8, ISSN: 2250-3994, Chandigarh, Haryana.
- 4. Human Resource Development in ASEAN Countries (2014), published in Journal of Central University of Haryana (International Multidisciplinary Refereed Research Journal), Vol.1, No.1, March, pp.97-104, ISSN: 2348-3377, Co-author with Chitra Choudhary and Rashmi Tanwar, Mahendergarh, Haryana.
- 5. Women Empowerment, Maternal Health and Child Health Care (2015), published in edited book Exploring the Engagement and Employment of Women, ISBN: 13:978-93-5125-160-6, Concept publication, New Delhi.

#### Committee membership/Posts held

- 1. Member, SC/ST Cell, CUH
- 2. Member, Organising Committee, National Seminar on "Cooperation for Cooperators" held on 13 October, 2015
- 3. Member, Organising Committee, International Girl Child Day, at Jant-Pali on 09 October, 2015.
- 4. Member, Organising Committee, Independence Day Celebrations.

#### 4. Dr Ajeet Kumar Sahoo

Qualification: Ph. D. & UGC NET

Experience: 8 Yrs

Research Area: Macroeconomic Policy

#### **Research Publication Books**

Mandloi, A., & Sahoo, A. K. (2014). Business Environment. Bhopal, MP: Thakur Publishers. [ISBN 978-93-82249-35-1]

Tiwari, S., & Sahoo A. K. (2013). Strategic Management. Bhopal, MP: Thakur Publishers. [ISBN 978-93-83130-11-5]

#### **Research Papers**

- 1. Sahoo, A. K., Chandra, A. K., & Sahu, B. (2012). MobileNumber Portability: A Study of Consumer Satisfaction. In S. Verma, & A. K. Sahoo (Eds.), *Refurbishing Facets of Management Concepts for New World Order* (pp. 09-14). Indore, MP: Chameli Devi School of Management
- 2. Sahoo, A. K., & Vora, A. (2011). An Empirical Study of Preference of Present-Day Students of Professional Courses towards Entrepreneurship: A Comparative Analysis between Engineering and Management Students. In J. S. Pawar & M. Dasmishra (Eds.), *The Role of Research and Innovative Practices to Revamp the Management Education: An Indian Perspective* (pp. 119-124). New Delhi.
- 3. Sahoo, A. K., & Katare J. (2011). A Study of Association of Attributes for Various Shampoo Products in Indian Rural Market. *International Journal of Marketing & Business Communication*, 1(1), 25-31.
- **4.** Vora, A., &Sahoo, A. K. (2011). Divergences between Indian Accounting Standards (AS<sub>s</sub>) and International Financial Reporting Standards (IFRSs). *International Journal of Research in Commerce and Management*, 2(10), 92-98.
- 5. Sahoo, A. K., Vora, A., & Samaiya, S. (2013). Effect of Bonus Share and Rights Issue on Share Prices of Selected BSE Listed Companies. In S. Singh, A. Gwal & J. K. Saharma (Eds.), Innovative Business Practices for Creating Value in Global Era (pp. 229-232). Indore, MP: Acropolis Faculty of Management and Research.

#### 5. Dr. Manoj Kumar

Qualifications: MA, MPhil, Ph.D., JRF

Experience: 01 Year

Research Interest: Microeconomics, Mathematical Economics

#### **Research Publication (Best Five)**

- 1. An Empirical Study of the Phillips Curve in India, *Indian Journal of Economics*, Vol. XIVC, No.374, ISSN 0019-5170, Part III, PP.525, 2013.
- 2. Comprative Analysis of Sustainable and Inclusive Development Among Indian States, *Asian Academic Research Journal of Social Science & Humanities*, Vol.1, No. 28, ISSN 2278-859X,PP.136-149, Oct 2014.
- 3. Manoj Kumar& Bhavya Singhal "Political Stability and Macroeconomics Variables Volatility in India", *Indian Journal of Applied Research*, Vol.4, No.10, ISSN 2249-555X, PP.185-187, Oct. 2014

- 4. Kusum Lata, Sneh Lata, Manoj Kumar "SNS and Political Awareness: Operationalizing the TAM Model", ACME *International Journal of Multidisciplinary Research*, ISSN: 2320-236X, Vol.III, No. X, Oct.-Nov. 2015.
- 5. Manoj Kumar, Ranjan Aneja, "FDI Destinations and Inclusive Growth: An Analysis", *International Journal of Advances in Management and Economics*, Vol.4, No. 5, ISSN: 2278-3369, Sept-Oct.2015

#### **Departmental Infrastructure**

The Department of Economics is equipped with modern and adequate infrastructure. There are 03 class rooms and 3 faculty rooms including HoD room in the department. The furniture availability in the class rooms and faculty rooms is adequate in number. To enrich the knowledge of students with modern technology, the department is equipped with 02 LCD Projectors.

#### **Research Thrust Area** (Details of Scholars and Area of Interest)

#### Research Scholars (M.Phil. Awarded Only)

Sr.	Roll	Session	Name	Research Thrust Area
No.	No			
1	1507	2009-10	Vijay Kumar Pal	Global Financial Crisis and Indian's Foreign Trade with SAARC Nations
2	1505	2009-10	Shweta Aggarwal	An Analysis of Composition and Direction of India's Foreign Trade
3	1226	2011-12	Poonam	Financial Inclusion and Its Determinants in India
4	1227	2011-12	Manju Bai	State wise Analysis of Employment Growth in Indian Manufacturing Sector
5	1502	2009-10	Lalit Sharma	Socio-Economic Conditions of Above Poverty Line and Below Poverty Line Households in Shahzadpur Village, Sonipat District.
6	1228	2011-12	Sapna	Cost and Productivity Analysis of Food grains in India
7	1506	2009-10	Manita Yadav	Role of Infrastructure in Economic Development of Haryana
8	1229	2011-12	Sunita	Comparative Performance of Public and Private Sector Banks in India
9	1501	2009-10	Chand Ram	World Trade Organisation: Opportunities and Challenges for Indian Agriculture
10	226	2010-11	Bajrang	Impact of Microeconomic Variables on Stock Price
11	1851	2012-13	Mukesh Kumari	Impact of MNREGS is Rural Development of Haryana (with special Reference to Mahendergarh District)
12	227	2010-11	Anita	Input and Output Variations in Haryana Agriculture: An Inter- District Analysis
13	1852	2012-13	Amita	An Empirical Investigation of Wagner's Law in India
14	228	2010-11	Priti Chahar	Living Standard of Rural Households in Haryana: A Study of Silani Village of Jhajjar District
15	1853	2012-13	Sneh Lata	Agricultural Diversification in Haryana
16	229	2010-11	Ravinder Sharma	Financial Inclusion in Rural Haryana: A Study of Attail Village of Rohtak District
17	1854	2012-13	Anuradha Sharma	Export Instability and Economics growth in India
18	230	2010-11	Manoj Kumar	An Empirical Study of Phillips Curve in India
19	1855	2012-13	Santosh Kumar	An Appraisal of work force in Labour market of India with reference to the 61st and 66th rounds of NSSO
20	232	2010-11	Birabrata Panda	Foreign Direct Investment and Economic Growth in India

Sr.	Roll	Session	Name	Research Thrust Area
No.	No			
21	4221	2013-14	Lalita Kumari	Impact of Reforms in Indian Banking Sector
22	4222	2013-14	Sunil Saini	Foreign Direct Investment in Insurance Sector in India
23	4224	2013-14	Pradeep Kumar	Health Economics & Health Problems of Rural Aged People in Mahendergarh District
24	4225	2013-14	Soniya	Impact of FDI on Economic Growth in India
25	4226	2013-14	Anita	FDI in Retail Sector: Impact of Employment Generation in India
26	5063	2014-15	Kuldeep Lohani	Trade Competitiveness of BRICS Countries: A Comparative Study
27	5066	2014-15	Umar Jeelanie Bandy	An Empirical Investigation of Twin Deficit Hypothesis: A Study of India
28	5061	2014-15	Dinesh Kumar	Health Expenditure and Economic Growth in Haryana: A Case Study with Special Reference to Mahendergarh
29	5065	2014-15	Ranjeet Kumar	Education Expenditure and Economic Growth in India: A Causality Analysis
30	6014	2015-16	Alok Kumar Yadav	A study of export competitiveness of major Horticulture crops of India
31	6015	2015-16	Sweety Garg	Socio-Economic Status of Women: A Study with Special Reference of Mahendergrh
32	6016	2015-16	Sushila	Performance of Kishan Credit Card Scheme in India: A Study Level Analysis
33	6017	2015-16	Ajay Kumar	Measuring Performance of Indian Commercial Banks: An Application of Economic Value Added
34	6018	2015-16	N. Praveen Kumar	Agricultural Productivity in Talengana and Haryana: A Comparative Analysis
35	6019	2015-16	Santosh Kumar Nimoria	Efficacy of Monetary Policy in India: Evidences from Taylor and McCallum rule
36	6020	2015-16	Ruchita Tripathi	Growth, Structural Change and Employment Productivity of Service Sector in India
37	6022	2015-16	Dipika	Growth and Performance of Manufacturing Sector: A Study of Haryana

#### Research Scholar (Ph.D, Awarded and Registered)

Sr. No.	Roll No	Session	Name	Research Thrust Area
1	1013	2009-10	Surender	Micro Finance and Self Help Groups: A Case Study of Jhajjar District (Haryana)
2	1003	2009-10	Chhatra Pal	Role of Food Processing Industry in Agricultural Development of India
3	1009	2009-10	Rajesh Kumar	Infrastructure Development and Agriculture Output: A District wise Analysis of Haryana
4	152	2010-11	Mahtab Singh	An Anlysis of Income and Expenditure Pattern of Cultivators in Haryana
5	1602	2012-13	Manoj Kumar	FDI and Macro Variables in India: A study of Bidirectional Relationship
6	1604	2012-13	Rashmi Tanwar	Urbanisat ion Induced Transformation in India with special reference to Haryana
7	1605	2012-13	Anju Rani	Regional Disparities in Agricultural Growth in Haryana
8	1156	2011-12	Manita Yadav	Infrastructure Development in India: A study of Power Sector

#### Research Projects, MOU, Consultancy, Awards, Collaborations, Academic Projects

The following Major Research Project is sanctioned to Dr. Ranjan Aneja, Assistant Professor of the Department.

Sr. No	Title of Project	Funded by	Amount	Status
1.	A Study of Regional Divergence in Growth of Haryana: A District Level Analysis (As Project Director)	Indian Council of Social Science and Research, New Delhi	5,50,000/-	On Going

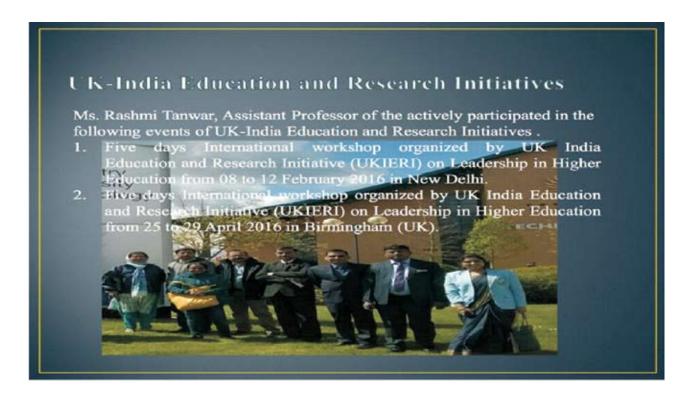
#### **Events Organised**

- 1. Department successfully organized two day National Seminar on theme "Make in Haryana: A Road Ahead" on 17-18 March 2016 sponsored by ICSSR. In the seminar more than 70 researchers actively participated and presented their academic research.
- 2. Department organized one day workshop on "Stock Market Trading" Jointly by Dept of Management Studies and Commerce.

#### **Highlights and Achievements**

- 1. Students of the department have also been nominated for the NSS camp outside the state to represent university.
- 2. Ms. Rashmi Tanwar, Assistant Professor, represented in a meeting of Innovation Club in innovation fair organized on 15th March 2016 in President of India House.
- 3. 12 students of the department qualified the UGC NET and JRF since inception.
- 4. Ms. Rashmi Tanwar Worked as convener of the committee for the Decoration of Dry/Waste Tree of campus.
- 5. Ms. Rashmi Tanwar was also nominated to Participate in five days International workshop organized by UK India Education and Research Initiative (UKIERI) on Leadership in Higher Education both in India and UK.
- 6. 37 M.Phil and 04 Ph. D has been successfully awarded in the department till date.





#### **Future Roadmap**

- 1. The department is carrying out the exercise to start the five year integrated program in Economics
- 2. The department is planning to establish a department-centric placement cell.
- 3. The department is planning to establish a computer lab with the facility of advance statistical software such as E-Views, Stata, SPSS, R, SAS etc.

### **Department of Education**

The Department of Education aims to facilitate studies in all emerging areas of Education such as Educational Management, Planning and Finance, Teacher Education, Educational Technology, Inclusive Education, Gender issues to prepare teacher educators who are well versed with the skills and competencies of effective and efficient teaching skills and research. The Department was established in 2010 with M.A. Education programme and with due course of time expanded it wings and starred Ph.D., M.Phil, M.Ed and B.Ed.

#### **Programmes Offered and Number of Seats**

- 1. Ph.D. in Education
- 2. M.Phil. in Education (With an intake of 07 Students)
- 3. M.A. Education (With an intake of 15 Students)
- 4. B.Ed. (With an intake of 50 Students)
- 5. M.Ed. (With an intake of 100 Students)

#### **Course Structure**

#### 1. M.A. Education

#### Semester I

S. No	Course code	Course title	L	T	P	Credit	No. of Lecture per Semester
1.	SAHSED 1101C4004	Philosophical Foundations of Education – I	4	0	0	4	60 hours
2.	SAHSED 1102C4004	Sociological Foundations of Education – I	4	0	0	4	60 hours
3.	SAHSED 1103C4004	Psychological Foundations of Education – I	4	0	0	4	60 hours
4.	SAHSED 1104C4004	Research Methods in Education	4	0	0	4	60 hours
5	SAHSED 1105C4004	Life Skills Education	4	0	0	4	60 hours
6.		To be taken from other department	4	0	0	4	60 hours

#### Semester II

1.	SAHS ED 1 2 05 C 4004	Philosophical Foundations of Education – II	4	0	0	4	60 hours
2.	SAHS ED 1 2 06 C 4004	Sociological Foundations of Education – II	4	0	0	4	60 hours
3.	SAHS ED 1 2 07 C 4004	Psychological Foundations of Education – II	4	0	0	4	60 hours
4.	SAHS ED 1 2 08 C 4004	Statistical Methods in Education	4	0	0	4	60 hours
5.	SAHS ED 1 2 02 GE 4004	Inclusive Education (compulsory)	2	0	0	2	30 hours
6.		Any one of the following three courses					
	SAHS ED 1 2 01DCEC 4004	Learner with Diverse Needs	4 4 4	$\begin{bmatrix} 0 \\ 0 \\ 0 \end{bmatrix}$	$\begin{bmatrix} 0 \\ 0 \\ 0 \end{bmatrix}$	4 4 4	60 hours
	SAHS ED 1 2 02DCEC 4004	Environmental Education	4	U	U	4	60 hours
	SAHSED 12 03DCEC4004	Professional Development of Teachers					60 hours

#### Semester III

1.	SAHS ED 1 3 09 C 4004	Educational Technology	4	0	0	4	60 hours
2.	SAHS ED 1 3 10 C 4004	Teacher Education	4	0	0	4	60 hours

3.	SAHS ED 1 3 11 C 4004	Curriculum Development and Instruction	4	0	0	4	60 hours
4.	SAHS ED 1 3 12DCEC 4004	Seminar Paper (compulsory)	0	2	0	2	30 hours
5.	To be taken from other de	partment	4	0	0	4	60 hours
6.		Any one of the following two courses					
	SAHS ED 1 3 05DCEC 4004	Educational Administration and School Leadership	4	$\begin{bmatrix} 0 \\ 0 \end{bmatrix}$	0	4 4	60 hours
	SAHS ED 1 3 06DCEC 4004	Educational Guidance & Counselling					60 hours

#### **Semester IV**

Skill Enhancement Elective Course (Compulsory and exclusively for Education students)

S. No	Course code	Course title	L	T	D	Credit
1.	SAHS ED 14 01 SEEC 0066	Dissertation	0	0	24	24
2	SAHS ED 14 02 SSR	Self-Study Report (Non-Credit)	-	-	-	-

List of Generic Elective Course (GEC) offered by the department to students of other departments

S. No	Course code	Course title	L	Т	P	Credit	No. of Lectures per Semester
		Offered in Semester I					
1.	SAHS ED 1 101GE 4004	Educational Management and Planning	4	0	0	4	60 hours
2.	SAHS ED 1 102GE 4004	Women Education	4	0	0	4	60 hours
		Offered in Semester III					
3.	SAHS ED 1 303GE 4004	Life Skills Education	4	0	0	4	60 hours
4.	SAHS ED 1 304GE 4004	Yoga Education	2	0	2	4	60 hours
5.	SAHS ED 1 305GE 4004	Value and Peace Education	4	0	0	4	60 hours

#### 2. B.Ed. Course Structure

#### Semester I

Course No.	Total Credits	Paper Title	Total Marks (Theory + Practicum)	Credits (Theory)	Class Teaching Hours per week	Credits: Practicum (Engagement with the Field)	Practicum Hours per week (per semester)	Total Hours per week (per semester)	Internal Assessment Weightage	Theory: External Assessment Weightage
1	6	Childhood and Growing Up	150	4	4	2	4	8	30%	70%
2	6	Contemporary India and Education	150	4	4	2	4	8	30%	70%
4	3	Language across the curriculum	75	2	2	1	2	4	30%	70%
5	3	Understanding Discipline and Subjects	75	2	2	1	2	4	30%	70%
EPC 1	3	Reading and Reflection on text	75	2	2	1	2		30%	70%
Total	21		525	14	14	7	14	28		

Practicum/Hands on/ Students Activity /Seminar/Workshop/etc; during Practicum hours

1Credit Theory = 16 hours in a semester

1 Credit Practicum = 32 hours in a semester

1 Credit = 25 Marks

#### Semester II

Course No.	Total Credits	Paper Title	Total Marks (Theory + Practicum)	Credits (Theory)	Class Teaching Hours per week	Credits: Practicum (Engagement with the Field)	Practicum Hours per week (per semester)	Total Hours per week (per semester)	Internal Assessment Weightage	Theory: External Assessment Weightage
3	6	Learning and Teaching	150	4	4	2	4	8	30%	70%
7a	3	Pedagogy of school subject Part-I	75	2	2	1	2	4	30%	70%
8a	3	Knowledge and Curriculum- Part-I	75	2	2	1	2	4	30%	70%
EPC-II	3	Drama and Art in Education	75	4	4	2	4	8	30%	70%
	8	Two Weeks School Internship*	200						30%	70%
Total	23		575	12	12	6	12	24		

Practicum/Hands on/ Students Activity /Seminar/Workshop/etc; during Practicum hours

1Credit Theory = 16 hours in a semester

- 1 Credit Practicum = 32 hours in a semester
- 1 Credit = 25 Marks
- \* For whole time students will be engaged with school internship

#### Sem ester III

Course No.	Total Credits	Paper Title	Total Marks (Theory + Practicum)	Credits (Theory)	Class Teaching Hours per week	Credits: Practicum (Engagement with the Field)	Practicum Hours per week (per semester)	Total Hours per week (per semester)	Internal Assessment Weightage	Theory: External Assessment Weightage
9	6	Assessment for Learning	150	4	4	2	4	8	30%	70%
7b	3	Pedagogy of school subject	75	2	2	1	2	4	30%	70%
	16	Four Weeks School Internship*	400	0	0	16			30%	70%
Total	25		625	6	6	19	6	12		

Practicum/Hands on/ Students Activity /Seminar/Workshop/etc; during Practicum hours

1Credit Theory = 16 hours in a semester

- 1 Credit Practicum = 32 hours in a semester
- 1 Credit = 25 Marks
- \* For whole time students will be engaged with school internship

#### **Semester IV**

Course No.	Total Credits	Paper Title	Total Marks (Theory + Practicum)	Credits (Theory)	Class Teaching Hours per week	Credits: Practicum (Engagement with the Field)	Practicum Hours per week (per semester)	Total Hours per week(per semester)	Internal Assessment Weightage	Theory: External Assessment Weightage
6	3	Gender, School and Society	75	2	2	1	2	4	30%	70%
8b	3	Knowledge an Curriculum Part-II	75	2	2	1	2	4	30%	70%
10	3	Creating an inclusive school	75	2	2	1	2	4	30%	70%
11	3	Optional Course	75	2	2	1	2	4	30%	70%
EPC- III	3	Critical Understanding of ICT	75	2	2	1	2	4	30%	70%
EPC- IV	3	Understanding the Self	75	2	2	1	2	4	30%	70%
Total	18		450	12	12	6	12	24		

Practicum/Hands on/ Students Activity /Seminar/Workshop/etc; during Practicum hours

1Credit Theory = 16 hours in a semester

1 Credit Practicum = 32 hours in a semester

1 Credit = 25 Marks

#### List of Optional Courses offered by the department

S.No.	Course title
1.	Educational Administration and Management
3.	Life Skills Education
4.	Yoga Education
5.	Value and Peace Education
6	Environmental Education

#### List of Pedagogical Courses offered by the department

S.No.	Course title	Course title
	Group-I	Group-II
1.	Teaching of Hindi	Teaching of History
2.	Teaching of Sanskrit	Teaching of Geography
3	Teaching of English	Teaching of Political Sciences
4.	Teaching of Social Sciences	Teaching of Biology
5.	Teaching of Sciences	Teaching of Chemistry
6.	Teaching of Mathematics	Teaching of Physics
		Teaching of Economics
		Teaching of Computer Sciences
		Teaching of Hindi
		Teaching of Sanskrit
		Teaching of English

Note: GroupI is for graduate and II is for post graduate students.

#### 3. **M.Ed. Course Structure**

#### Semester I

Course No.	Total Credits	Paper Title	Total Marks (Theory + Practicum)	Credits (Theory)	Class Teaching Hours per week	Credits: Practicum (Engagement with the Field)	Practicum Hours per week (per semester)	Total Hours per week (per semester)	Internal Assessment Weightage	Theory: External Assessment Weightage
1	6	Childhood and Growing Up	150	4	4	2	4	8	30%	70%
2	6	Contemporary India and Education	150	4	4	2	4	8	30%	70%
4	3	Language across the curriculum	75	2	2	1	2	4	30%	70%
5	3	Understanding Discipline and Subjects	75	2	2	1	2	4	30%	70%
EPC 1	3	Reading and Reflection on text	75	2	2	1	2	4	30%	70%
Total	21		525	14	14	7	14	28		

Practicum/Hands on/ Students Activity /Seminar/Workshop/etc; during Practicum hours

1 Credit Theory = 16 hours in a semester 1 Credit Practicum = 32 hours in a semester 1 Credit = 25 Marks

#### **Semester II**

Course No.	Total Credits	Paper Title	Total Marks (Theory + Practicum)	Credits (Theory)	Class Teaching Hours per week	Credits: Practicum (Engagement with the Field)	Practicum Hours per week (per semester)	Total Hours per week (per semester)	Internal Assessment Weightage	Theory: External Assessment Weightage
3	6	Learning and Teaching	150	4	4	2	4	8	30%	70%
7a	3	Pedagogy of school subject Part-I	75	2	2	1	2	4	30%	70%
8a	3	Knowledge and Curriculum- Part-I	75	2	2	1	2	4	30%	70%
EPC-II	3	Drama and Art in Education	75	4	4	2	4	8	30%	70%
	8	Two Weeks School Internship*	200						30%	70%
Total	23		575	12	12	6	12	24		

Practicum/Hands on/ Students Activity /Seminar/Workshop/etc; during Practicum hours

1Credit Theory = 16 hours in a semester

1 Credit Practicum = 32 hours in a semester

1 Credit = 25 Marks
\* For whole time students will be engaged with school internship

#### **Semester III**

Course No.	Total Credits	Paper Title	Total Marks (Theory + Practicum)	Credits (Theory)	Class Teaching Hours per week	Credits: Practicum (Engagement with the Field)	Practicum Hours per week (per semester)	Total Hours per week (per semester)	Internal Assessment Weightage	Theory: External Assessment Weightage
9	6	Assessment for Learning	150	4	4	2	4	8	30%	70%
7b	3	Pedagogy of school subject	75	2	2	1	2	4	30%	70%
	16	Four Weeks School Internship*	400	0	0	16			30%	70%
Total	25		625	6	6	19	6	12		

Practicum/Hands on/ Students Activity /Seminar/Workshop/etc; during Practicum hours

1Credit Theory = 16 hours in a semester

1 Credit Practicum = 32 hours in a semester

1 Credit = 25 Marks

\* For whole time students will be engaged with school internship

#### **Semester IV**

Course No.	Total Credits	Paper Title	Total Marks (Theory + Practicum)	Credits (Theory)	Class Teaching Hours per week	Credits: Practicum (Engagement with the Field)	Practicum Hours per week (per semester)	Total Hours per week (per semester)	Internal Assessment Weightage	Theory: External Assessment Weightage
6	3	Gender, School and Society	75	2	2	1	2	4	30%	70%
8b	3	Knowledge an Curriculum Part-II	75	2	2	1	2	4	30%	70%
10	3	Creating an inclusive school	75	2	2	1	2	4	30%	70%
11	3	Optional Course	75	2	2	1	2	4	30%	70%
EPC-III	3	Critical Understanding of ICT	75	2	2	1	2	4	30%	70%
EPC- IV	3	Understanding the Self	75	2	2	1	2	4	30%	70%
Total	18		450	12	12	6	12	24		

Practicum/Hands on/ Students Activity /Seminar/Workshop/etc; during Practicum hours

1Credit Theory = 16 hours in a semester

1 Credit Practicum = 32 hours in a semester

1 Credit = 25 Marks

#### List of Optional Courses offered by the department

S.No.	Course title					
1.	Educational Administration and Management					
3.	Life Skills Education					
4.	Yoga Education					
5.	Value and Peace Education					
6	Environmental Education					

#### List of Pedagogical Courses offered by the department

S. No.	Course title	Course title
	Group-I	Group-II
1.	Teaching of Hindi	Teaching of History
2.	Teaching of Sanskrit	Teaching of Geography
3	Teaching of English	Teaching of Political Sciences
4.	Teaching of Social Sciences	Teaching of Biology
5.	Teaching of Sciences	Teaching of Chemistry
6.	Teaching of Mathematics	Teaching of Physics
		Teaching of Economics
		Teaching of Computer Sciences
		Teaching of Hindi
		Teaching of Sanskrit
		Teaching of English

#### Note:

Teaching subjects are likely to be added in due course. Group I is for graduate students Group II is for post graduate students

#### **Admission Criteria and Procedure**

**Master of Arts in Education:** Bachelor's degree in any discipline from any recognized university (foreign recognition to be as per AIU list) with a minimum 50% aggregate marks or equivalent grade

Master of Philosophy in Education: A candidate shall be eligible for admission to M.Phil. Programme, if he/she: Has qualified Master's Degree in the subject concerned/allied/cognate subjects with at least 55% marks, in aggregate from the University and/or a degree recognized by the University for this purpose as its equivalent. The cases of students who have passed examination outside the Indian Universities system and who may not have obtained a Master's degree may be considered for admission to the programme subject to the condition that each case shall be examined on its own merit by the Admission Committee and in accordance with recommendations of the Equivalence Committee.

Note: The candidates shall appear for a written test followed by an interview to be conducted by the concerned Department, which shall carry weightage of 80% and 20% respectively. Candidates who have cleared NET/JRF/SET/Teacher Fellowship or who have teaching/research experience of more than two years on regular basis shall be exempted from the written test. In such case the interview shall carry 100% weightage.

Doctor of Philosophy in Education- Ph.D.: A Candidate shall be eligible for admission to the Ph.D. programme, if he/she: has qualified master's degree in the subject concerned/allied/cognate subjects

with at least 55% marks, in aggregate. Note: The candidate shall appear for a written test conducted by the university to be followed by an interview to be conducted by the concerned department, which shall carry weightage 80% and 20% respectively. The candidates who have qualified UGC/CSIR/JRF/NET/SLET or are Teacher fellowship holders or have passed M.Phil. Programme with course recognized by the UGC as per UGC regulations (maximum standards and procedure for award of M.Phil./Ph.D. degree, 2009) shall be exempted from appearing for the written test. Such applicants will however, be required to appear for the personal interview. In case of the candidates exempted from the written test, the Interview shall carry 100% weightage.

Bachelor of Education (B. Ed): 50% Marks either in Bachelor Degree and /or in Master's Degree in Science/ Social Science/ Humanities, Bachelors in Engineering or Technology with specialization in Science and mathematics with 55 % marks or any other qualification recognized as equivalent.

Master of Education (M. Ed): 50% Marks or an equivalent grade in B.Ed./B.El.Ed./B.A.B.Ed., B.Sc.B.Ed./D.El.Ed. with an undergraduate degree with 50% (with fifty percent marks in each). The candidates having compartment will not be allowed for admission in M.Ed. (Regular Course) in any case.

#### **Departmental Infrastructure**

Department has adequate no. of furnished air conditioner classroom. Providing all facilities to the students like, library, e-library, open access system, wi-fi facility etc.

#### **Brief Faculty Profile**

#### 1. Dr. Sarika Sharma



**Area:**Educational Administration, Management, Supervision & Finance", Value Education, Teaching learning, women empowerment, HRM

**Educational Qualifications :** Ph.D. in Education, M. Ed, M.A. Economics & English, DACA-Computers, MBA -HR, Diploma in Women Empowerment & Development

**Teaching Experience College of Education:** 16 Years: (B.Ed. 13 Years & M.Ed. 06 in Years, M.A. 3 Years) Administrative Experience Principal & Head of Department: 11.5 Years

#### Academic /Administrative Affiliation

- 1. Associate Professor & Head Dept. of Education Central University of Haryana
- 2. Cell for Person With Disabilities (Divyangjan)- Convener, Chairperson ICC (Internal complaint committee),
- 3. Coordinator- Faculty Induction Development
- 4 Academic Council

**Member Expert Group,** constituted in pursuance of the MHRD letter No. F.11-131/2015-EE-10 dated 31.12.2015 of NCTE programme of Four Years BAB.Ed./B.Sc. B.Ed. & Prepared curriculum Framework for the same

- 1. Attended the Launch of the 2015 Education for All Global Monitoring Report on 9th April, 2015. The invitation is received from MHRD Government of India & UNESCO.
- 2. Participated in Regional Consultative Meeting of NCTE on New Education Policy (NEP-2016)- Teacher Education on 25.10.2015 at Amritsar and framed Vision & Mission

- 3. Participated as Proctor in Regional Seminar at Chandigarh organized by MHRD and presented the university related report.
- 4. Attended workshop on "Pandit Madan Mohan Malviya National Mission on Teachers and Teaching" on 20th and 21st October, 2016 at Jamia Milia Islamia, New Delhi and presented views.

#### Life Membership:

- 1. All India Association Of Teacher Education (3100), All India Association Of Educational Research (0033), International Association Of Academician & Research (INAAR/0649)
- 2. Indian Red Cross Society, BhartiyaYog Mahasangh

#### **Current Research Area:**

- 1. Educational Administration, Management, Supervision & Finance, Leadership, Peace & Values
- 2. Ethics & Inclusive Education

**In Service Training:** 18, Papers Presented in International Seminar: 18, Papers Presented in National Seminar: 40, Paper published: In a referred publication with ISBN & ISSN 38 Invited Lecturers at International & National Institutions =39

**Research Guided:** Ph.D. 6 Continue, M. Phil Awarded: 08, M.Ed. Dissertation: 38, M.A. Edu. **Dissertation: 15** 

- 1. Managing Editor: An International multidisciplinary Refereed Research Journal of Central University of Haryana, March 1, 2014 ISSN 2348-3377 for the year 2015 and 2016
- Member of the editorial board of An International multidisciplinary Refereed Research Journal of Central University of Haryana, March 1, 2014 ISSN 2348-3377 for the year 2014
- 3. Chief Editor: e journal: Bhartiam International Journal of Education and Research ISSN 2277 1255 for the year 2010 to 2013, and Editor: International Academic Journal of Research ISSN 2348-7070 April 2014

#### **Course Attended**

- 1. GIAN course on Starter's and Start-Ups: A Learning Cycle for Beginners (Get Excellent Grade with Grade Point 10 and earned 2 credit), MHRD & Central University of Haryana, 18-07-2016 to 30-07-2016.
- 2. Workshop on Teaching Online Courses with Moodle LMS, National University of Educational Planning and Administration (NUEPA), Delhi-Aug. 26-28, 2016.

#### 2. Prof. Neerja Dhankar



**Area:** Teacher Education, Educational Administration, Value Education, Teaching of Social Sciences, In service Teacher Education

**Educational Qualifications :** Ph.D. in Education, M. Phil in Education, M.Ed., M.A. (Political Science, Sociology, Human Rights) UGC NET in Education, Sociology, Human Rights, PG Diplomas in Higher Education, Human Resource Management, Journalism and Mass Communication, Environment and Sustainable Development, Certificate Courses in Guidance, Human Rights, Yoga and Ayurveda

Life Membership:

Indian Red Cross Society, British Council, Max Muller Bhawan, Uttaranchal Kala Parishad

Academic / Administrative Affiliation

Advisor - Girls' Hostel

Convener-Centre for Value Education and Professional Ethics

NAAC- Advisory Committee Member

NAAC- Coordination Committee Member

Reception of NAAC Team- Convener

NAAC-Interaction with Teaching Staff Team- member

National Seminar on Inclusive Education- Coordinator

PMMMNMTT Scheme- member of All Advisory Committees

Convocation-2017 Convener of two committees

Teaching Experience in College of Education: 18 Years in Colleges of Teacher Education and University

Departments of Teacher Education

Educational Administration 2 years 2 months

#### **Current Research Area:**

Educational Leadership, and Management, Women Rights and Education Philosophy of Education

#### 3. Dr. Renu Yadav



Qualification-Ph.D. (Education), M. Phil., M. Ed., NET (Education), M. Sc. Microbiology (Gold Medalist)

Experience- 8 years

Research Area- Gender Concern in Education, Guidance and

Counselling

**Assistant Proctor** 

Membership of Professional Bodies: Member of Editorial Board,

Reviewer of International Journals and APA

#### **Projects**

- 1. "Hygiene and Sanitation practices among Adolescent Girls: Study of Schools" funded by Youth Red Cross in 2016-17 as Principal investigator (Co-investigator- Dr. Dinesh)
- 2. "Evaluation of YRC activities in Haryana" funded by Youth Red Cross in 2016-17 as Co-investigator with Dr. Dinesh

#### Research Guidance

Ph.D.- 4 (Continue), M.Phil.- 5 (completed), 1(Continue), M.A..-10 (completed), 1(Continue)

#### **Publications/Presentation/Invited Lectures**

20 papers published in International and National Journals/Books

27 Papers presented at National/International Seminars/Conferences

10 Invited Lectures

#### Membership of Committees, Cells & Clubs

Convener- Women Empowerment Cell, Health, Hygiene and Sanitation Unit

Programme Coordinator-Community Development Centre & Unnat Bharat Abhiyan

Nodal Officer- Gender Champion

Programme Officer- National Service Scheme& YRC

**Member-** Sensitization, Prevention and Redressal of Sexual Harassment Committee, Alumni Club, School Board of School of Arts, Humanities and Social Sciences, Board of Studies of School of Arts, Humanities and Social Sciences, Syllabus Committee for B. Ed and M. Ed, Central Counselling Cell, Anti-discrimination Cell, Grievances Redressal committee, Sports Club/Advisory Committee, NAAC Self-Study Preparation Committee,

#### **Programme Organized**

82 programmes have been organized at University/ National Level. 2 National Workshop/seminar organised.

#### **MOOC Courses**

- 1. Course on Inspiring Leadership through Emotional Intelligence offers by Richard E. Boyatzis, Professor, Case Western Reserve University.
- 2. Course on What Future for Education offers by Dr. Clare Brooks, Institute of Education, University of London.
- 3. Course on Women in Leadership: Inspiring Positive Change offers by Dianna Billimoria, Professor, Case Western Reserve University.

#### **Editorial Board**

1. Editorial Board of Journal of Education & Social Policy, Published by Ideas for Promoting Ideas, USA, quarterly peer reviewed journal, ISSN 2375-0782 (Print) 2375-0790 (Online)

#### Reviewer

1. Journal of the International Society for Teacher Education, Hong Kong (Peer Reviewed, International Journal), ISSN 1029-5968.

#### **Membership of Professional Bodies**

1. American Psychological Association, Member, International Society for Development and Sustainability (ISDS), Japan, All India Teacher Educators Association

#### **Professional Programmes attended**

- 1. Attended 28 days Orientation Programme at Central University of Hyderabad from June 19-July 17, 2014 with "A" Grade.
- 2. Attended 21 Days Refresher Course in Education at University of Kerala, Trivandrum, from Feb. 2-23, 2015 with "A" Grade.
- 3. Attended Short term course on Higher education" Equity, privatisation and Internationalisation conducted by NUPEA in University of Pune, Pune from Dec. 12-23, 2016.

#### 4. Dr. Dinesh Chahal



Qualification-Ph.D. (Education), M.Ed., NET (History) and NET (Education) M.A (History).

Experience- 12+ years

Research Area-Teacher Education, School Education, Policy Implementations

#### **Projects**

1. "Hygiene and Sanitation practices among Adolescent Girls: Study of Schools" funded by Youth Red Cross in 2016-17 as Co-investigator with Dr. Renu Yadav

2. "Evaluation of YRC activities in Haryana" funded by Youth Red Cross in 2016-17 as Principal Investigator (Co-investigator Dr. Renu Yadav)

#### Research Guidance

Ph.D.- 4 (Continue), M.Phil.- 3 (completed), 3(Continue), M.A..-6 (completed), 1(Continue)

#### **Publications/Presentation/Invited Lectures**

18 papers published in International and national Journals/books More than 30 Papers presented at National/International Seminars/Conferences More than 40 Invited Lectures

#### **Membership of Committees- Cells & Clubs**

Coordinator -NSS & YRC

Member- Community Development Centre &Unnat Bharat Abhiyan, Women Empowerment Cell, Health, Hygiene and Sanitation Unit, Board of Studies of School of Arts, Humanities and Social Sciences, Syllabus Committee for B. Ed and IQAC Committee, NAAC Self-Study Preparation Committee

#### **Programme Organized**

More than 40programmes have been organized at University/ National Level.

#### **Editorial Board**

Editorial Advisory Member for journal- Milestone Education

Membership of Professional Bodies: Life Member AIAER, CTE, AIATE, Learning Community

#### 5. Ms. Aarti Yadav



# Assistant Professor in Department of Education at Central University of Haryana (since 30/12/2013)

Area: Educational Psychology, Pedagogical approaches

#### **Educational Qualifications:**

- Ph.D (Education) pursuing
- UGC NET&M.Phil in Education, M.Ed,M.D.U,Rohtak
- MA(Economics), B.Com, Panjab University, Chandigarh

**Teaching Experience:** 5 Years

Current Research Area: Educational Psychology, Pedagogical

approaches

**Paper Presented in Conferences, Seminars, Workshop, Symposia etc:** More than 15 papers presented in national and international seminars, conferences, resource person at more than 3 conferences and acted as organising secretary in worksop on SPSS organised by Dept. of Education and Statistics **Published Papers:** Five papers published in national and international peer reviewed journals.

Research Guided Supervised six students of M.A Education

#### **Courses Attended:**

1. UGC sponsored Orientation Course at University of Hyderabad from 19 /6/14 to 16/7/14, University of Hyderabad, Hyderabad

2. UGC Sponsored Short Term Course on IT (June 14 – June 20, 2016), University of Kashmir, Srinagar

## **Contribution in the Corporate Life of the University:**

1. Coordinator: The Group for Promotion of Arts, Culture and Heritage

2. Coordinator: Movie Club

3. Nodal Officer: National Digital Library

4. Member: Unnat Bharat Abhiyaan

**Programmes Organized in University:** More than 20 programmes organised in University.

#### **Attended Courses on MOOCS Platform**

- 1. Course on Inspiring Leadership through Emotional Intelligence offers by Richard E. Boyatzis, Professor, Case Western Reserve University.
- 2. Course on Learning Assessments organised by IIEP from 1-26 February 2016.
- 3. Course on Problem Based Learning: Principles and Design offered by Maastricht University through through NovoEd.

## **Member of Major Administrative Bodies**

- 1. Member of Board Of Studies of Department of Psychology(2014)
- 2. Member of IQAC (2014)
- 3. Member of Invitation Committee, Accommodation And Transport Committee, and Committee for Entry Passes During Convocation 2014
- 4. Member of Stage arrangement Committee, Compering and Stage Coordination, Reception Committee in second convocation 2016
- 5. Member of NAAC Self-Study Preparation Committee 2016

#### **Research Thrust Area**

#### M.Phil:

Sr. No.	Name of Student	Roll No.	Session	Topic of Research	Inter-disciplinary/ Multidisciplinary Focus	Supervisor
1.	Dilbag	5072	2014	Children with Special Needs and their Educational Aspiration: A Perceptive study of Peers of CWSN	Inclusive Education	Dr. Sarika Sharma
2.	Jyoti	5074	2014	A Study of Leadership Style and Abilities Among Adolescents	Educational Leadership/ Managenent	Dr. Sarika Sharma
3.	Hari Krishan	5073	2014	An Analytical study into managing stress and its impact on learning behavior of school teachers	Learning/ Psychology	Dr. Sarika Sharma
4.	Annu Kumari	5071	2014	Socio-Cultural and Educational Challenges of Third Gender	Gender studies	Dr. Renu Yadav
5.	Nitu Kumari	5076	2014	Study of Learning Styles in relation to Emotional Intelligence and Self-Concept of College Students	Educational Psychology	Dr. Renu Yadav
6.	Naveen Jain	5075	2014	Relationship Between Scientific attitude and Achievement in Science Subject at Secondary Level	Teacher Education	Dr. Dinesh Chahal
7.	Satish Chand Saini	5077	2014	A Comparative Study Of Awareness Between Primary & Middle Level Teachers About RTE ACT, 2009	Teacher Education	Dr. Dinesh Chahal
8.	Amarjit	6001	2015	Excessive use of electronic gadgets and its impact on mental health: A study in relation to mobile phone addiction among college students	Connecting with social Media	Dr. Sarika Sharma
9.	Rajesh Kumari	6002	2015	Environmental Awareness And Ethics: A comparative study of in-service teachers of government and private schools	Environment	Dr. Sarika Sharma
10.	Parveez Ahmad	6003	2015	Understanding impact of learning style on academic achievement: An exploration in context of secondary school students	Learning/ Psychology	Dr. Sarika Sharma

Sr. No.	Name of Student	Roll No.	Session	Topic of Research	Inter-disciplinary/ Multidisciplinary Focus	Supervisor
11.	Anand Prakash	6040	2015	Exploring Effect of Administrative Behaviour on formation of Attitude among Teachers, Parents And Students: A study in context of schools in Haryana	Education Administration	Dr. Sarika Sharma
12.	Altaf Rasool	6041	2015	Understanding impact of Personality traits on Social Intelligence of Students: A Study in context of college going students of Jammu District	Personality / Psychology	Dr. Sarika Sharma
13.	Veenu Mehra	6005	2015	Study of Women Safety in Higher Education: Qualitative exploration of Jammu District	Gender studies	Dr. Renu Yadav
14.	Shashi Kala	6006	2015	Effect of leadership approach on learning organisation Quantitative & Qualitative Perspective	Leadership Behaviour	Dr. Renu Yadav
15.	Sachin Kumar	6004	2015	Effect of Youth Services on Social Intelligence: An exploration in the Context of Higher Education	Higher Education	Dr. Dinesh Chahal
16.	Teena Yadav	6039	2015	Evaluation of Mid-Day Meal programme in Mahendergarh district	Elementary Education	Dr. Dinesh Chahal
17.	Madhusmita Behra	8088	2016	Effect of Government Schemes on Educational Status of Tribal Students: Reflection on Post Matric Scholarship Scheme	Sociological	Dr. Renu Yadav
18.	Mirza Muneeb Manan	8089	2016	Effect of mid-day meal scheme on access to Education at elementary level	Government Policy	Dr. Dinesh Chahal
19.	Raj Kumar	8090	2016	Marginalized children and their Education: A study of parental awareness towards child's rights in Udhampur District.	Child Rights	Dr. Dinesh Chahal
20.	Ravindra Kumar Thakur	8091	2016	Social Freedom and its Ramifications on Teaching: An Analysis in context of Women Teacher Educators	Women Education	Dr. Sarika Sharma
21.	Anash Kumar Das	8092	2016	Effect of Vocational Training on Behavioural skills in Mild Intellectually Disabled Person	Special Education	Dr. Sarika Sharma

# Ph. D.

Sr. No.	Name	Roll No.	Session	Торіс	Inter-disciplinary/ Multidisciplinary Focus	Supervisor
1.	Suraj Kumar	5018	2014	Impact of CAI on the development of Motor, Academic and Communication Skills in Children with Mental Retardation	Special Education	Dr. Sarika Sharma
2.	Ajay Kumar Yadav	5011	2014	Effect of Transformational Leadership of Principals on Job Satisfaction and Job Performance of Teachers	School Leadership	Dr. Renu Yadav
3.	Ashok Kumar	5013	2014	Impact of Socio-Economic Status and Personality on Teaching Competency of Secondary School Teachers	Teacher Education	Dr. Sarika Sharma
4.	Sanjay	5017	2014	Study of Learning Outcome of Students in Relation to Pedagogical Content Knowledge of Elementary Teachers	Elementary Education	Dr. Dinesh Chahal
5.	Poonam Kumari	5015	2014	Effect of Social Networking Addiction and Academic Self Concept in Adolescents on their Academic Achievement	Mass & Communication	Dr. Sarika Sharma
6.	Poonam Bharti	5016	2014	Values And General Well Being Among High School Students In Relation To Socio-Demographic Variables	Value Education	Dr. Renu Yadav
7.	Meena Kumari	5014	2014	Teacher Effectiveness of Secondary School Teachers in Relation to Teaching Competency, Work Values and Spiritual Intelligence	Teacher Education	Dr. Dinesh Chahal
8.	Anita Rai	5012	2014	Value of Prospective Teachers in relation to their vocational Interest, Teaching Competency and Level of Aspiration of Central and State Universities: A comparative Study	Values	Dr. Sarika Sharma

# **Students' Enrichment Programme**

Sr. No.	Name	Affiliation
1.	Justice Lila Seth, Prof. Yash Pal (Workshop on Towards designing a roadmap-Implementation of RTE Act, 2009)	Representative from Ministry, Delhi University, NCERT, Azim Prem Ji University, International Schools and NGO. June 21, 2012
2.	Prof. Saroj Sharma (An over view on Education)	Dept. of Education, GGSIP University, Delhi
3.	Prof. C.B.P. Singh (PASS Model of Intelligence of J.P. Das,)	Department of Psychology, T. M. Bhagalpur University, Bihar on 16-09-2014

Sr. No.	Name	Affiliation
4.	Prof. C.B.P. Singh (Time Management & Classroom culture of Professional courses in the University System)	Department of Psychology, T. M. Bhagalpur University on 17-09-2014
5.	Prof. Rajender Singh (Recent Trends in Teacher Education & Relevance of two years B.Ed. Programme)	Department of Education, Kurukshetra University, Kurukshetra on19-09-2014
6.	Dr. Sarika Sharma (Research Methodology An overview)	Department of Education Central University of Haryana on 15.04.2015
7.	Prof. M.M. Goyal (Identification of Problem for Research at M.Phil. & Ph.D. Level Issues and discussions) And (Designing of an effective Research Proposal)	Department of Economics, Kurukshetra University, Kurukshetra on 15.04.2015
8.	Prof. Madhulika Banerjee (Doing Ethnography & Research Fallacies)	University of Delhi, Delhi on 16.04.2015
9.	Dr. Namita Rajput (Thematic Content Analysis and Discourse Analysis.)	University of Delhi, Delhi on 16.04.2015
10.	Dr. Ranjan Aneja (Basic Statistics (Framing of Hypothesis, Type of Data, Central Tendencies & other statistical Techniques)	Department of Economics Central University of Haryana on 16.04.2015
11.	Dr. N.C. Ojha, (Interpreting and Theorizing Results – How to write the discussion section of a research report based on qualitative data.)	RIE, Bhopal on 18.04.2015
12.	Prof. Hemant Lata Sharma (Live Discussions on Research Proposals and Projects – moderated by experts)	Dean, Faculty of Education, M.D. University, Rohtak, Haryana on 18.04.2015
13.	Dr. Rajkumar (Research Report Preparation and Publication)	CDLU Sirsa on 24.04.2015
14.	Mr. Vinay Ahlawat (Application and Role of Statistics in Educational Research)	Department of Statistics, Central University of Haryana on 18.02.2015
15.	Mr. Vinay Ahlawat (Application and Role of Statistics in Educational Research)	Department of Statistics, Central University of Haryana on 18.02.2015
16.	Vinay Kumar (Data Analysis using SPSS and MS-Excel)	IIT Kanpur on17.04.2015
17.	Mr. Vinay Ahlawat (Practical of Data Analysis using SPSS and MS-Excel.)	Department of Statistics Central University of Haryana 17.04.2015
18.	Dr. Renu Yadav (Brainstorming, Discussions, Experience sharing)	Department of Education Central University of Haryana on 20.04.2015
19.	Dr. Jagdish Prasad (Bhasha Aur Bhasha Ka Saundarya)	Hindi Officer, Central University of Haryana on 19.09.2015
20.	Lecture on "Role of Education in Building Society & Culture" By prof. Jitender Prasad Department of Sociology CUH	
21.	Lecture on "The Impact of Time Management on the Students".  By Dr. Anand Sharma, HOD, Department of Management Studies, Central University of Haryana, Mahendergarh	
22.	Guest Lecture on "Yoga for wellness: An essential component of Teacher Education"	Feb 17, 2017
23.	National Seminar on "Inclusive Education: Past, Present and Future"	Feb 28, 2017

#### **Highlights and Achievements**

- 1. 26 Scholars got Job and few went for higher studies
- 2. 14 Scholars cleared UGC-NET Examination during their course work
- 3. Faculty, Dr. Sarika is Chairperson, InternalComplaint Committee.
- 4. Faculty, Dr. Renu is Convenor, Women Empowerment Cell
- 5. Faculty, D. Dinesh is Programme Coordinator NSS, YRC
- 6. Faculty, Ms. Aarti is Convenor of Group of Arts, Culture and Heritage

#### **Major Events Organised**

- 1. Faculty contributed in the Editorial Board of National Level Consultative Workshop on "Right to Education 2009" (June 21, 2012).
- 2. Faculty contributed in Organising Committee of National Seminar on "People, Power and Progress' (May 30-31, 2012).
- 3. Faculty of the contributed in Organising Committee of Seminar on "India of Today & Tomorrow" (Feb. 2, 2012).
- 4. Faculty of the Department contributed as coordinator and Member of Editorial Board in the Workshop on "Addressing Discrimination against Women: Walk the Talk" (May 18-20, 2011).
- 5. Faculty of the contributed as the member of Organising Committee of National Seminar on "Republic of India@61" (March 26-27, 2011).
- 6. All faculty members contributed in Coordinator of National Workshop on Choice Based Credit System: Potential and Challenges in collaboration with AIU, Delhi -9-11, Nov., 2016
- 7. All faculty embers contributed in five day- Workshop on SPSS in collaboration with Dept. of Statistics, April, 2015
- 8. All faculty members contributed in organising committee of National Seminar "Inclusive Education:Past, Present and Future", Feb 28, 2017
- 9. International Literacy Day-08.09.2014
- 10. Departmental Alumni Meet- 2.10.2016





# **Future Roadmap**

- 1. Establishment of Centre of Excellence.
- 2. Open Integrated Teacher Education programme.
- 3. Development of MOOCs
- 4. Collaborative initiatives with prestigious organisations
- 5. Student-exchange programmes
- 6. Continuing the Series of Extension Lectures by the Eminent Professors
- 7. Engaging Visiting Professors/Adjunct Faculty

# **Department of History and Archeology**

The department was established in the year 2014 under the aegis of the School of Arts, Humanities and Social Sciences. At present, the Dept. offers two years post-graduate programme, viz., MA in History & Archaeology, which runs into four semesters. Since 2015 onwards, the Dept. has been following *CBCS* syllabus with provisions for specialisation in the final year. Currently,the department offers twenty-five seats (25) at PG level.

## Programmes Offered and Number of Seats: M.A. History

Session	Intake Capacity	No. of Students
2014-16	15	13
2015-17	25	25
2016-18	25	13

#### **Admission Criteria and Procedure**

Admission process is through CUCET (Central University Common Entrance Test). This entire process is followed up as per the provisions enumerated in the ordinance of the University.

#### **Brief Faculty Profile**

### 1. Dr. Vinay Kr. Rao

Head of Department

Associate Professor

- 1. M. A., Ph.D., NET
- 2. More than 12 years of experience
- 3. Area of Interest: Art & Archaeology
- 4. **Association with National Societies:** Life Membership of *Indian Archaeological Society*, New Delhi., Life Membership of *Indian History and Culture Society*, New Delhi, Association with International Societies, Life Membership of *Society of South Asian Archaeology*, Pune., Life Membership of *International Association of Asian Heritage*, Keleniya, Sri Lanka., Office bearer Positions in International Societies, Standing Committee member of *International Association of Asian Heritage*, Keleniya, Sri Lanka., Executive Committee member of *International Federation of Teaching Archaeologists and Historians* (IFTAH), Sri Lanka.

#### 2. Dr. Narendra Parmar

#### **Assistant Professor**

- 1. M.A., Ph.D., NET, Diploma in Archaeology from ASI
- 2. About 3 yrs. of teaching experience
- 3. Area of Interest: South Asian Archaeology; Field Archaeology
- 1. **Membership:** Life member Haryana History Congress, Life Membership of *Indian Archaeological Society*, New Delhi.

#### 3. Dr. Abhiranjan Kumar

#### **Assistant Professor**

- 1. M.A., Ph.D., NET & JRF
- 2. More than 3 yrs. of teaching experience
- 3. Area of interest: Communal politics in colonial India (from regional perspective) and Historiography
- 4. E-mail: abhiranjan@cuh.ac.in; Mob:8059998969
- 6. Membership: Life member Indian National Congress, Life member Haryana History Congress, Bihar History Congress

#### 4. Dr. Iswar Parida

#### **Assistant Professor**

- 1. M.A., Ph.D.
- 2. About one year of teaching experience
- 3. Area of Interest: Childhood history in colonial India and Social and Intellectual History
- 4. E-mail: Iswar@cuh.ac.in; Mob: 8689058367

#### **PUBLICATIONS**

Name	Journal	Book/Chapter	Seminar Proceeding
Dr. Vinay Kr. Rao	14	04 books	
Dr Abhiranjan Kumar	03	Nil	01
Dr. Narendra Parmar	10	03 chapters	Nil
Dr. Iswar Parida	Nil	Nil	01

#### **Highlights and Achievements**

#### 1. Exploration of Rakhigarhi

The department organized a day long exploration to Rakhigarhi in Hissar distt. to explore one of the biggest sites of the Harappan Civilization.

#### 2. Tigrana Excavation

The Dept. of History & Archaeology is the first in Haryana state to get the license to excavate a Harappan site at Tigrana in the Distt. Bhiwani, Haryana, by the Archaeological Survey of India (ASI).

#### 3. Setting up Museum in the University

It is located in the department itself. Presently the museum has collection of artefacts collected from exploration and excavation of various sites of Haryana. The museum has collection of models/replicas also procured from National Museum, New Delhi, for study by PG students.

#### 4. Departmental Library

The department has recently set up library at departmental level for students and faculty.

#### 5. Eminent Lectures

The department organized guest lectures of eminent historians from other Universities like Kurushetra University and M D University, Rohtak.

- Prof. K. C. Yadav, Kurushetra University
- Prof. Amar Singh, M. D. University

#### 6. Ask Question Movement

The department has also initiated the 'ASK QUESTION MOVEMENT' for students with the aim of reducing their hesitation and initiating academic discussions.

# Harappan-era industrial site found in Bhiwani village





apaper transmitta manni (1911)

#### **Research Thrust Area**

It lies in enhancing the status of department to a centre of excellence in the field of archaeology and regional history of Haryana.

#### **Future Roadmap**

- 1. To set up well equipped archaeological lab;
- 2. To strengthen the present departmental museum;
- 3. To set up repository containing archival materials and micro films for researchers;

# **Department of Psychology**

Department of Psychology is established in the year 2014-15 under the School of Arts, Humanities and Social Sciences, Central University of Haryana. Department of Psychology offers PG Programme (M.A. Psychology) of two years duration which are divided into four semesters and based on choice based credit system (CBCS).

#### Programmes Offered, Number of Seats and Eligibility Criteria

Sr. No.	Name of the Programme	Minimum Duration (Years)	Total Annual Fee in Rs.	Eligibility	Seats Available
1.	Master of Psychology (M.A. Psychology)	2 Years	14930	Graduation from any recognized University with a minimum 50% Marks or equivalent grade in aggregate (45% for SC/ST or differently abled categories)	25

#### **Brief Faculty Profile**

#### 1. Professor (Dr.) Umed Singh (Academic Consultant)

Qualification - M.A. & Ph.D

Experience- 37 years

Research Area/ Interest –Personality, Mental Ability, Clinical Psychology, Hypnocounselling

Mobile: 9416781400

Publications/ Ph.D/ Dissertations Details

- 1. Ph.D Supervisor 20
- 2. M. Phil- 150
- 3. Master Dissertations- 100
- 4. Paper Published 50
- 5. Books 03

Membership of academic & research bodies – Member of BOS in Various University Permanent member – Indian Science Congress Association, Indian association of applied Psychology, Somatic Ink Block Society (USA), Advisor and Member, Educational Boards

Awards & Achievements – Best research Award (2006), International Somatic Ink Block Society. Membership of Important Committees- Imported post held- Member EC, AC, Chairman, Department of Psychology, Deputy Chief Warden, Coordinator NSS, Incharge Estate, Counselor & Students Advisor Students, Incharge Departmental Mental Health & Psychological Clinic,- Kurukshetra University, Director K.U. P.G. Regional Centre Jind, Dean Academic Affairs, CRVS University Jind,, K.U.,

#### 2. Dr. Jitendra Kumar K.

#### (Assistant Professor)

Qualification – M.A. M.Phil & Ph.D (TISS Mumbai) (UGC-NET, ICMR- JRF & SRF and DAAD Fellowship-Germany) Experience-

2.5 Years as Assistant Professor and 1.5 Years as Teacher In-Charge, Dept. of Psychology,

Research Area/ Interest – Mental Health, Stress Management, Organizational Behaviour, Discrimination issues, Personality

Email: kjitendrakumar85@gmail.com

Mobile: +91-8059599464

#### **Publications**

- 1. Paper Published 03
- 2. Book chapters- 01
- 3. Book- 01
- 4. Psychological Scale- 01

#### Membership of academic & research bodies

- 1. American Psychological Association: Membership No. 49759333
- 2. The Indian Science Congress Association: Membership No L19318.
- 3. Indian School Psychology Association (InSPA): Membership No 141/2012.
- 4. Community Psychology Association of India.
- 5. National Association of Psychological Science (NAPS).
- 6. National Academy of Psychology, India (NAOP, India).

#### **Awards & Achievements**

- 1. ICMR-JRF & SRF for Doctoral Research
- 2. TISS-M.Phil, PhD.
- 3. DAAD Fellowship for Research at Freie University Berlin, Germany
- 4. Membership of Important Committees-
- 5. Convener admission committee and Centre Superintendent Examination, Deptt. of Psychology
- 6. Faculty Coordinator, Divergent Thinking for UGC-NET Classes, CUH
- 7. Member, Departmental Board of Studies, CUH
- 8. Member, Document verification and Counselling Assistance Committee, CUH

Imported post held-Teacher In-Charge, Department of Psychology, CUH (Since August 2015)

#### 3. Dr. Arun Kumar (Assistant Professor)

 $Qualification-M.A.\ \&\ Ph.D$ 

Experience-

- 1. Working as Assistant Professor at Central University of Haryana since 14 Oct, 2016
- 2. JRF & SRF in Defence Institute of Psychological Research, DRDO, Delhi since 31 Dec, 2013 to 12 Oct, 2016.
- 3. Supportive Counselling Supervisor at various centers of Uttar Pradesh under 'SAKSHAM Project' the Global Fund to Fight AIDS, TB & Malaria, Round-7, Department of Psychology, D.D.U. Gorakhpur University, Gorakhpur, U.P. India from Oct, 2012 to 2015.

Research Area/ Interest - Health, Cyber, Applied, Positive, Organizational and Military Psychology

Email: arun@cuh.ac.in Mobile: +918130884310

#### **Publications**

- 1. Paper Published 11
- 2. Book chapters- 02

Membership of academic & research bodies – National Academic of Psychology (NAOP) member (2016)

#### **Awards & Achievements**

- 1. Awarded JRF and SRF from Defence Institute of Psychological Research, DRDO.
- 2. Awarded Gold Medal in 2011 from DDU Gorakhpur University Gorakhpur U.P. for obtaining 1st rank in Master of Art (Psychology) degree.
- 3. Awarded Gold Medal in 2009 from DDU Gorakhpur University Gorakhpur U.P. for obtaining 1st rank in B.Ed. degree.

#### **Research Thrust Area**

- 1. Mental Health & Stress
- 2. Discrimination and Mental Health
- 3. Social Cognition & Group Dynamics
- 4. Personality and Clinical
- 5. Test & Scale Development
- 6. Hypnocounselling
- 7. Organizational Behaviour
- 8. Applied & Positive Psychology

#### **Future Roadmap**

- 1. To start the Research Programme (M.Phil, PhD Programme).
- 2. To associate with various public organizations, hospitals, non-government organizations, corporate industries and community organizations for field work.
- 3. To initiate collaboration with international institutes / universities for quality research
- 4. To develop advanced psychology laboratory for quality education

# **Department of Sociology**

Department of Sociology is established in the year 2014 under the aegisof School of Arts, Humanities and Social Sciences. Department of Sociology offers PG Programme (M.A. Sociology) of two years duration which are divided into four semesters and based on choice based credit system (CBCS).

#### **Program Outcome**

The MA program helps to develop critical understanding of sociological issues. It also helps students to advance their cognitive and research skills for professional purposes.

Number of seatsoffered: 15

Scheme of the Programme: The course is based on Choice Based Credit System (CBCS).

#### **Admission Procedure**

(adherence to ordinance)- Through an all India entrance Examination, Central Universities Common Entrance Test (CUCET).

#### **Departmental Infrastructure**

• Five classrooms with LCD Projector in two rooms. One Computer Lab, One Reading Room, One Research Scholar's Room, One Seminar Hall (Shared with the Department of Psychology), One Extra Room and Office Rooms for all the faculty members.

#### **Facilities for students**

- 1. Internet Facility with Wi-Fi.
- 2. Library Facility with computer lab.

#### **Events Organized (last three years)**

#### **Collaborative Venture**

- 1. One Day Orientation Program for motivation of students in Rural Reconstruction in collaboration with Education Department and NSS with the support of National Institute of Rural Development (NIRD), Hyderabad on 23rd September 2016.
- 2. Collaborative academic venture with Department of Tourism & Hotel Management.

#### **Highlights and Achievements**

- 1. Field work and extension activities supervised by the faculty members in six adopted villages adjoining Mahendergarh block, Mahendergarh Dholi, Pali, Jant from March 1-4, 2016.
- 2. Extension Lecture on topical issues organized in the department.
- 3. Interaction with outside experts such as Prof. Avijit Pathak and Prof Anand Kumar from JNU, New Delhi and Prof. B.K. Nagla, Retired Prof. MDU, Rohtak who visited department.
- 4. Organized one day workshop on "Internet, online safety, optimal use of counter speech: Need for a gender sensitive cyber etiquette" in the month of February 2017 in collaboration with Centre for Social Research and Facebook.

# Research Projects, MOU, Consultancy, Awards, Collaboration and Academic Projects/activities:

- 1. Research Proposal has been submitted to District Administration for setting up Centre for Rural Studies to be located in the Department of Sociology.
- 2. The Program Coordinator of UNDP visited the university to explore the feasibility of initiating collaborative ventures for placements of students of Department of Sociology.

## **Future Roadmap**

- 1. To develop and institutionalize a forum of conducting research on topical issues.
- 2. To initiate the process of starting M.Phil. and Ph.D. programs from next year and thrust areas will be identified to undertake research on rural and women studies as well as other contemporary issues.

#### **Faculty Profile**

#### 1. Prof. Jitender Prasad

Professor, Dept. of Sociology,

E-mail: jitenderprasad@cuh.ac.in, jpjnu1976@gmail.com



#### **Publications:**

#### Books:

- 1. Tribal Movements in India, Kilaso Publications, New Delhi, 2005
- 2. Industrial Sociology, Vayu Education of India, New Delhi. 2009
- 3. Gandhi, Ambedkar and Dalit's Emancipation, Academic Excellence, New Delhi, 2015

Number of Articles published in Research Journals: 20
Papers published in Edited Books: 20
Projects Completed for various academic institutes 15

# Research Guidance/Supervision:

Number of students supervised for M.phil & Ph.D 36
Participated in Seminar, Workshop, Symposia,
Conferences National/International etc. 90

#### **Publications (Best five) of Articles in Journals**

- 1. Problems of Objectivity in Social Science, M.D.U.Research Journal of (Arts), vol.1, No. 2, October, 2002.
- 2. Plural Ethnic Group Characterstics: The Nature of Identity Formation in Haryana, Guru Nanak Journal of Sociology, Vol.24, no.2, October 2003.
- 3. Rheotoric of Human right Provisions: The Case of Dalit Women, Gurunanak Journal of Sociology, Vol. 25, No. 1, October 2003.

- 4. Gender Dimensions of Poverty and Human Rights in an Era of Development, Journal of Institute of Human Rights, Vol.7, No.1 June 2004.
- 5. Myth and Reality of Women's Status: The Case of Working Women, Samaja Shodhana (Journal of the Manglore Sociology Association), Vol.13, No.1& 2, March- October, 2004.

#### **Papers in Edited Books**

- 1. An Impact study of Women Empowerment through SHGs in Haryana: Its Prospects and Challenges in Lazar Daniel, Natrajan P & Deo Malbika(eds) Microfinance Enabling Empowerment, Vijoy Nicole Imprints Pvt Ltd. Chennai, 2010.
- 2. Ambedkar's Perspective on Dalit Movement in R.B. Langian(ed) Relevance of Thoughts of Dr Ambedkar in the Present Times, Gaziabad Sahitya Sansthan,2010.
- 3. Scourge of Untouchability and Social Deprivations of Scavengers in B.Pathak(ed) Sociology of Sanitation, Sulabh International Social Science Organisation, New Delhi, 2013.
- 4. Some Reflections on Socio-economic aspects of Food Security: Debating Development Issues in Souvenir National Seminar Reorientation of Agricultural Research to Ensure National Food Security, Jan 6-7, 2014, Directorate of Research, CCSHAU, Hisar.
- 5. Some Reflections on Food Security, Poverty, Inequality and Marginalisation in Mohinder Salaria(ed) Issues in Development Economic and Bio-Diversity Conservation Vol-5. 2014 ISBN-13.

#### **Research Projects Completed**

- 1. Carried out a study for National Human Rights Commission Sponsored Project entitled A pilot Study of the Socio-economic, Political and cultural Status of Dalit Women in Haryana which was submitted in 2006.
- 2. Completed a Survey Study of the Ministry of Minority Affairs sponsored Project on the Development status of Meo in Mewat district of Haaryana for the Institute of Human Development, Delhi in 2008.
- 3. Completed a study of Ministry of Rural Development sponsored, Haryana Govt project for the Haryana Institute of Rural Development on Survey/Study of B.R.G.F Scheme in Mohindergarh District of Haryana in 2011.
- 4. Labour Department Govt of Haryana Sponsored Project was carried out to identify the incidence of bonded labour in the Stone Crushing and Mining Industries of the Mewat District in Haryana and the project report was submitted in 2012.
- 5. Labour Department GOVT OF Haryana Sponsored project was carried out to identify the incidence of Bonded labour in the Brick Kiln Industries of Jhajjar District of Haryana. The report was submitted in 2012.
- 6. Labour Department Govt of Haryana Sponsored project was Carried out to identify the bonded labour in the Brick kiln Industries and Agricultural Sector of Rohtak District of Haryana. The project report was submitted in 2013.
- 7. UGC sponsored Major Research Project on Assessment of the Role of SHGs in Women Empowerment through Microfinance in Haryana, 2015.

#### 2. Dr. Asheesh Kumar

**Assistant Professor** 

Contact: asheesh@cuh.ac.in

Research Interest- Sociological Theories, Globalization, Political Sociology, Economic Sociology, Political Economy of Information, Surveillance Studies



#### **Educational Qualification**

M.A., M.Phil, PhD in Sociology (J.N.U.), UGC- NET and JRF, Dr. Sarvapalli Radhakrishnan Fellow at J.N.U.

#### **Professional Experiences**

- 1. Teacher at the Centre for the Study of Social Systems, School of Social Sciences, Jawaharlal Nehru University, New Delhi. The nature of the job was to teach Remedial Course in Sociology to the M.A. students of the same department.
- 2. Programme Officer (India) with Building Global Democracy Project of the University of Warwick, United Kingdom. My role was to lead the team, which organized its "Citizen Learning for Global Democracy" workshop held in New Delhi on 01-03 September 2010. http://www.buildingglobaldemocracy.org/
- 3. Worked as a Student Coordinator for students of Global Studies Programme, Freiburg, Germany during December 2008- June 2013. GSP is an international programme consists of 6 universities across the world and provides M.A. and PhD degrees in the area of Globalization studies. https://www.gsp.uni-freiburg.de/
- 4 Research Consultant at FIJEEHA (Forum for Indian Journalists on Education, Environment, Health and Agriculture). http://www.fijeeha.in/

#### **Achievements**

- 1. Qualified for National Eligibility Test (NET) and Junior Research Fellowship (JRF) conducted by University Grants Commission, December 2006. The scholarship was extended as Senior Research Fellowship for period 2010-2013.
- 2. "Young Sociologist of India- 2014" Award presented by 'Indian Sociological Society' during Annual ISS Conference at Varanasi.
- 3. Selected for Study Tour to Columbia University, New York (USA) by the Ministry of Social Justice and Empowerment, New Delhi.

#### **Publications (Recent five only)**

- 1. Kumar, Asheesh (2014), Book Review, Alternative Credit Institutions and Poverty Alleviation by Birendra Suna, Bhaarteeya Samajshastra Sameeksha, Vol. 1 No. 2, Issue 1, July.
- 2. Kumar, Asheesh (2015), Ek Tarksangat Vishay Ke Roop Mein Samajshastra: Vishay Ki Prakriti Ewam Vyapakta, Prof. Andre Beteille's Interview by Ankita Mookherjee, (Translation in Hindi), Bhaarteeya Samajshastra Sameeksha, Vol. 2, Issue 1, Jan-June.
- 3. Kumar, Asheesh (2016), Book Review, Alternative Credit Institutions and Poverty Alleviation by Birendra Suna, The Fourth World (Journal of the Marginalized People), NISWASS, Vol. 36, April.
- 4. Kumar, Asheesh (2016), Kshetra Karya, Anubhavwaad Ewam Anya Mudde: Prof. A. M. Shah Ke Saath Saakshatkar, Interview by Prof. Kamla Ganesh (Translation in Hindi), Bhaarteeya Samajshastra Sameeksha, Vol. 3, Issue 1, Jan-June.

5. Kumar, Asheesh (2017), *Contextualizing the Role of ICTs in Poverty Alleviation in India: A Critical Assessment* in Anand Kumar (et al), *Poverty in India: Policy, Issues and Challenges*, to be published by Vitasta Publications, New Delhi.

# 3. Dr. Reema Gill



WORK EXPERIENCE	Department of Sociology, Central University of Haryana     Working as Assistant Professor
	2. National AIDS Control Organisation (NACO), Ministry of Health and Family Welfare (MOHFW), Government of India (GoI)
	Working as Programme Officer (Counseling) with Basic Services Division, NACO
	3. Public Health Foundation of India (PHFI)
	Worked as Senior Research Fellow (Social Sciences) with WELLCARE Project at CCCI, PHFI (Gurgaon).
	4. HCL Infosystems Limited
	Worked as Consultant (Social Sciences) with HCL Learning
	5. Educomp Solutions Limited
	Worked as Consultant and Reviewer (Social Sciences)
	6. TransGenez Solutions and Engineering Limited
	Worked as Consultant (Social Sciences)
	7. Educomp Solutions Limited
	Worked as Consultant (Social Sciences)
EDUCATION	1. Ph D, Jawaharlal Nehru University, New Delhi (2014)
	Thesis: International Migration of Skilled Health Workers: A Case Study of Indian Nurses
	2. M.Phil., Jawaharlal Nehru University, New Delhi (2009)
	Dissertation: Nursing Shortages in India: A Preliminary Study of Nursing Migration
	3. Masters in Sociology, Jawaharlal Nehru University, New Delhi (2007)
	4. Bachelors in Business Studies, Shaheed Sukhdev College of Business Studies, Delhi University, New Delhi (2003)
PUBLICATIONS	Journal 'Nursing Shortage in India with special reference to International Migration of Nurses', Social Medicine (peer reviewed), Vol 6, No 1 (2011), ISSN is 1557-7112.
	"Scarcity of Nurses in India: A Myth or Reality?", Journal of Health Management (Sage Journal), Volume 18, Number 4 (October-December) 2016 (Forthcoming)

HONORS	<ul> <li>Received University Grants Commission-Junior Research Fellowship (UGC-JRF) in Sociology (Dec, 2006).</li> </ul>
	Received grant from Indian Council of Social Science Research (ICSSR) for undertaking data collection in London, United Kingdom.
	Successful in University Grants Commission-National Eligibility Test (UGC-NET) in Sociology for lectureship in Indian Universities.
	Received a Zero Point One Merit from CBSE for Hindi language.
FIELD STUDIES AND WORKSHOPS	Field Studies  • Field study among nurses working in private health organizations in New Delhi, India and London, UK
	Field study on the public health institutions in New Delhi, Ballabhgarh sub district in Haryana and Kangra district in Himachal Pradesh. It was undertaken to understand the structure and functioning of public health systems in India.
	<ul> <li>Workshops</li> <li>Attended North Zone workshop by Indian Council of Medical Research (ICMR) on 'Application of Qualitative Research Techniques in Health' organized from 26th to 29th February 2008.</li> </ul>
RESEARCH AREA/ INTEREST	Medical Sociology, Population Studies, Health and Society, Developmental Sociology, Migration Studies, Family and Kinship, Research Techniques.

#### 4. Ms. T. Longkoi Khiamniungan

Assistant professor

Email id: longkoi2009@gmail.com

#### **Educational Profile**

B.A. MA (Sociology) Nagaland University, Nagaland.

M.Phil, PhD submitted July 2016 (Viva awaited) Jawaharlal Nehru University, New Delhi.

#### Fellowships and Awards

- 1. UGC-NET, Rajiv Gandhi National Fellowship (Junior), Senior Research Fellowship
- 2. ICSSR Doctoral Fellow
- 3. Full funded ICSSR and JNU- Presented a paper in an International Conference at San Francisco (USA) 15<sup>th</sup> to 17<sup>th</sup> Oct 2015.

#### **Work Experience**

- 1. Taught for two semesters in JNU, MA course (remedial class) from August to December 2104, Sep to Dec 2015.
- 2. Adhoc Faculty in Janki Devi Memorial College, University of Delhi.

#### Area of Research interests

Social inequality, development disparity, class emergence in tribal society, gender disparities and its political representation in Nagaland (Social Stratification) Recognition and Redistribution (Political Sociology)



#### **Papers Published**

- 1. Inequality in Nagaland: A Case Study of 'Advanced' and 'Backward' Tribes. (Ontario International Development Agency. ISSN 1923-6654 (Journal of Sustainable Development)
- 2. Kushal, Virender, 2015, "Pitfalls of Develop77ment: A Case Study of Nagaland" (Eds). Himachal Publication, Himachal Pradesh, (chapter contributed) ISBN 978-8192619446.
- 3. Gender and Democracy: Disparity in Women's Political Representation in Nagaland. Eastern Quarterly (peer reviewed journal) Vol. 9. Issue I & II.
- 4. Poonam Prakash and Kumar, 2016, Ashok "Public Participation in Planning in India" (Eds), Cambridge Scholars Publishing, UK, (chapter contributed) ISBN 978-1-4438-9707-5.
- 5. 'Questioning women safety in Nagaland' Morung Express (Newspaper) June 11/2014.

# SCHOOL OF LANGUAGE, LINGUISTICS, CULTURE AND HERITAGE

Department of English & Foreign Languages Department of Hindi & Indian Languages Department of Tourism & Hotel Management

# > SCHOOL OF LANGUAGE, LINGUISTICS, CULTURE AND HERITAGE

- Department of English & Foreign Languages
- Department of Hindi & Indian Languages
- Department of Tourism & Hotel Management

# **Department of English & Foreign Languages**

The Department of English and Foreign Languages was introduced with the establishment of the University in 2009. It comes under School of Language, Linguistics, Culture and Heritage and offers M.A. (English), M.Phil. (English) and Ph.D. (English) programmes. The department started with M.Phil.-Ph.D. (Integrated) and Ph.D. (Direct) programmes in 2009 and M.A. programme was introduced in the session 2014-15. However, integrated programme in M.Phil./Ph.D. discontinued and replaced with M.Phil.and Ph.D. as independent programmes through Direct Admission from the academic session 2010-11. The department cherishes its diversity as the students enrolled in various programmes of the department represent sixteen different states of the country. The department adopts Semester System with 100% implementation of Choice Based Credit System (CBCS). Presently, department has six regular teachers—two Associate Professors and four Assistant Professors.

# **Programmes Offered and No. of Seats**

M.A. (English) : 30 Seats

M.Phil. (English) : The student intake shall not exceed 10, subject to availability of eligible

faculty in the Department.

Ph.D. (English) : As per the availability of research supervisors.

# **Programme-wise Course structure**

#### M.A. (English):

#### **Semester-I**

S. No.	Course Code	Course Title	L	T	P	Credit
110.	Core Courses					
1	SLLCH ENG 01 01 C 01 3104	Literary Criticism- I	3	1	0	4
2	SLLCH ENG 01 01 C 02 3104	British Poetry- I	3	1	0	4
3	SLLCH ENG 01 01 C 03 3104	British Drama- I	3	1	0	4
4	SLLCH ENG 01 01 C 04 3104	British Fiction- I	3	1	0	4
5	SLLCH ENG 01 01 C 05 3104	American Literature	3	1	0	4

	Elective Courses						
1	SLLCH ENG 01 01 E 01 2103	Communication Skills in English (General Elective)	2	1	0	3	
2	SLLCH ENG 01 01 E 02 2103	Literature and Cinema	2	1	0	3	
3	SLLCH ENG 01 01 E 03 2103	Dalit Literature and Aesthetics	2	1	0	3	

# **Semester-II**

S. No.	Course Code	Course Title	L	T	P	Credit
110.	<u> </u>	Core Courses				
1	SLLCH ENG 01 02 C 06 3104	Literary Theory and Criticism –I	3	1	0	4
2	SLLCH ENG 01 02 C 07 3104	British Poetry -II	3	1	0	4
3	SLLCH ENG 01 02 C 08 3104	British Drama –II	3	1	0	4
4	SLLCH ENG 01 02 C 09 3104	British Fiction –II	3	1	0	4
5	SLLCH ENG 01 02 C 10 3104	History of English Literature-I	3	1	0	4
		<b>Elective Courses</b>				
4	SLLCH ENG 01 02 E 04 2103	Media and Communication (General Elective)	2	1	0	3
5	SLLCH ENG 01 02 E 05 2103	Diaspora and Literature	2	1	0	3
6	SLLCH ENG 01 02 E 06 2103	Literature and Philosophy	2	1	0	3

# **Semester-III**

S.	Course Code	Course Title	L	Т	P	Credit
No.						
		Core Courses				
1	SLLCH ENG 01 03 C 11 3104	Literary Theory and Criticism-II	3	1	0	4
2	SLLCH ENG 01 03 C 12 3104	Indian Writings in English	3	1	0	4
3	SLLCH ENG 01 03 C 13 3104	Modern World Literature	3	1	0	4
4	SLLCH ENG 01 03 C 14 3104	History of English Literature-II	3	1	0	4
		Elective Courses				
7	SLLCH ENG 01 03 E 07 2103	Research Methodology (General Elective)	2	1	0	3
8	SLLCH ENG 01 03 E 08 2103	Literature of Protest	2	1	0	3
9	SLLCH ENG 01 03 E 09 2103	Introduction to Linguistics	2	1	0	3

# **Semester-IV**

S.	Course Code	Course Title	L	T	P	Credit
No.						
1	SLLCH ENG 01 04 C 15 3104	Indian Literary Criticism	3	1	0	4
2	SLLCH ENG 01 04 C 16 3104	Modern Indian Literature in English Translation	3	1	0	4
3	SLLCH ENG 01 04 C 17 3104	Postcolonial Theory and Literature	3	1	0	4
4	SLLCH ENG 01 04 C 18 0066	Dissertation#	0	0	6	6

	Elective Courses							
10	SLLCH ENG 01 04 E 10 2103	Literature and Gender (General Elective)	2	1	0	3		
11	SLLCH ENG 01 04 E 11 2103	Comparative Literature and Translation Studies	2	1	0	3		
12	SLLCH ENG 01 04 E 12 2103	Introduction to Cultural Studies	2	1	0	3		
13	SLLCH ENG 01 04 E 13 2103	Literature and Theatre	2	1	0	3		

Note: #. Dissertation shall carry six credits for the students of enrolled in the session 2015-16 and for the students enrolled in 2016-17, dissertation shall carry 12 credits. Therefore, the Course Code shall get changed to SLLCH ENG 01 04 C 18 001212.

L: Lectures T: Tutorial P: Practical Cr: Credits; Total Credit Requirements: 96 to 104 **M.Phil. /Ph.D. Course Work:** (Revised M.Phil./Ph.D. Course Work w.e.f. 3rd May 2016)

## Paper I: Research Methodology:

M.Phil. Course Code: SLLCH ENG 02 01 C 01 4004 Ph.D. Course Code: SLLCH ENG 02 01 C 01 4004

## Paper II: Contemporary Literary Thought and Critical Approaches

M.Phil. Course Code: SLLCH ENG 03 01 C 02 8008 Ph.D. Course Code: SLLCH ENG 03 01 C 02 8008

#### **Admission Criteria and Procedure**

#### M.A. (English):

**Eligibility:** A candidate may be admitted to the Master's Degree programme if he/she has obtained a Bachelor's degree under 10+2+3 system, recognized by the University, or a degree recognized as its equivalent, provided that such a candidate has attained the minimum eligibility/qualification at the time of admission, as decided by the University from time to time.

#### M.Phil. (English):

**Eligibility:** A candidate shall be eligible for admission to the M.Phil. programme, if he/she holds: A Master's degree or a professional degree, declared equivalent to the Master's degree by the corresponding statutory regulatory body, with at least 55% marks in the aggregate or its equivalent grade 'B' in the UGC 7-point-scale (or an equivalent grade in a point-scale wherever grading system is followed) or an equivalent degree from a foreign educational institution accredited by an Assessment and Accreditation Agency which is approved, recognised or authorised by an authority, established or incorporated under a law in its home country, or any other statutory authority in that country for the purpose of assessing, accrediting or assuring quality and standards of educational institutions.

A relaxation of 5% of marks, from 55% to 50%, or an equivalent relaxation of grade, may be allowed for those belonging to the SC/ST/OBC (non-creamy layer)/Differently-abled and other categories of candidates, as per the decision of the Commission from time to time, or for those who had obtained their Master's degree prior to 19th September, 1991. The eligibility marks of 55% (or an equivalent grade in a point scale wherever grading system is followed) and the relaxation of 5% to the categories mentioned above are permissible based only on the qualifying marks without including the grace mark procedures.

**Procedure for Admission:** The University shall conduct an Entrance Test, with the qualifying marks as 50% (a relaxation of 5% of marks may be allowed for those belonging to the SC/ST/OBC (non-creamy layer)/ Differently-abled and other categories of candidates as per the decision of the Commission from time to time). The syllabus of the Entrance Test may consist of 50% of research methodology and 50% may be subject-specific. The Entrance Test shall be conducted at the centre(s) notified in advance by the University.

The candidates who have cleared the UGC/CSIR-NET/JRF/SLET/SET/GATE and Teacher-Fellowship-holders shall be exempted from Entrance Test.

Admission shall be based on the performance of the qualified candidates in an interview/viva-voce to be organised by the Department where the candidates shall be required to discuss their research interest/area through a presentation before a duly constituted Departmental Research Committee (DRC).

#### Ph.D. (English):

**Eligibility:** A candidate shall be eligible for admission to the Ph.D. programme, if he/she possesses: A Master's degree or a professional degree declared equivalent to the Master's degree by the corresponding statutory regulatory body, with at least 55% marks in aggregate or its equivalent grade 'B' in the UGC's 7-point scale (or an equivalent grade in a point scale wherever the grading system is followed), or an equivalent degree from a foreign educational Institution accredited by an Assessment and Accreditation Agency which is approved, recognized or authorised by an authority, established or incorporated under a law in its home country, or any other statutory authority in that country for the purpose of assessing, accrediting or assuring quality and standards of educational institutions.

A relaxation of 5% of marks, from 55% to 50%, or an equivalent relaxation of grade, may be allowed for the candidates belonging to SC/ST/OBC (non-creamy layer)/Differently-abled and other categories of candidates as per the decision of the University Grants Commission from time to time, or for those who had obtained their Master's degree prior to 19th September, 1991. The eligibility marks of 55% (or an equivalent grade in a point scale wherever the grading system is followed) and the relaxation of 5% to the categories mentioned above are permissible only on the basis of the qualifying marks without including the grace mark procedures.

The candidates who have qualified the UGC/CSIR-JRF/NET/SLET, or are Teacher Fellowship-holders or have passed M. Phil. programme with course work recognised by the U.G.C., as per the UGC Regulations (Minimum Standards and Procedure for award of M.Phil./Ph.D. Degree, 2009), shall be exempted from appearing at the written test.

#### **Procedure for Admission**

#### **Direct Admission:**

The University shall conduct an Entrance Test with qualifying marks as 50% (a relaxation of 5% of marks to be allowed for those belonging to the SC/ST/OBC (non-creamy layer)/ Differently-abled and other categories of candidates as per the decision of the Commission from time to time). The syllabus for the Entrance Test shall consist of: (a). research methodology (50%) and (b). subject-specific (50%). The Entrance Test shall be conducted at the Centre(s) notified in advance by the University.

The admission shall be based on the performance of the qualified candidates in the interview/ viva-voce to be organised by the Department concerned where the candidates shall be required to discuss their research interest/area through a presentation before a duly constituted Departmental Research Committee.

The candidates who have qualified UGC/CSIR-JRF/NET/SLET/GATE, or are Teacher Fellowship holders, or have passed the M. Phil. programme with course work recognised by

the U.G.C., as per the UGC Regulations (Minimum Standards and Procedure for award of M.Phil./Ph.D. Degree, 2009), shall be exempted from the written test.

# **Brief Faculty Profile**

Sl. No.	Name	Designation	Qualification	Years of Experience	Areas of Specialisation/ Interest	
1.	Dr. Bir Singh Yadav	Associate Professor	M.A., Ph.D.	36 Years	Philosophy and Romantic Poetry	
		<ul> <li>Publications: 37 a chapters in edited</li> <li>Research Supervision</li> <li>M.Phil.: 31</li> <li>Ph.D.: 5</li> </ul>		ference proceeding	gs, one book and 8	
2.	Dr. Sanjiv Kumar	Associate Professor &Head	M.A., M.Phil., Ph.D., PGCTE (EFLU)	17 Years	Diaspora Studies; Dalit Literature & Aesthetics: Postcolonial Literature	
		<ul> <li>Publications: 22 a chapters in books.</li> <li>Research Supervis</li> <li>M.Phil.: 11</li> <li>Ph.D.: 1</li> </ul>		ference proceeding	gs, one book and 4	
3.	Mr. Sudeep Kumar	Assistant Professor	M.A., M.Phil., Ph.D. (Submitted), UGC-NET	3 Years 7 Months	Indian Bhasa Criticism, Literary Theory, Gender Studies	
		Publications: 3 art     Research Supervis     M.Phil.: 3 (Co-sup	sion (Awarded):	rence proceedings	and one chapter in book	
4.	Dr.Snehsata	Assistant Professor	M.A., M.Phil., Ph.D., UGC-NET	3 Years	Western Philosophy, Literature and Gender	
			pers published in journ sion (Awarded):M.Phil		ceedings.	
5.	Ms.Rinu	Assistant Professor	M.A., M.Phil., Ph.D.(Pursuing), UGC-NET- JRF	I	Stylistics, Literary Theory Indian and Western), Diaspora Studies, American Literature	
		• Publications: one • Research Supervis • M.Phil.: 3 (Co-sup	sion (Awarded):	urnal/conference proceedings.		
6.	Dr. Manoj Kumar	Assistant Professor	M.A., Ph.D., D.Lit. (Pursuing)	11 Years	Indian Sanskrit Poetics, Indo-Canadian Literature, Indian Writing in English	
		<ul><li>Publications: 16 p</li><li>Research Supervis</li><li>M.Phil.: 5</li><li>Ph.D.: 3</li></ul>	apers in journals/confesion (Awarded):	erence proceeding	s and SevenBooks	

# Training Programmes/Orientation/Refresher Courses Attended by the Faculty

# Dr. Bir Singh Yadav:

Sr. No.	Programme	Duration	Organised by
1.	UGC-Sponsored Orientation Programme	23 days (23/10/1996 to 14/11/1996)	Dronacharya PG College, Gurgaon
2	UGC Refresher Course	21 Days (26/03/1995 to 15/04/1995)	University of Rajasthan, Jaipur
3.	UGC Refresher course	20 Days (25/12/2000 to 13/01/2001)	University of Rajasthan, Jaipur
4.	Soft-Skill Training	7 Days (17/09/2006 to 23/09/2006)	Higher Education Commission, Panchkula, Haryana

# Dr. Sanjiv Kumar:

Sr. No.	Programme	Duration	Organised by
1.	Induction Training for College Lecturers	05 Days	Haryana Institute of Public Administration, Gurgaon
2	UGC-Sponsored Orientation Programme	28 Days (27/10/2003 to 22/11/2003)	Himachal Pradesh University, Shimla
3.	UGC Refresher course	21 Days (06/02/2006 to 27/02/2006)	University of Delhi, Delhi
4.	UGC Refresher course	21 Days (06/03/2010 to 26/03/2010)	Panjab University, Chandigarh
5.	NSS Orientation Programme held at Kurukshetra University, Kurukshetra	10 Days (27/08/2003 to 05/09/2003)	Organised by Training, Orientation and Research Centre, Dept. of Social Work, University of Delhi, Delhi

#### Dr. Snehsata:

Sr. No.	Programme	Duration	Organised by
1	Orientation Programme	28 Days (17/11/2016 to 14/12/2016)	UGC Human Resource Development Centre, Guru Jambeshwar University of Science and Technology, Hisar, Haryana

# Dr. Manoj K. Vidyalankar:

Sr. No.	Programme	Duration	Organised by
1	Orientation Programme	28 Days (28/8/2012 to 24/09/12)	ASC, Guru Ghasidas University, Bilaspur
2	Refresher Course on Research Methodology	21 Days	ASC, Rani DurgavatiVishwavidyalaya, Jabalpur

# Ms. Rinu:

Sr. No.	Programme	Duration	Organised by
1	Orientation Programme	28 Days (11/6/2015 to 08/07/15)	UGC Human Resource Development Centre, University of Hyderabad, Hyderabad

# **Infrastructure in the Department**

Department has five classrooms, one Researchers' Room, one Seminar Hall, One Language Lab. (in the process of establishment), twelve faculty rooms, one waiting lounge and one office.

**Thrust Areas of Research**—Details of M.Phil. and Ph.D. Research Pursued/being Pursued by the Researchers on Inter/Multidisciplinary Topics:

#### M.Phil.:

Sr. No.	Name of Student	Session	Topic of Research	Inter-disciplinary/ Multidisciplinary Focus	Supervisor
1	Anoop Singh	2009-10	Struggle of Modern Generation for Identity and Freedom in Selected Novels of Chetan Bhagat	Philosophical/ Existentialism	Dr. Bir Singh Yadav
2	Charu Aggarwal	2009-10	Voice of the Voiceless: A Comparative Study of Subaltern Characters in E. M. Forster's A Passage to India and Munshi	Subaltern Study	Dr. Bir Singh Yadav
3	Indu Rani	2009-10	Radical Behaviouristic Interpretation of Rusty's Character in the Selected Novels of Ruskin Bond	Psychological Dimensions- Behaviouristic Approach	Prof.Rajul Bhargava
4	Shruti Jain	2009-10	Towards Becoming a Being: A Feminist Study of That Long Silence, My God is a Woman and The Space Between Us	Gender Study	Prof.Rajul Bhargava
5	Munesh Yadav	2009-10	Racial Bias and Prejudice in Mark Twain's The Adventure of Huckleberry Finn and Louisa May Alcott's Little Women	Racial Study	Prof.Rajul Bhargava
6	Pooja Yadav	2009-10	Chick-Lit and the Novels of Shobha De: A Select Study	Gender Study	Prof.Rajul Bhargava
7	Poonam	2010-11	Minimalism and the short Stories of Raymond Carver: An Analysis	Study of Arts	Dr. RituTomer
8	Jyoti	2010-11	Politics in 'Home' and 'Aboard' in the Fiction of Uma Parmeswaran	Diaspora Study	Dr. Bir Singh Yadav
9	RekhaKumari	2010-11	Upward Mobility versus Ethical Values: A Study of ArvindAdiga'sThe White Tiger and Upamanyu Chatterjee's Way to Go	Philosophy	Dr. Sanjiv Kumar
10	SumanKumari	2010-11	Reforming a New World Order: Changing Dialectics in Toni Morrison's The Bluest Eye and Mercy	Sociology	Dr. Bir Singh Yadav
11	Saikat Banerjee	2011-12	Re-thinking Train to Pakistan	Partition	Dr. Bir Singh Yadav
12	Dharmendra Singh	2011-12	ContextualisingAn Area of Darkness in Contemporary Indian Ethos	Culture Study	Dr. Sanjiv Kumar
13	Pabitra Sharma	2011-12	Postfeminist Dimensions in Toni Morrison's Beloved and Sula	Gender Study	Prof. Hemendra Singh Chandalia

Sr. No.	Name of Student	Session	Topic of Research	Inter-disciplinary/ Multidisciplinary Focus	Supervisor
14	Yashpal	2011-12	Representation of Woman as Doubly Marginalised in Dalit Autobiographies: A Study of Bama'sKarukkuand Limbale'sOutcaste	Dalit Studies	Dr. Sanjiv Kumar
15	Satyawati	2012-13	Childhood in Dalit Literature: A Study of Select Dalit Autobiographies	Dalit Studies	Dr. Sanjiv Kumar
16	Rajesh Kumar Dua	2012-13	Making of People's Icon: A Study of the Autobiographies of M.K. Gandhi and Nelson Mandela	Political Autobiography	Prof. H.S. Chandalia
17	Showkat Hussain Itoo	2012-13	Select Short Stories of K.A. Abbas: A Study of his Progressive Vision	Progressive Movement	Prof. H.S. Chandalia
18	Sonal Sharma	2012-13	Arundhati Roy's Worldview as Represented in The God of Small Things	Sociology	Dr. Bir Singh Yadav
19	Priyanka	2013-14	Complex Terrain of the Indian Family: A Study of ManjuKapur's Custody	Sociology	Dr. Manoj K. Vidyalankar
20	Salesh	2013-14	Rasa Aesthetics in Rabindranath Tagore's Select Short Stories	Indian Aesthetics	Dr. Manoj K. Vidyalankar Co-Supervisor: Ms.Rinu Yadav
21	Manju Kumari	2013-14	U.R. Ananthamurthy's Samskara and Bharthipura: A Site of Clashes	Dalit Studies	Dr.Snehsata (Supervisor) Mr.Sudeep Kumar (Co-Supervisor)
22	Basant Lal Yadav	2013-14	Cultural Politics and leisure Economy of Blog Writings	Culture Study	Dr.Snehsata (Supervisor) Mr.Sudeep Kumar (Co-Supervisor)
23	Raj Kumar	2013-14	Translating Nature in Deepa Mehta and Bapsi Sidhwa: An Eco-Critical Approach to Adapting Ice-Candy Man and Water	Ecofeminism & Adaptation	Dr. Sanjiv Kumar
24	Waseem Majid	2013-14	Reflection of Trauma in the Poetry of Agha Shahid Ali: A Study of Select Poems	Diaspora and Kashmir Experience	Dr. Bir Singh Yadav
25	Anushka Nagpal	2014-15	Contextualising the Predicament of Dalit Christians: A Study of Bama's Karukku and Sangati	Dalit Studies	Dr.Snehsata
26	Daljeet	2014-15	Vakrokti Siddhanta and Russian Formalism: A Study	Comparative Study	Dr. Manoj K. Vidyalankar
27	Deepu Kumar	2014-15	Socio-cultural Study of Sharankumar Limbale'sDalit Brahman and Hindu	Dalit Studies	Dr. Sanjiv Kumar

Sr. No.	Name of Student	Session	Topic of Research	Inter-disciplinary/ Multidisciplinary Focus	Supervisor
28	Rajbir Singh	2014-15	Demystifying the Feminine Mystique: Women in Shauna Singh Baldwin's The Selector of Souls and NamitaGokhale'sA Himalayan Love Story	Gender Studies	Dr. Manoj Kumar &Ms.Rinu
29	Shaifali Arora	2014-15	Religio-Cultural Contexts of Contemporary Indian Cinema	Cinema Studies	Dr. Sanjiv Kumar
30	Shankar Lal Choudhary	2014-15	The Politics of Desiyata: A Literary Context	Bhasa Criticism and Nativist Issues	Dr. Sanjiv Kumar & Mr.Sudeep Kumar
31	Tanupriya	2014-15	Contemporary Gay writing of Indian English Witter; with reference to Hoshang Merchant's Yaarana: Gay Writings from South Asia and R. Raj Rao's The Boyfriend	LGBT Studies	Dr. Bir Singh Yadav
32	Aibhi Biswas,	2015-16	Magic Realism: A Comparative Study of Select Films	Magic Realism	Dr. Manoj Kumar
33	Manish Kumar Meena	2015-16	The Contours of Adivasi Consciousness: A Study of Lo BirSendra	Adivasi Studies	Dr. Bir Singh Yadav
34	Ruchi Rani	2015-16	Interrogating Life: A Study of Herman Hesse's Siddhartha and Yann Martel's Life of Pi	Existential Study	Dr. Manoj Kumar
35	Dinesh Kumar	2015-16	Disability as Discourse: A Study of Black and Margarita with a Straw	Disability Studies	Dr. Sanjiv Kumar
36	DevpriyaTripathi	2015-16	Cyberfeminism—Women's Mobiliy into Digital Space	Cyberfeminism	Dr.Bir Singh Yadav
37	Sushma Yadav	2015-16	Anandvardhana's <i>Dhvani</i> Siddhant and the Poems of Coleridge: A Critical Study	Indian Aesthetics	Dr. Manoj Kumar
38	Jerene Sarah George	2015-16	'Food' as Dalit Identity with Reference to Dalit Community in Northern Kerala: A Study	Dalit Literature	Dr. Sanjiv Kumar
39	Hemant Kumari	2015-16	Interrogating the Stereotypes: A Study of Poile Sengupta's Thus Spake Shoorpanakha So Said Shakuni	Indian Literature in Translation	Dr. Bir Singh Yadav
40	Surender Kumar	2015-16	Debating Dalit and Brahmin Psyche: A Study of Kancha Ilaiah's Untouchable God and Why I am Not a Hindu	Dalit Studies	Dr. Sanjiv Kumar
41	Vandana Nain	2016-17	Caste and the Politics of Translation: A Study of Select Dalit Writings	Subaltern Studies	Dr.Snehsata
42	Ramniwas Baira	2016-17	Fictionalising History: A Study of M.G. Vassanji's Select Novels	Historical Fiction	Dr. Manoj K. Vidyalankar
43	Naresh	2016-17	Question of Livelihood in Dalit Literature: A Study of Bama's Karukku and Sangati	Subaltern Studies	Dr. Sanjiv Kumar

Sr. No.	Name of Student	Session	Topic of Research	Inter-disciplinary/ Multidisciplinary Focus	Supervisor
44	Neha Rana	2016-17	Negotiating Modern and the Folk: A Study of Habib Tanvir's Select Plays	Folk Theatre	Dr. Bir Singh
45	Carlos Fernandez	2016-17	Archetypal Criticism as the Reading Framework: A Study of The Lost World	Archetypal Criticism	Dr. Sanjiv Kumar
4	Deepak Kumar	2016-17	Humanising God: From Sacred to the Playful	Popular Indian Fiction	Dr. Manoj Kumar Vidyalankar
46	Ajay Kumar	2016-17	Progressivism in the Digital World: A Study	Progressive Movement	Dr. Bir Singh
47	Ajit Anand	2016-17	Narrating Partition 'Graphically': A Study of This Side That Side	Partition	Dr.Snehsata

# Ph.D.:

Sr. No.	Name	Session	Торіс	Inter-disciplinary Multidisciplinary Focus	Supervisor
1	Arpit Kothari	2009-10	New Socio-Cultural Realities in Indian English Fiction of the New Millennium	Indian English Literature	Prof. H.S. Chandalia Joint Supervisor: Prof. Rajul Bhargava
2	Jag Pal	2009-10	From Affirmation to Negation: A study of Gandhian Ideology in Select Indian English Novels	Indian English Literature	Prof. H.S. Chandalia Joint Supervisor: Prof. Rajul Bhargava
3	Venu Madan	2009-10	Critiquing Dimensions of Realism in the Works of Vikram Chandra	Indian English Literature	Prof. H.S. Chandalia Joint Supervisor: Prof. Rajul Bhargava
4	Priyanka Yadav	2009-10	Diasporic Negotiations in the Select Works of Indo-Canadian Women Writers	Diaspora Studies	Prof. H.S. Chandalia Joint Supervisor: Prof. Rajul Bhargava
5	Snehsata	2009-10	Revisiting Albert Camus' Existentialism: A Study of His Major Works	Philosophy	Dr. Bir Singh Yadav
6	Naresh Mahicha (De-registered)	2010-11	Socio- Cultural Transcription of the Oral Tradition of the Fatehpur Shekhawati Region	Culture Studies	Dr. Sanjiv Kumar
7	RuchiVadhva	2010-11	Issues of Subalternity in the Works of Mahasweta Devi: Towards A More Equitable Order	Subaltern Studies	Dr. Sanjiv Kumar
8	Anuradha Deepak	2010-11	From Myth to Metamorphosis: The Changing Images of Womanhood in Post-1990 Hindi Cinema	Cinema Studies	Dr. Bir Singh Yadav
9	SubhashChand	2010-11	Negotiating Cultural Diversities: The Spatio-temporal Dialogics of Amitav Ghosh	Culture Studies	Dr. BirSingh Yadav
10	Shweta Ahuja	2010-11	The Metropolis as a Locale: A Politico-Cultural Study of the Works of Chetan Bhagat, Vikram Chandra and Suketu Mehta	Culture Studies	Dr. Bir Singh Yadav

Sr. No.	Name	Session	Торіс	Inter-disciplinary Multidisciplinary Focus	Supervisor
11	Akhilesh Kumar	2011-12	India in the Select Travelogues of Fanny Parkes, V.S. Naipaul and William Dalrymple: Re-Readng Socio-Cultural Dimensions	Travel Writings	Dr. Bir Singh Yadav
12	Ajit Singh	2011-12	Debating the Contemporary: A Study of Mahesh Dattani's Plays	Sociology	Dr. Manoj Kumar
13	Yespal Singh	2011-12	Contextualising Premchand and Anton Chekhov: A Study of Select Short Stories	Comparative Study	Dr. Sanjiv Kumar
14	Shushma Sharma	2011-12	A Postmodernist Feminist Critique of Salman Rushdie's Fiction: A Study Select Novels	Gender Study	Dr. Manoj Kumar
15	Bhavya Singhal	2011-12	Contextualising Simone de Beauvoir's The second Sex in the Select Novels of Doris Lessing	Gender Study	Dr. Bir Singh Yadav
16	Indu Rani	2011-12	Humanistic Psychology: Analysis of Select Characters of James Joyce, Ruskin Bond and Khaled Hosseini	Psychological Study	Dr. Sanjiv Kumar
17	Shruti Jain	2011-12	Redefining Feminism - Going Beyond the 'Waves': A Study of Select Indian Women Writers	Gender Study	Dr. Bir Singh Yadav
18	Munesh Yadav	2011-12	Spirituality and Science in the Select Works of Chitra Banerjee Divakaruni, Pratibha Ray and SundarSarukkai	Science and Spirituality Interface	Dr. Sanjiv Kumar
19	NisthaParashar	2012-13	Toni Morrison's Fiction: An Ecocritical Appraisal	Racial Study	Dr. Bir Singh Yadav
20	Ravinder Kumar	2012-13	Loss and Gain in Translation: A Stylistic Study of Saadat Hasan Manto's short stories	Translation Study	Dr. Bir Singh Yadav
21	Saraswati	2012-13	Literary Responses to Violence: A Study	Study of Violence	Dr. Sanjiv Kumar
22	RekhaKumari	2012-13	Problematics of Human Rights in Contemporary Indian English Fiction	Human Rights	Dr. Sanjiv Kumar
23	Jyoti	2012-13	Narration of Past and Location of Ambivalence in the Work of Uma Parmeswaran and Anita Rau Badami: A Comparative Study	Diaspora Studies	Dr. Bir Singh Yadav
24	Arpit Kothari	2009-10	New Socio-Cultural Realities in India English Fiction of the New Millennium	Culture Studies	Prof. H.S. Chandalia
24	Jag Pal	2009-10	From Affirmation to Negation: A study of Gandhian Ideology in Select Indian English Novels	Philosophy	Prof. H.S. Chandalia

Sr. No.	Name	Session	Торіс	Inter-disciplinary Multidisciplinary Focus	Supervisor
25	Venu Madan	2009-10	Critiquing Dimensions of Realism in the Works of Vikram Chandra	Philosophy	Prof. H.S. Chandalia
26	Priyanka Yadav	2009-10	Diasporic Negotiations in the Select works of Indo-Canadian Women Writers	Diaspora Studies	Prof. H.S. Chandalia
27	Snehsata	2009-10	Revisiting Albert Camus' Existentialism: A Study of His Major Works	Philosophical Theory	Dr. Bir Singh Yadav
28	Ghulam Mohammad Khan	2014-15	Problematic of Memory: A Study of Contemporary Kashmiri Narratives	Regional Studies	Dr. Bir Singh Yadav
29	Manjeet Singh	2014-15	The Game of Dice as a Structural Metaphor in Popular Indian Culture	Indian Mythology	Dr. Sanjiv Kumar
30	Sanjay Kumar Joshi	2014-15	Idea of Justice in William Shakespeare's Play: A Study	Law and Literature	Dr. Bir Singh Yadav
31	Showkat Hussain Itoo	2014-15	Representation of Disability in Indian English Writing: Identity, Subjectivity, Voices and Concerns	Disability Study	Dr. Sanjiv Kumar
32	Sunil Kumar	2014-15	Thematics of Violence in the Plays of Vijay Tendulkar	Study of Violence	Dr. Manoj Kumar
33	Poonam	2014-15	Social Issues in the Plays of Mahesh Elkunchwar	Sociological Issues	Dr. Manoj K. Vidyalankar
34	Vidhi Yadav	2014-15	Narrating the Nation in U.R. Ananthmurthy's Fiction: A Study	Politics of Nation	Dr. Manoj K. Vidyalankar

#### **Events Organised**

- 1. First Department-Level Alumni Meet was conducted (24th Oct. 2016).
- 2. Conducted series of Extension Lectures by Eminent Scholars in the session 2015-16 and 2016-17. Prof. Bhim S. Dahiya (Retd. Professor, KUK); Prof. Avadhesh Singh (IGNOU); Prof. Akshay Kumar (Panjab University); Prof. Shrawan Kumar Sharma (GurukulKangri University); and Prof. Rajkumar (University of Delhi) delivered extension lectures on relevant topics.
- 3. Organized a commemorative event "Shradhanjali" featuring a Mono-Acting, Dramatic Performance of "Draupadi" and Screening of Movie Mother of 1084 (21st September 2016).
- 4. Three-Day National Seminar on "Progressive Works in Indian English Literature: Diaspora and Beyond" (Dec. 3-5, 2015).
- 5. Department of English & Foreign Languages and the Department of Hindi jointly organised an event on the theme "A Bilingual Approach to Creation of Knowledge: Revisiting Saadat Hasan Manto—A Dialogue" (Nov. 19, 2012).
- 6. Faculty of the Department contributed in the Editorial Board of National Level Consultative Workshop on "Right to Education 2009" (June 21, 2012).
- 7. Faculty of the Department contributed in the Editorial Board and Organising Committee of National Seminar on "People, Power and Progress' (May 30-31, 2012).
- 8. Faculty of the Department contributed in the Editorial Board of Seminar on "India of Today & Tomorrow" (Feb. 2, 2012).

- 9. Faculty of the Department contributed as the member of Advisory Committee in the Workshop on "Addressing Discrimination against Women: Walk the Talk" (May 18-20, 2011).
- 10. Faculty of the Department contributed as the member of Editorial Committee of National Seminar on "Republic of India@61" (March 26-27, 2011).
- 11. The faculty of the department coordinated and initiated Book-Reading Sessions of different books.

#### **Highlights and Achievements**

- 1. The M. Phil. and Ph.D. scholars of the first batch attended the event "PPP in Higher Education: Beginning of Dialogue" on 22nd May 2010 with Business, Commerce, Civil Society, Industry, Professionals and School Leadership.
- 2. In the Lectures, Seminars & Presentation Series organised by the University on 16th-17th Feb. 2010, the scholars of the department gave presentations on the following themes:
  - a. Mr. Jagpal on "Stylistics: Theory and Practice- H.G. Widdowson", "Approaches to Stlistics: Geoffrey N. Leech & Other Stylisticians" and "Phonology of English and Suggestions for the Improvement of Indian English"
  - b. Ms. Venu Madan on "Tradition and Individual Talent" and "Ramanujan's Philosophy"
  - c. Ms. Priyanka Yadav on "Victorian Age: A Glimpse into Non-Fiction", and "Formalist Approach- A Practical Approach"
  - d. Ms. Snehsata on "Albert Camus- An Existentialist with a Difference" and "Confessional Strain in KamlaDas's Poetry"
- 3. M.Phil. and Ph.D. scholars of the department, Mr. Jagpal, Mr. Arpit Kothari, Ms. Snehsata, Ms. Venu Madan, Ms. Priyanka Yadav, Ms. Charu Aggarwal, Ms. Shruti Jain, Ms. Indu Rani, Ms. Munesh and other students of the first batch got the opportunity to interact with Hon'ble Vice President, Mr. M. Hamid Ansari at his residence on 23rd April 2010.
- 4. The scholars of the department participated in National Seminar on "Republic of India@61" held in the University on March 26-27, 2011.
- 5. The scholars of the department gave their presentations in the colloquium "India of Today and Tomorrow: Economic, Political, Cultural & Literary Perspectives" on Feb. 2, 2012.
- 6. The Ph.D. scholar of the department, Mr. Ravinder Kumar was the panellist in the Students' Panel Discussion on "Nurturing Democratic Values and Youth" on Aug. 14, 2012.
- 7. The Ph.D. scholars of the department, Ms. Rekha and Mr. Ravinder Kumar, and faculty, Dr. Sanjiv Kumar were on the panel discussion on "Gyanarjanmein Dvibhashi Drishti: Manto se Gujarate Huye" on Nov. 19, 2012.
- 8. The faculty and students of the department organised Premchand Anniversary Celebration in collaboration with the Department of Hindi and Indian languages on 31st July 2013. Prof. H.S. Chandalia and Dr. Bir Singh Yadav participated as panellists.
- 9. In the series of faculty seminars at the University, Dr Sanjiv Kumar presented a paper on 'Culture Crossroads' on 24th Sept. 2010.
- 10. Faculty of the department, Dr. Bir Singh Yadav and Dr. Sanjiv Kumar performed as the panellists in various panel discussions organised as the part of First (Oct. 14-Nov. 14, 2011) and Second (Oct. 22 to Nov. 22, 2012) One Month Celebration of Partnership in Creating and Sharing Knowledge in 2011-12 and 2012-13.
- 11. Faculty of the department, Dr. Bir Singh Yadav and Dr. Sanjiv Kumar performed as the panellists in various panel discussions organised as the part of Orientation Programmes "Joining the Sojourn, Aug. 8-10, 2011", Onward Journey, Rededication Programme, July 23, 2011" conducted by the University at the beginning of sessions 2011-12 and 2012-13.

- 12. The faculty of the department, Prof. H.S. Chandalia, Dr.Bir Singh Yadav and Dr. Sanjiv Kumar were in the panel discussion organised by the Movie Club on the topic "Dissecting the Film: Paan Singh Tomar' on April 26, 2012.
- 13. Dr. Bir Singh Yadav performed as the panellist in the Demonstrative Panel Discussion on "India Story: Reality or Myth" on Aug. 13, 2012.
- 14. Literary Club of the department organizes various student-centric literary and cultural activities including weekly seminars. Some of the important events of the Club include:
  - a. Screening of Syllabi-specific Movie "A Tale of Two Cities" on 18th Sept. 2015
  - b. Poetry Recitation on Sept. 24, 2015
  - c. Screening of Movie "The Colour Purple" on 13th Oct. 2015
- 15. Mr. Pawan Kumar, M.A. (English), participated in Essay Competitions organised by Rajbhasha Department and got the Second Prize (2014-15 and 2015-16)
- 16. Mr. Pawan Kumar and Mr. Sushil, M.A. (English), participated in Quiz Competition organised by Rajbhasha Department and got the Second Prize (Session 2014-15)
- 17. A play "Ëk Ansuni Awaaz" directed by Dr. Manoj Kumar was enacted by the students of the department on International Girl Child Day.
- 18. A play "Bhrun Hatya, Ek Abhishap" was enacted under the direction of Dr. Manoj Kumar on 24th Sept. 2014.
- 19. A play "School Inspection" was enacted by the students of the department under the direction of Dr. Manoj Kumar on 24th Feb. 2015.
- 20. Dr. Sanjiv Kumar, represented the University in the meeting to discuss the framework of New Policy on Higher Education at Vigyan Bhawan, New Delhi on 11th Aug. 2015.
- 21. Dr. Sanjiv Kumar, was nominated as 'Inspired Teacher' to be the part of Inspired Teachers In-Residence Programme at Rashtrapati Bhavan from June 6-12, 2015.

# Contribution of the Faculty in the Corporate Life of the University

#### Dr. Bir Singh Yadav

- 1. Chief Editor, Journal of Central University of Haryana, Vol. I, Issue I (2014)
- 2. Member, Editorial Board, Souvenir, First Convocation (March 2014), Central University of Harvana
- 3. Member, Editorial Board, Odyssey (a University Publication), March 2014, Central University of Haryana
- 4. Member, Executive Council, Central University of Haryana (Session 2014-15)
- 5. Member, Academic Council, Central University of Haryana
- 6. Member, Building Committee, Central University of Haryana (Session 2014-15)
- 7. Coordinator, Yoga Club, Central University of Haryana (2014-15)
- 8. Convenor, Admission Committee, Central University of Haryana (2014-15 & 2015-16)
- 9. Convenor, Discipline Committee, Central University of Haryana (2014-15 & 2015-16)
- 10. Coordinator, OBC Cell, Central University of Haryana
- 11. Coordinator, Anti-Ragging Cell, Central University of Haryana (2014-15 & 2015-16)
- 12. Convenor for the National Seminar on Progressive Writings in Indian English Literature: Diaspora and Beyond held on 3-5 Dec. 2015

#### Dr. Sanjiv Kumar

- 1. Nodal Officer, Parliamentary Questions, Central University of Haryana
- 2. Head, Department of English and Foreign Languages, Central University of Haryana (w.e.f. 18th August 2015)

- 3. Convenor, Centre for Community Development, Central University of Haryana
- 4. Member of Editorial Board of Journal of Central University of Haryana. Vol. 01, Issue 01 (March 2014). ISSN: 2348-3377
- 5. Editor, Annual Reports of Central University of Haryana since 2010
- 6. Editor, Information Bulletin, Central University of Haryana since 2010
- 7. Convenor, International Students Cell w.e.f. 8th September 2016.
- 8. Member, Editorial Board, Souvenir, First Convocation (March 2014), Central University of Haryana
- 9. Member, Editorial Board, Odyssey (a University Publication), March 2014, Central University of Haryana
- 10. Member, Academic Council, Central University of Haryana (w.e.f. January 2014)
- 11. Member, Executive Council, Central University of Haryana (Session 2014-15)
- 12. Member, Research Council, Central University of Haryana w.e.f. 29th June 2016
- 13. Member, Internal Quality Assurance Cell (IQAC), Central University of Haryana
- 14. Member, Building Committee, Central University of Haryana (Session 2015-16)
- 15. Member, Ordinances Draft Committee(s) for revised PG, M.Phil and Ph.D Ordinances, (2015-16 & 2016-17)
- 16. Chairperson, Board of Studies, Department of English & Foreign Languages, Central University of Haryana (w.e.f. 23rd Sept. 2015)
- 17. Dean Students Welfare, Central University of Haryana (from 16thJanuary 2014 to 17th Oct. 2016)
- 18. Member, Admission Committee, Central University of Haryana for the session 2012-13, 2013-14, 2014-15 and 2015-16
- 19. Member, NAAC Steering Committee, Central University of Haryana
- 20. Coordinator, Publication Division, Central University of Haryana, (2014-15 & 2015-16) and Advisor w.e.f. September 2016.
- 21. Dean, School of Journalism and Mass Communication, Central University of Haryana from 28th Nov. 2014 to 17th Aug. 2015.
- 22. Coordinator, Community Development Cell and Unnat Bharat Abhiyan (UBA) Cellw.e.f. 7th September 2015
- 23. Convenor, Website Review Committee, Central University of Haryana w.e.f. 29th July 2016.
- 24. Organising Secretary for the National Seminar on "Progressive Writings in Indian English Literature: Diaspora and Beyond" held on 3-5 Dec. 2015 at Central University of Haryana.
- 25. Supdt. of End-Semester Examinations, 2014-15, 2015-16, and 2016-17 (Odd Semester)
- 26. Supdt. of Entrance Exams., Central Universities Common Entrance Test, 2016-17.
- 27. Supdt. of Written Exams., Non-Teaching Posts, Central University of Haryana (2016-17)
- 28. Convenor, Printing and Editorial Committee of First, Second and Third Convocation, Central University of Haryana.
- 29. Coordinator, Book Reading Club, Central University of Haryana from 2012-13 to 2015-16
- 30. Member, Innovation Club, Central University of Haryana (2014-15)
- 31. Member, Examination Committee, 2014-15
- 32. Member of Organising& Editorial Committee in National Seminar on "Inclusive Democracy: People, Power and Progress" (May 30-31, 2012)
- 33. Member of Editing, Compiling and Printing Committee for the publication of Report of Consultative Workshop: Towards Designing a Roadmap—Implementation of RTE Act 2009, Central University of Haryana (June 21, 2012)

34. Member, Organising Committee of Orientation Programme... Coming Together, Central University of Haryana (Aug. 8-9, 2012)

#### Dr. Manoj K. Vidyalankar

- 1. Member of Editorial Board of Journal of Central University of Haryana. Vol. 01, Issue 01 (March 2014). ISSN: 2348-3377.
- 2. Member, Editorial Board, Odyssey (a University Publication), March 2014, Central University of Haryana
- 3. Member, Editorial Board, Souvenir, First Convocation (March 2014), Central University of Harvana
- 4. Member, Career and Placement Cell, Central University of Haryana
- 5. Member, Admission Committee, Central University of Haryana
- 6. One of the Coordinators for the National Seminar on Progressive Writings in Indian English Literature: Diaspora and Abroad held on 3-5 Dec. 2015
- 7. Member, Group for the Promotion of Art, Culture and Heritage, Central University of Haryana
- 8. Event Coordinator, Literary Club of Department of English and Foreign Languages, Central University of Haryana

#### Dr. Snehsata

- 1. Member, Editorial Board, Odyssey (a University Publication), March 2014, Central University of Haryana.
- 2. Member, Editorial Board, Souvenir, First Convocation (March 2014), Central University of Haryana.
- 3. Performed as Assistant Warden of Girls Hostel during the session 2014-15.
- 4. Member, Editorial Board, Souvenir, First Convocation (March 2014), Central University of Haryana
- 5. Event Coordinator, Book Reading Club, Central University of Haryana w.e.f. 8th September 2016.
- 6. Faculty Coordinator, Centre for Community Development, Central University of Haryana
- 7. Event Coordinator, Literary Club of Department of English and Foreign Languages, Central University of Haryana
- 8. Member, Book Reading Club, Central University of Haryana

#### Mr. Sudeep Kumar

- 1. Member, Editorial Board, Souvenir, First Convocation (March 2014), Central University of Harvana.
- 2. Member, Editorial Board, Odyssey (a University Publication), March 2014, Central University of Haryana.
- 3. Member, Board of Studies, Department of English and Foreign Languages, Central University of Haryana
- 4. Member, School Board, School of Language, Linguistics, Culture and Heritage Male Counsellor, Youth Red Cross, Central University of Haryana.
- 5. Assistant Warden, Boys Hostel, Central University of Haryana.
- 6. One of the Coordinators for the National Seminar on "Progressive Writings in Indian English Literature: Diaspora and Beyond" held on 3-5 Dec. 2015.
- 7. Faculty Counsellor, Youth Red Cross, Central University of Haryana
- 8. Coordinator, Literary Club, Central University of Haryana

#### Ms. Rinu

- 1. Member of Editorial Board of Journal of Central University of Haryana. Vol. 01, Issue 01 (March 2014). ISSN: 2348-3377
- 2. Member, Editorial Board, Odyssey (a University Publication), March 2014, Central University of Haryana
- 3. Member, Editorial Board, Souvenir, First, Second and Third Convocation (2014, 2016 and 2017), Central University of Haryana
- 4. Member of Information Bulletin Committee (Academic Year 2015-16)
- 5. Member of Proficiency & Skill Development Cell (2014-15)
- 6. Faculty Coordinator (Comprehension Analysis) for UGC-NET Classes (2015-16)
- 7. Faculty Representative, Swachh Bharat Abhiyan
- 8. Coordinator, English Language Laboratory, Central University of Haryana
- 9. One of the Coordinators for the National Seminar on Progressive Writings in Indian English Literature: Diaspora and Abroad held on 3-5 Dec. 2015
- 10. Member, Board of Studies, Department of Computer Science, Central University of Haryana (session 2014-15)
- 11. Member, Publication Division, Central University of Haryana
- 12. Event Coordinator, Literary Club of Department of English and Foreign Languages, Central University of Haryana
- 13. Member, Editorial Board, Central University Newsletter (Vol. 2)
- 14. Member, Organising Committee, Abhivyakti ke Apni Rahein (University Level Painting Competition), 2016 and 2017.

#### **Future Roadmap**

- 1. Certificate and Diploma Courses in Foreign Languages
- 2. Short-Term skill-based Courses
- 3. Collaborative Initiatives with Prestigious Organisations
- 4. Student-exchange Programmes
- 5. Creative Writers in-Campus Programmes
- 6. Continuing the Series of Extension Lectures by the Eminent Professors
- 7. Engaging Visiting Professors/Adjunct Faculty
- 8. Organising Seminars/Conferences/Workshops at Regular Intervals

# **Department of Hindi & Indian Languages**

The Department of Hindi and Indian Languages was introduced in 2011. It comes under School of Language, Linguistics, Culture and Heritage and offers M.A. (Hindi), M.Phil. (Hindi) and Ph.D. (Hindi) programmes. Though the department does not offer any inter-disciplinary programme but most of the topics of research in M.Phil.and Ph.D. are of inter/multidisciplinary nature. The department adopts Semester System with 100% implementation of Choice Based Credit System (CBCS).

#### Programmes Offered and No. of Seats

a. M.A. (Hindi) : 30 Seats

b. M.Phil. (Hindi) : The student intake in each Department shall not exceed 10 subject

to availability of eligible faculty in the Department.

c. Ph.D. (Hindi) : As per the availability of eligible research supervisors.

#### **Programme-wise Scheme of course**

#### M.A. Hindi:

#### Scheme of Courses (M.A. Hindi)

#### प्रथम सेमेस्टर

क्रम. सं.	पाठ्यक्रम कोड	पाठ्यक्रम का शीर्षक	L	T	P	क्रेडिट
1.	SLLCH HND 1 1 01 C 5005	स्वच्छंदतावादी काव्य	5	0	0	5
2.	SLLCH HND 1 1 02 C 5005	हिंदी कथा साहित्य-I	5	0	0	5
3.	SLLCH HND 1 1 03 C 5005	आदिकालीन एंव मध्यकालीन साहित्य का इतिहास	5	0	0	5
4.	SLLCH HND 1 1 04 C 5005	हिंदी भाषा का स्वरूप एंव इतिहास	5	0	0	5
5.		अन्य विभाग से चयन किया जाएगा	4	0	0	4

#### द्वितीय सेमेस्टर

क्रम.	पाठ्यक्रम कोड	पाठ्यक्रम का शीर्षक	L	Т	P	क्रेडिट
सं.						
1.	SLLCH HND 1 2 05 C 5005	छायावादोत्तर काव्य	5	0	0	5
2.	SLLCH HND 1 2 06 C 5005	हिंदी कथा साहित्य-II	5	0	0	5
3.	SLLCH HND 1 2 07 C 5005	आधुनिक हिंदी साहिय का इतिहास	5	0	0	5
4.	SLLCH HND 1 2 08 C 5005	कथेतर गद्य विधाएं	5	0	0	5
5.	SLLCH HND 1 2 02 GE 2002	पुस्तक एंव फिल्म समीक्षा (अनिवार्य)	2	0	0	2
6.	SLLCH HND 1 2 DCEC	अधोलिखित में से किसी एक का चयन करना होगा	4	0	0	4
	SLLCH HND 1 2 01 DCEC 4004	समकालीन साहित्य चिंतन				
	SLLCH HND 1 2 02 DCEC 4004	हरियाणा का लोकसाहित्य				
	SLLCH HND 1 2 03 DCEC 4004	आधुनिक भारतीय का साहित्य				

# तृतीय सेमेस्टर

क्रम. सं.	पाठ्यक्रम कोड	पाठ्यक्रम का शीर्षक	L	T	P	क्रेडिट
1.	SLLCH HND 1 3 09 C 5005	प्राचीन एंव रीतिकालीन काव्य	5	0	0	5
2.	SLLCH HND 1 3 10 C 5005	हिंदी नाटक एंव रंगमंच	5	0	0	5
3.	SLLCH HND 1 3 11 C 5005	भारतीय काव्य शास्त्र	5	0	0	5
4.	SLLCH HND 1 3 12 DCEC 2002	संगोष्ठी पत्र (अनिवार्य)	2	0	0	2
5.		अन्य विभागों से चयन किया जायेगा	4	0	0	4
6.		अधालिखित में से किसी एक का चयन होगा	4	0	0	4
	SLLCH HND 1 3 05 DCEC 4004	मीरां				
	SLLCH HND 1 3 06 DCEC 4004	प्रेमचंद				

# चतुर्थ सेमेस्टर

क्रम. सं.	पाठ्यक्रम कोड पाठ्यक्रम का शीर्षक L		Т	P	क्रेडिट	
1.	SLLCH HND 1 413 C 5005	भक्ति काव्य	5	0	0	5
2.	SLLCH HND 1 414 C 5005	हिंदी आलोचना	5	0	0	5
3.	SLLCH HND 1 415 C 5005	पाशचात्य काव्यशास्त्र	5	0	0	5
4.	SLLCH HND 1 4 01 SEEC 0066	लघु शोध प्रबंध	0	0	12	12

# विभाग द्वारा अन्य विभाग के विद्यार्थियों हेतु प्रस्तावित सामान्य वैकल्पिक पाट्यक्रमों (GEC) की सूची

क्रम. सं.	पाठ्यक्रम कोड	पाठ्यक्रम का शीर्षक	L	Т	P	क्रेडिट					
प्रथम सेम्	प्रथम सेमेस्टर में प्रस्तावित										
1.	SLLCH HND 1 1 01 GE 4004	हिन्दी की संस्कृति	4	0	0	4					
2.	SLLCH HND 1 1 02 GE 4004	साहित्य की समझ	4	0	0	4					
तृतीय से	मेस्टर में प्रस्तावित										
3.	SLLCH HND 1 3 03 GE 4004	सिनेमा अध्ययन	4	0	0	4					
4.	SLLCH HND 1 3 04 GE 4004	अस्मितामूलक साहित्य	4	0	0	4					
5.	SLLCH HND 1 3 05 GE 4004	प्रयोजनमूलक हिंदी	4	0	0	4					

#### M.Phil./Ph.D. Course Work

# Paper I: शोध प्रविधि एंव तुलनात्मक साहित्य

M.Phil. Course Code : SLC HND 01 101 Ph.D. Course Code : SLC HND 01 101

# Paper II: साहित्य का इतिहास दर्शन और विचारधारा

M.Phil. Course Code : SLC HND 01 102 Ph.D. Course Code : SLC HND 01 102

#### **Admission Criteria and Procedure**

#### M.A. (Hindi):

#### **Eligibility:**

Graduation from any recognized university with a minimum 50% marks or equivalent grade in aggregate.

#### M.Phil. (Hindi):

#### **Eligibility:**

A candidate shall be eligible for admission to the M.Phil. programme, if he/she holds: A Master's degree or a professional degree, declared equivalent to the Master's degree by the corresponding statutory regulatory body, with at least 55% marks in the aggregate or its equivalent grade 'B' in the UGC 7-point-scale (or an equivalent grade in a point-scale wherever grading system is followed) or an equivalent degree from a foreign educational institution accredited by an Assessment and Accreditation Agency which is approved, recognised or authorised by an authority, established or incorporated under a law in its home country, or any other statutory authority in that country for the purpose of assessing, accrediting or assuring quality and standards of educational institutions.

A relaxation of 5% of marks, from 55% to 50%, or an equivalent relaxation of grade, may be allowed for those belonging to the SC/ST/OBC (non-creamy layer)/Differently-abled and other categories of candidates, as per the decision of the Commission from time to time, or for those who had obtained their Master's degree prior to 19th September, 1991. The eligibility marks of 55% (or an equivalent grade in a point scale wherever grading system is followed) and the relaxation of 5% to the categories mentioned above are permissible based only on the qualifying marks without including the grace mark procedures.

The cases of students who have passed examination outside the Indian Universities system and who may not have obtained a Master's degree in relevant subject may be considered for admission to the programme, subject to the condition that each case shall be examined on its own merit by the Admissions Committee and in accordance with the recommendations of the Equivalence Committee.

#### **Procedure for Admission:**

The University shall conduct an Entrance Test, with the qualifying marks as 50% (a relaxation of 5% of marks may be allowed for those belonging to the SC/ST/OBC (non-creamy layer)/ Differently-abled and other categories of candidates as per the decision of the Commission from time to time). The syllabus of the Entrance Test may consist of 50% of research methodology and 50% may be subject-specific. The Entrance Test shall be conducted at the centre(s) notified in advance by the University.

The candidates who have cleared the UGC/CSIR-NET/JRF/SLET/SET/GATE and Teacher-Fellowship-holders shall be exempted from Entrance Test.

Admission shall be based on the performance of the qualified candidates in an interview/viva-voce to be organised by the Department where the candidates shall be required to discuss their research interest/area through a presentation before a duly constituted Departmental Research Committee (DRC).

#### Ph.D. (Hindi):

#### **Eligibility:**

A candidate shall be eligible for admission to the Ph.D. programme, if he/she possesses:A Master's degree or a professional degree declared equivalent to the Master's degree by the corresponding statutory regulatory body, with at least 55% marks in aggregate or its equivalent grade 'B' in the UGC's 7-point scale (or an equivalent grade in a point scale wherever the grading system is followed), or an equivalent degree from a foreign educational Institution accredited by an Assessment and Accreditation Agency which is approved, recognized or authorised by an authority, established or incorporated under a law in its home country, or any other statutory authority in that country for the purpose of assessing, accrediting or assuring quality and standards of educational institutions.

A relaxation of 5% of marks, from 55% to 50%, or an equivalent relaxation of grade, may be allowed for the candidates belonging to SC/ST/OBC (non-creamy layer)/Differently-abled and other categories of candidates as per the decision of the University Grants Commission from time to time, or for those who had obtained their Master's degree prior to 19th September, 1991. The eligibility marks of 55% (or an equivalent grade in a point scale wherever the grading system is followed) and the relaxation of 5% to the categories mentioned above are permissible only on the basis of the qualifying marks without including the grace mark procedures.

The cases of candidates who have passed an examination outside the Indian Universities system and those who may not have obtained a Master's degree may be considered for admission to the programme subject to the condition that each case shall be examined on its own merit by the Admissions Committee and in accordance with the recommendations of the Equivalence Committee.

The candidates who have qualified the UGC/CSIR-JRF/NET/SLET, or are Teacher Fellowship-holders or have passed M. Phil. programme with course work recognised by the U.G.C., as per the UGC Regulations (Minimum Standards and Procedure for award of M.Phil./Ph.D. Degree, 2009), shall be exempted from appearing at the written test.

#### **Procedure for Admission**

#### **Direct Admission:**

The University shall conduct an Entrance Test with qualifying marks as 50% (a relaxation of 5% of marks to be allowed for those belonging to the SC/ST/OBC (non-creamy layer)/ Differently-abled and other categories of candidates as per the decision of the Commission from time to time). The syllabus for the Entrance Test shall consist of: (a). research methodology (50%) and (b). subject-specific (50%). The Entrance Test shall be conducted at the Centre(s) notified in advance by the University.

The admission shall be based on the performance of the qualified candidates in the interview/ viva-voce to be organised by the Department concerned where the candidates shall be required to discuss their research interest/area through a presentation before a duly constituted Departmental Research Committee.

# **Brief Faculty Profile:**

Sr.	Name	Designation	Qualification	Years of Experience	Areas of Specialisation/ Interest			
1	Dr.Siddharth Shanker Rai	Assistant Professor	Modern Poetry, Hindi Criticism					
		ii. Research Supervision: M.Phil: Awarded :06; Ongoing	<ul> <li>i. Publications: 12 articles in journals/conference proceedings and 5 chapters in edited books.</li> <li>ii. Research Supervision: <ul> <li>M.Phil:</li> <li>Awarded: 06; Ongoing: 03</li> <li>Ph.D: Awarded: 01; Submitted: 01; Ongoing: 04</li> </ul> </li> </ul>					
2	Dr.Amit Kumar	Assistant Professor	M.A., UGC-NET- JRF M.Phil., Ph.D.,	03Yrs	Hindi Fiction			
		<ul><li>i. Publications: 20 article collection</li><li>ii. Research Supervision: M.Phil: Awarded: 06; 0</li><li>Ph.D: Awarded: 02; On</li></ul>	Ongoing: 03	ce proceedings, one	e book and two poetry			
3	Dr. Arvind Singh Tejawat	Assistant Professor	M.A., M.Phil., Ph.D., UGC-NET	03Yrs 05 Months	Indian Bhasa Criticism, Literary Theory, Gender Studies			
		<ul><li>i. Publications: 5 articles books.</li><li>ii. Research Supervision: M.Phil: Awarded :06; C.Ph.D: Awarded :00; Su</li></ul>	Ongoing: 04		ne chapter in Book and two			

# Training Programmes/Orientation/Refresher Courses Attended by the Faculty

#### I. Dr. Siddharth Shanker Rai

S.N	Programme	Duration	Organised by
1.	UGC-Sponsored Orientation Programme	03-30 JUNE, 2015	UGC-HRDC, B.H.U., VARANASI
2	Orientation Programme	08-23 March 2010	Centre For Women's Studies & Development, FSS, BHU

#### II. Dr. Amit Kumar

S.No.	Programme	Duration	Organised by
1.	UGC-Sponsored Orientation	02-28 JUNE, 2016	UGC-HRDC, Rani Durgawati
	Programme		Vishwavidyalya, Jabalpur
2	Orientation Programme	12-31 Dec, 2016	CCRT, NEW DELHI

# III. Dr. Arvind Singh Tejawat

Sr. No.	Programme	Duration	Organised by
1.	Orientation Programme	03-30 Dec, 2015	UGC Human Resource Development Centre, Ranchi University, Ranchi
2.	Workshop	31July-10 Aug, 2016	Academy of Science, Charls University, Prague

# **Infrastructure in the Department**

Department has five classrooms, two researchers' room, one seminar hall, one language lab (yet to be established), eleven faculty rooms, one waiting lounge and one office.

# Thrust Areas of Research—Details of M.Phil. and Ph.D. Research Pursued/being Pursued by the Researchers on Inter/Multidisciplinary Topics

# M.Phil:

Sr.	Name of Student	Roll	Session	Topic of Research	Inter-	Supervisor
No.		No.			disciplinary/ Multidisciplinary Focus	
1	Pankaj Kumar	1401	2011-12	प्रभा खेतान के उपयान्सों में स्त्री चेतना	Gender Studies	Dr. Yogender Sharma
2	Kavita	1405	2011-12	स्त्री चेतना के निर्माण में 'श्रृखला की कडियाँ' का योगदान	Gender Studies	Dr. Yogender Sharma
3	Deepak	1751	2012-13	21 वीं सदी के प्रमुख युवा कवियों की कविताओं में युग बोध	Contemporary Literature	Dr. Yogender Sharma
4	VineshKumari	1752	2012-13	विजयदान देथा की कहानियों का आलोचनात्मक अध्ययन	Folk Literature	Dr. Yogender Sharma
5	ManishaJha	1753	2012-13	सहआदत हसन मंटो की कहानियों में विभाजन की त्रासदी	Partition	Dr. KamalanandJha
6	Kanta Devi	1754	2012-13	21 वीं शताब्दी के हिंदी ललित निबंधों की विशेषताएं	Aesthetics	Dr. Yogender Sharma
7	PremDutt Pandey	1756	2012-13	अनिल यादव की यात्रा- वृतान्त 'वह भी कोई देश है महाराज' में विन्यस्त- उत्तर पूर्व भारत का यर्थाथ	Culture Studies	Dr. KamlanandJha
8	ManjuChaturvedi	1757	2012-13	हिंदी पत्रकारिता का बदलता स्वरूप और साहित्य संस्करण की भूमिका	Journalism	Dr. Yogender Sharma
9	Ajay Kumar	4182	2013-14	नार्गाजुन के उपन्यासों में स्त्री-संघर्ष	Gender Study	Pro. Ram Naresh Mishra
10	Ajay Kumar Tanwar	4183	2013-14	'मुर्दहिया' में वर्णित सामाजिक यथार्थ	Dalit Studies	Dr. Arvind Singh Tejawat
11	Ravina	4184	2013-14	प्रेमचंद की कहानियों में बचपन	Psychological Dimensions- Behaviouristic Approach	Dr. Arvind Singh Tejawat
12	Avinash Kumar	5083	2014-15	रणेन्द्र के उपन्यासों में अभिव्यक्त आदिवासी जीवन का यथार्थ	Subaltern Studies	Dr. Siddharth Shanker Rai
13	SanjuBala	4186	2013-14	'रेहन पर रग्धू' में चित्रित समाज	Sociology	Dr. Amit Kumar
14	AbhishekVikram	5081	2014-15	उदय प्रकाश की कहानी मोहन दास के मूल पाठ एंव फिल्मांकन का तुलनात्मक अध्ययन	Cinema Studies	Dr. Siddhartha Shanker Rai

Sr. No.	Name of Student	Roll No.	Session	Topic of Research	Inter- disciplinary/ Multidisciplinary Focus	Supervisor
15	Pankaj Kumar	1401	2011-12	प्रभा खेतान के उपयान्सों में स्त्री चेतना	Gender Study	Dr. Yogender Sharma
16	Kavita	1405	2011-12	स्त्री चेतना के निर्माण में 'श्रृखला की कडियाँ' का योगदान	Gender Study	Dr. Yogender Sharma
17	Deepak	1751	2012-13	21 वीं सदी के प्रमुख युवा कवियों की कविताओं में युग बोध	Contemporary Literature	Dr. Yogender Sharma
18	VineshKumari	1752	2012-13	विजयदान देथा की कहानियों का आलोचनात्मक अध्ययन	Folk Literature	Dr. Yogender Sharma
19	Pradeep Kumar Tiwari	5086	2014-15	सागर लहरें और मनुष्य तथा 'मछुवारें' का तुलनात्मक अध्ययन	Comparative Literature	Dr. Siddharth Shanker Rai
20	Rakesh Pandey	5087	2014-15	उषा प्रियवंदा के उपन्यासों में प्रवासी संस्कृति का अध्ययन	Diaspora	Dr.Arvind Singh Tejawat

# Ph.D:

Sr. No.	Name	Session	Topic Inter- disciplinary/ Multidisciplinar Focus		Supervisor
1	PreetiYadav	2011-12	ममता कालिया के उपन्यासों में कामकाजी महिलाओं के संघर्ष का समाजशास्त्रीय अध्ययन	Gender Studies	Prof. Ram Naresh Mishra
2	KrishanaKumari	2011-12	दक्षिणी हरियाणा के पारमपरिक लोकगयीतों में सामाजिक, आर्थिक, सांस्कृतिक यर्थाथ	Culture Studies	Prof. Ram Naresh Mishra
3	ReenaYadav	2011-12	हिंदी नवजागरण में बालमुकुन्द गुप्त का योगदान	Hindi Renaissance	Dr.SiddharthShankerRai
4	Rahish Ali Khan	2011-12	जगदीश चंद्र के उपन्यासों में पंजाब के मजदूर किसानों के जीवन का यथार्थ	Sociology	Dr. Amit Kumar
5	Leela Ram	2012-13	प्रेमचंद के कथेतर साहित्य का आलोचनात्मक अध्ययन	Criticism	Dr.Arvind Singh Tejawat
6	Rattan Lal	2012-13	बींसवी सदी के उत्तरार्ध्द के हिंदी फिल्मी गीतों में प्रगतिशील चेतना	Cinema Studies	Dr. Amit Kumar
7	Manisha	2011-12	भारतीय संस्कृति के विकास में अलवार संत एंव अष्टछाप के कवियों का योगदान	Culture Studies	Dr.Arvind Singh Tejawat

#### **Events Organised**

- 1. First Department-Level Alumni Meet on 24th Oct. 2016.
- 2. Two-Day National Seminar on "*Hindi Vyakhyanmala*" and '*Chhatra Adhyayan Yatra*' in collaboration of Kendriya Hindi Nideshalya, New delhi and Department of Hindi and Indian Languages from Feb. 10-12, 2014.
- 3. Department of Hindi & Indian Languages and the Department of English jointly organised an event "A Bilingual Approach to Creation of Knowledge: Revisiting Saadat Hasan Manto—A Dialogue" on Nov. 19, 2012.
- 4. 'Poetry recitation in Indian Languages' on 12 Sept, 2013.
- 5. National Seminar on 'Sanskritik Bahulta Aur Nagarjuna Ki Prasngikt' (09 Nov.2011)
- 6. National Level Consultative Workshop on 'Right to Education 2009' (June 21, 2012)

#### **Highlights and Achievements**

- 1. A magazine 'Bhasha Aur Abhivyakti' Published by Department of Hindi in 2014.
- 2. A magazine 'Nirmaan' published by Department of Hindi in 2016.
- 3. Dr. Arvind Tejawat visited Kelaniya University, Shri Lanka in 2016.
- 4. Three-Day Painting Exhibition organized by Dr. Amit Kumar, Dept. of Hindi.

#### Contribution of the Faculty in the Corporate Life of the University

#### Dr. Siddharth Shanker Rai:

- 1. Co Editor, *Lokchetna*, ISSN2277-5013,.
- 2. Member, Editorial Board, CUHJ (a University Publication), Central University of Haryana.
- 3. Member, Editorial Board, Annual Reports of Central University of Haryana since 2014.
- 4. Member, Editorial Board, Central University of Haryana.
- 5. Member, Book Reading Club, Central University of Haryana.
- 6. TIC, Department of Journalism and Mass Communication, Central University of Haryana.
- 7. Hindi Officer, Central University of Haryana.
- 8. Public Relation Officer, Central University of Haryana, (till 02.10.2016)

#### Dr. Amit Kumar

1. Editor, Retpath (ISSN-2347-6702)

#### Dr. Arvind Singh Tejawat

- 1. Member, Internal Quality Assurance Cell, Central University of Haryana.
- 2. Member, Alumni Club, Central University of Haryana.

#### **Research Project and Award(s)**

#### Dr. Arvind Singh Tejawat:

1. Research project "The Study of Language Change and Development at The Backdrop of Cultural, Social, Political and Economic Change in The Context of Southern and Western Rajasthani Society Based on Written and Oral Tradition" Awarded by ICSSR, New Delhi. (9:00 Lakh).

#### Dr. Amit Kumar:

2. Dr. Amit Kumar Awarded with *Babu Balmukund Gupt Purskar* by Babu Balmukund Gupt Sahitya Evam Patrkarita Sanrkshan parishad, Rewari in 2014.

#### **Future Roadmap**

- 1. Certificate and Diploma Courses in Hindi Language and Creative Writing.
- 2. Creative Writers/Poets in-Campus Programmes
- 3. Continuing the Series of Extension Lectures by the Eminent Professors
- 4. Organising Seminars/Conferences/Workshops at regular intervals
- 5. Development of MOOC
- 6. Languages Lab

# **Department of Tourism & Hotel Management**

Central University of Haryana is the first Central University in India to launch Masters Programme in Hotel Management and Catering Technology. The Department of Tourism and Hotel Management was established in August 2015. The MHMCT programme is open for all disciplines with 100% Choice based Credit System in Semester Mode. Department of Tourism and Hotel Management (DTHM) is a part of School of Language, Linguistics, Culture & Heritage and aims at becoming one of the advanced institutes in the country offering education, training, research and consultancy in the field of hospitality, tourism, travel and allied sectors.

#### Programmes Offered and No. of Seats

Master of Hotel Management & Catering Technology (MHMCT): 15 Seats

The programme is open for all discipline and 100% choice based credit system in semester mode is adopted.

#### **Programme Outcome**

Trained and Skilled Professionals with intense knowledge, research aptitude and an eye for detail at work with which student will lead industry requirements through the provision of hospitality skills development, operational exposure, and managerial competence and as strategic outlook.

#### **Programme-wise Scheme of Course**

#### Semester -I

S.No	Paper	Course Code	Credits			
	Core Course	es:				
1	Food Production Operations	SLLCH THM 1 1 01 C 3036	6 (3T+3P)			
2	Food & Beverage Service Operations	SLLCH THM 1 1 02 C 2024	4 (2T+2P)			
3	Accommodation Operations	SLLCH THM 1 1 03 C 2024	4 (2T+2P)			
4	Meetings, Expositions, Events & Convention Management  SLLCH THM 1 1 04 C 3003					
Total C	Total Credits of Core Courses:					
Electiv	ve Courses: (Choose any Two)					
1	Communication Skills & Personality Development for Hospitality & Service Sector	SLLCH THM 1 1 01 E 3003	3			
2	Managing Hotels Effectively: Lessons from Managers	SLLCH THM 1 1 02 E 3003	3			
3	Hospitality Information Systems & E Commerce	SLLCH THM 1 1 03 E 3003	3			
4	Field / Industry Visit/ Excursion	SLLCH THM 1 1 04 E 0033	3			
Total Credits of Elective Courses:						
	Total Credits of I Semester – 23					
	One Course (Elective) to be taken from other department of atleast 3 credits					

# Semester –II

S.No	Paper	Credits				
Core	Core Courses:					
1	The Great Indian Cuisine	SLLCH THM 1 2 05 C 2035	5 (2T+3P)			
2	Beverage Service & Management	SLLCH THM 1 2 06 C 3025	5 (3T+2P)			
3	Accommodation Management	SLLCH THM 1 2 07 C 2024	4 (2T+2P)			
4	Researching for Hospitality & Tourism	SLLCH THM 1 2 08 C 3003	3			
	Total Credits of Core Courses:					
Electi	ive Courses: (Choose any Two)					
1	Foreign Language – French	SLLCH THM 1 2 05 E 3003	3			
2	Hospitality & Tourism Services Facilitation Management	SLLCH THM 1 2 06 E 3003	3			
3	Transport & Travel Management	SLLCH THM 1 2 07 E 3003	3			
4	Theme Event	SLLCH THM 1 2 08 E 0033	3			
Total (	Total Credits of Elective Courses: 06					
	Total Credits of II Semester – 23					
	One Course (Elective) to be taken from other department of at least 3 credits					

# Semester -III

S.No	Paper	Course Code	Credits			
Core Co	ourses:					
1	Foreign Cuisines	SLLCH THM 1 3 09 C 3036	6 (3T+3P)			
2	Banquet Management & Operations	SLLCH THM 1 3 10 C 2024	4 (2T+2P)			
3	Rooms Division Management	SLLCH THM 1 3 11 C 2024	4 (2T+2P)			
4	Seminar	SLLCH THM 1 3 12 C 3003	3			
	Total Credits of Core Cou	irses:	17			
Elective	Courses: (Choose any One Module)					
	Module-1 (Human Resources Area) (	Choose any Two)				
1	Human Resource Management in Hospitality	SLLCH THM 1 3 09 E 3003	3			
2	OrganisationalBehaviour	SLLCH THM 1 3 10 E 3003	3			
3	Leadership & Management Development	SLLCH THM 1 3 11 E 3003	3			
	Module-II (Marketing Area) (Cho	oose any Two)				
1	Marketing for Hospitality & Tourism	SLLCH THM 1 3 12 E 3003	3			
2	Hospitality Management & Consumer Behaviour	SLLCH THM 1 3 13 E 3003	3			
3	Advertising Management	SLLCH THM 1 3 14 E 3003	3			
Total Cre	Total Credits of Elective Courses:					
	Total Credits of III Semester – 23					
	One Course (Elective) to be taken from other department of atleast 3 credits					

#### Semester -IV

S.No	Paper	er Course Code				
Core C	Core Courses: Industry Exposure / On the Job Training					
1	Production & Service Operations Areas (Report)	SLLCH THM 1 4 13 C 0606	6			
2	Rooms Division Areas Report	SLLCH THM 1 4 14 C 0606	6			
3	Marketing/ HR (Report)	SLLCH THM 1 4 15 C 0303	3			
4	Project/ Dissertation	SLLCH THM 1 4 16 C 0303	3			
	Total Credits of IV Semester:					

# **Admission Criteria and Procedure**

# **Eligibility:**

Graduation from any recognized university with a minimum 50% marks or equivalent grade in aggregate.

# **Brief Faculty Profile**

Sr.	Name	Designation	Qualification	Years of	Areas of Specialisation/	
No.				Experience	Interest	
1	Mr.Vikas Mohan	Assistant Professor	UGC-NET MBA (Hospitality), M.Sc.(H.M),MTM	8 Years	Hotel & Tourism Management	
		Publications: 7 (3 Na	tional and 4 International)	)		
2	Dr.Dilbag Singh	Assistant Professor	Ph.D. MHM, PG Diploma in Human Rights, BA	6 Years	Accommodation operation, Food Production	
		Publications: 3 (1 Na	tional and 2 International	)		
3	Mr. Amandeep	Assistant Professor	M.Sc., B.Sc. in Hotel &Hospitality Administration	1 Year 7 Months	Front Office Management, Housekeeping, Customer Relationship Management	
		Publications: 1 (1 International)				
4	Miss.Shikha	Assistant Professor	MHM, BHM, MTM (Pursuing)	2.5 Years	Front Office, Housekeeping	
		Publications: 5 (5 International)				

# **Infrastructure in the Department**

Type of Infrastructure	Number
Faculty Room	1
Labs	1 (Housekeeping Lab); 1 (F&B Production Lab); 1 (F&B Service Lab)
Classroom	1

#### **Thrust Areas of Research**

- 1. Hotel, Hospitality Operations & Management
- 2. Food Service Management & Operations
- 3. Culinary Practices & Food Gastronomy
- 4. Hospitality & Tourism Education

#### **Highlights and Achievements**

- 1. Awarded as the Best Department of Central University of Haryana under Swachh Bharat Abhiyan for its ambience and cleanliness (25<sup>th</sup> Feb. 2016).
- 2. Reckoned as one of the most promising Hotel Management Institutes in India in Government Sector by GHRDC Times (April 2016).
- 3. Mr. Ajay Kumar, student of DTHM cleared UGC-JRF in Tourism Administration & Management (June 2016)
- 4. Inaugurated & mentored by culinary legends, industry renowned & celebrity Chef Manjit Gill-Corporate Chef, ITC Welcom Group.
- 5. Mr. Pawan Verma, student of DTHM felicitated with Budding Hospitality Award at 7<sup>th</sup> Indian Hospitality Congress Annual Conference, New Delhi (Feb. 2016).
- 6. Mr. Arvind and Mr. Joginder selected as a Job Trainees in Sarovar Portico Jaipur Hotel in their 4th semester of MHMCT programme.
- 7. Department has the honour of receiving accolades from:
  - 1. Hon'ble Union Minister of HRD Smt. Smriti Zubin Irani
  - 2. Hon'ble Union Rural Development Minister Ch. Birender Singh
  - 3. Hon'ble Minister of Education, Haryana Sh. Ram Bilas Sharma
  - 4. Hon'ble Member of Parliament Ch. Dhrambir Singh
  - 5. Hon'ble Chief Minister of Haryana Sh. Manohar Lal

#### **Events and Activities Organised (2015-2016)**

S. No.	Title of Event	Date of Event	Resource Person/Guest Speaker / Event
1	Contemporary Issues in Management	20.08.2015	Prof. Manjula Choudhary Kurukshetra University
2	Haryana Tourism Day	01.09.2015	Dr. Surjeet Kumar
3	Latest trends in Hospitality	02.09.2015	Chef Manjit Gill ITC Welcome Group
4	Positive Psychology and Stress Management	14.9.2015	MDU, Rohtak Prof. RadheyShyam
5	International Housekeeper Weeks	13.09.2015 – 19.09.2015	DTHM

S. No.	Title of Event	Date of Event	Resource Person/Guest Speaker / Event
6	Facilitation Services in Hospitality & Tourism Management	17.09.2015	Dr. Anoop Kumar IHTM, MDU, Rohtak
7	Culinary Management & Operations	17.09.2015	Mohd. ShahidHasnain Principal, IHM, Rohtak
8	World Tourism Day	27.09.2015	DTHM
9	Personality Development & Positive Psychologys	06.10.2015	Prof. Sonia Malik Dept. of Sociology, MDU, Rohtak
10	Indian Tourism - Current Status & Future Prospects'	06.10.2015	Dr. Ranbir Singh IHTM, MDU, Rohtak
11	Academic Institutional Visit -Banarasi Das Chandiwala Institute of Hotel Management & Catering Technology, New Delhi	7.10.2015	Institutional Visit
12	World Food Day	16.10.2015	DTHM
13	Navratra Food Festival	13.10.2015– 16.10.2015	DTHM
14	Field Trip to Jaipur	18.10.2015	Field Visit
15	Hotel Visit	18.10.2015	Mr. SonalSajwan
16	International Chef Day	20.10.2015	DTHM
17	Haryana Day	01.11.2015	DTHM
18	Country Side – Rajasthani Theme	11.1.2016	Theme Event
19	National Tourism Day	25.01.2016	DTHM
20	Professional Fair Visit Surajkund Craft Mela	07.02.2016	Fair Visit
21	Conference Participation 6th IIHTTRC	10.02.2016- 12.02.2016	Conference
22	Academic Institutional Visit- i). IHTM, M.D. University, Rohtak ii). IHM Rohtak	11.03.2016	Institutional Visit
23	Professional Fair Visit – AAHAR International Food & Hospitality Fair	12.03.2016	Food Fair
24	Activity Based Learning – Punjabi Theme &Parantha Festival	17.03.2016	Theme Event

S. No.	Title of Event	Date of Event	Resource Person/Guest Speaker / Event
25	Workshop – Towel Art	31.03.2016	Ms. Shelley Duggal
26	Seminar- Community Policing to Interact Police Public Contact at CUH	31.03.2016	Prof. Ashish Dahiya
27	Conference Participation – International Conference on Hospitality & Tourism at Le Cordon Blue School of Hospitality, G	13.04.2016	Conference
28	Activity Based Learning - Mango Festival	04.05.2016 - 06.05.2016	Theme Event
29	Round Table Conference	24.06.2016	Conference on Food
30	International Housekeeper Week 2016	1-17.09.2016	DTHM
31	Talk on Changing Trends in cleaning	15.09.2016	Mr. Vikas Mohan
32	Organized Cleaning Drive	16.09.2016	DTHM
33	World Tourism Week	26.09.16- 30.09.2016	DTHM
34	Lecture on "Tourism For All-Promoting Universal Accessibility)	26.09.2016	Mr. Vikas Mohan
35	Organized Tourism Quiz, Poster Making, Best Out of Waste, Collage Making competitions	27.09.2016	Ms. Shikha, Mr. Amandeep
36	Table Etiquette Workshop	28.09.2016	Mr. Vikas Mohan
37	Napkin Folding Workshop	29.09.2016	Mr. Vikas Mohan
38	Display Starters & Soup	30.09.2016	Mr. Dilbag Singh
39	Chocolate Making Workshop	07.10.2016	Chocolatier Ashutosh Singh
40	Indian Sweet Making Workshop	27.10.2016	Mr. Dilbag singh
41	Industrial Visit To the Neemrana Fort Palace, Rajasthan.	23.12.2016	Industrial Visit
42	Demonstration of Heavy Housekeeping Equipments used in Hotels	25.01.2017	Karcher Group
43	Demonstration of Cleaning Agents used in cleaning various surfaces in collaboration with Taski company	01.02.2017	Taski Company

S. No.	Title of Event	Date of Event	Resource Person/Guest Speaker / Event
44	Arranged Lecture on Latest Trends and Development in Hotel Industry	02.02.2017	By Mr. D.P. Singh IHM Panipat
45	Organized Workshop on Tandoor by the name of Tandoori Bites	3.02.2017	Workshop by Chef Jaswinder Singh, Punjab University Chandigarh

#### Contribution of Faculty in the Corporate Life of University

#### Mr. Vikas Mohan

- 1. Presently serving as Teacher In-Charge in Department.
- 2. Member of Admission Committee for Department (session 2015-16 and 2016-2017)
- 3. Member of Training and Placement Cell of Department.
- 4. Exam Coordinator of End-Semester Examination, Dec 2015 and June 2016, CUH
- 5. Exam Superintendent of End-Semester Examination of Dept. Management), Dec 2016, CUH
- 6. Member, Board of Studies, Department of Tourism and Hotel Management, Central University of Haryana (Session 2015-16).
- 7. Chairman, Board of Studies, of Department (Session 2016-17).
- 8. Member-NAAC Coordination Committees.
- 9. Convener and member of hospitality committees and food committees for various University functions.
- 10. Facilitating refreshments and sumptuous lunch to VVIPs, VIPs and dignitaries of the University.
- 11. Planning, establishment and operation of Departmental Labs.

#### Dr. Dilbag Singh

- 1. Member of NAAC Logistic Committee
- 2. Member of NAAC Hospitality Committee
- 3. Member of Convocation Lunch Committee
- 4. Member of Purchase Committee for University Guest House Amenities
- 5. Facilitating refreshments and lunch for VVIP guest.
- 6. Planning, Establishment and operation of Departmental Labs
- 7. Organizing various Workshops, Seminars and lectures for the students, faculties of the university.

#### Mr. Amandeep

- 1. Teaching subjects like Accommodation operations and Food Production in different semesters.
- 2. Handling profile of Head Training & Placement Cell.
- 3. Member, Sanitation Committee, Central University of Haryana
- 4. Counsellor for Post-graduation students.
- 5. Member Hospitality, Logistics NAAC Team Visit committee.
- 6. Member Lunch organizing committee for Convocation.

- 7. Member, Board of Studies, Department of Tourism and Hotel Management, Session (2016-2017)
- 8. Planning, Establishment and operation of Departmental Labs

#### Ms. Shikha

- 1. Organized various events (Poster making, Best out of waste, cultural talk) on world tourism day
- 2. Member, Sanitation Committee
- 3. Member, NAAC Preparation Committee (To receive peer team in Academic Floor) Central University of Haryana
- 4. Organized Sweets making workshop for Diwali
- 5. Attended GIAN Programme In Central University of Haryana
- 6. Member, NAAC Preparation Committee (Girls Hostel), Central University of Haryana
- 7. Members of various committees for Convocation.
- 8. Member, Board of Studies, Session (2016-2017)
- 9. Planning, Establishment and operation of Departmental Labs

#### **Future Roadmap**

- 1. Development of infrastructure.
- 2. To place students in reputed organization in the field of hospitality, retail & other sector of service industry.
- 3. To sign MoUs with hotels and restaurants for on the job and off the job training of the students.
- 4. To introduce skill oriented programmes in Hospitality & Tourism.
- 5. Development of departmental library.

# SCHOOL OF LAW, GOVERNANCE, PUBLIC POLICY AND MANAGEMENT

Department of Management Studies
Department of Law
Department of Commerce

# SCHOOL OF LAW, GOVERNANCE, PUBLIC POLICY AND MANAGEMENT

- Department of Management Studies
- Department Infrastructure
- Department of Commerce
- Department of Law

### **Department of Management Studies**

Department of Management Studies was established in the year 2010 under the School of Law, Governance, Public Policy and Management with two years full time Master of Business Administration. Initially, the intake of MBA programme was 15. From academic year 2014-2015 intake has been increased from 15 to 30. The eligibility criterion for admission is 50% marks in graduation or an equivalent grade. At present three specialisations are being offered in second year i.e. Finance, Marketing and HR. Each student is required to take any two specialisation, thus follows system of dual specialisation. Students are required to undergo a summer training of 6-8 weeks in industrial/services organisations.

Ph.D programme in Management was introduced from academic session 2011-12 with an intake of five students which has been increased to 8 from academic year 2014-15. After completion of admission process, students are required to complete course work of one semester. After successful completion of course work, student has to defend his/her research topic in the Board of Studies and proposed research supervisors are allotted.

#### **Programme Offered**

- 1. Master of Business Administration (MBA)
- 2. PhD in Management Studies

#### **Programme Outcome**

MBA programme is meant for preparing the students to serve corporate world. MBA pass out are expected to know and understand the general functioning of a typical business organisation. He/she is expected to deal with any business situation which may be a potential opportunity or threat for the business organisation. These are treated as the niche functional areas of management. Student is also expected to be specifically maintaining a high standard in solving the discipline related problems in Marketing, HR, and Finance.

M.B.A. pass out students are expected to become entrepreneur to explore business opportunities. Our budding managers are not only meant to serve business organisations for profit rather they are expected to serve not for profit organisations as well.

#### **Number of Seats**

- 1. Master of Business Administration (MBA)- Two Year Full Time: 30
- 2. PhD in Management Studies: 8

# **Scheme of the Programme**

#### **Semester-I**

S.No.	Course code	Course title	L	T	P	Credit
1.	SLM MGT 01 101 C 3104	Management Process and Organizational Behaviour	3	1	0	4
2.	SLM MGT 01 102 C 3104	Managerial Economics	3	1	0	4
3.	SLM MGT 01 103 C 3104	Financial and Management Accounting	3	1	0	4
4.	SLM MGT 01 104 C 3104	Business Statistics and Research Methods	3	1	0	4
5.	To be taken from other department					4
	Offered to Other Departments					
1.	SLM MGT 01 101 GEC 3104	Business Communication	3	1	0	4
2	SLM MGT 01 102 GEC 3104	Business Environment	3	1	0	4

# Semester-II

S.No.	Course Code	Course Title	L	T	P	Credit	
1.	SLM MGT 01 201 C 3104	Operations Research	3	1	0	4	
2.	SLM MGT 01 202 C 3104	Marketing Management	3	1	0	4	
3.	SLM MGT 01 203 C 3104	Financial Management	3	1	0	4	
4.	SLM MGT 01 204 C 3104	Human Resource Management	3	1	0	4	
	Offered to Other Departments (This course is compulsory for the students of Department of Management Studies)						
5.	SLM MGT 01 201GEC 2002	Legal Aspect of Business	3	1	0	4	
	Offered as Elective course to students of Department of Management Studies (students of Department of Management Studies will opt one elective course from other departments)						
1.	SLM MGT 01 201DCEC 3104	Production and Operation Management	3	1	0	4	
2.	SLM MGT 01 202DCEC 3104	International Business	3	1	0	4	

# Semester-III

S No	No Course Code Course Name				P	Credit	
		Compulsory Course					
1.	1. SLM MGT 01 301 C 2204 Seminar Paper (STP)		2	2	0	4	
	Student h	as to opt three core from the following					
2.	SLM MGT 01 302 C 3104	Consumer Behavior		1	0	4	
3.	SLM MGT 01 303 C 3104	Marketing Research	3	1	0	4	
4.	4. SLM MGT 01 304 C 3104 Security Analysis and Portfolio Management		3	1	0	4	
5.	5. SLM MGT 01 305 C 3104 Management of Financial Services				0	4	
	Two course from following DCEC should be chosen from different streams						

S No	Course Code	Course Name	L	T	P	Credit
6.	SLM MGT 01 301DCEC 2002	Marketing of Services	2	0	0	2
7.	SLM MGT 01 302DCEC 2002	Retail Marketing	2	0	0	2
8	SLM MGT 01 303DCEC 2002	Rural Marketing	2	0	0	2
9.	SLM MGT 01 304DCEC 2002	Banking and Insurance	2	0	0	2
10.	SLM MGT 01 305DCEC 2002	Corporate Governance	2	0	0	2
11.	SLM MGT 01 306DCEC 2002	Financial Reporting	2	0	0	2
12.	To be taken from other department	nt (Compulsory)				4
	Offered to Other Departments					
1.	SLM MGT 01 301GEC 2044	Personal Selling and Salesmanship	2	0	4	4

# **Group II: Finance & Human Resource Management**

S.No.	Course Code	Course Name	L	Т	P	Credit
		Compulsory Course				•
1.	SLM MGT 01 301 C 2204	Seminar Paper (STP)	2	2	0	4
	Student h	as to opt three core courses from the fol	lowing	'		
2.	SLM MGT 01 304 C 3104	3	1	0	4	
3.	SLM MGT 01 305 C 3104	Management of Financial Services	3	1	0	4
4.	SLM MGT 01 306 C 3104	Industrial Relations and Labor Laws	3	1	0	4
5.	SLM MGT 01 307 C 3104	Negotiation and Conflict Management	3	1	0	4
	Two courses from follow	wing DCEC should be chosen from diffe	rent st	ream	S	
6.	SLM MGT 01 304DCEC 2002	Banking and Insurance	2	0	0	2
7.	SLM MGT 01 305DCEC 2002	Corporate Governance	2	0	0	2
8.	SLM MGT 01 306DCEC 2002	Financial Reporting	2	0	0	2
9.	SLM MGT 01 307DCEC 2002	Performance and Talent Management	2	0	0	2
10.	SLM MGT 01 308DCEC 2002	Leadership in Organization	2	0	0	2
11.	SLM MGT 01 309DCEC 2002	Selection, Training and Development	2	0	0	2
12.	To be taken from other departme	nt (Compulsory)				4
		Offered to Other Departments				
1.	SLM MGT 01 301GEC 2044	Personal Selling and Salesmanship	2	0	4	4

# **Group III: Human Resource Management & Marketing**

S.No.	Course Code	Course Name	L	T	P	Credit
	Compulsory Course					
1. SLM MGT 01 301C 2204		Seminar Paper (STP)	2	2	0	4

	Student has to opt three core courses from the fo			g		
1.	SLM MGT 01 306 C 3104 Industrial Relations and Labor Laws				0	4
2.	SLM MGT 01 307 C 3104	Negotiation and Conflict Management	3	1	0	4
4.	SLM MGT 01 302C 3104	Consumer Behaviour	3	1	0	4
5.	SLM MGT 01 303C 3104	Marketing Research	3	1	0	4
	Two courses from following DCEC should be chosen from different streams					
6.	SLM MGT 01 307DCEC 2002	Performance and Talent Management	2	0	0	2
7.	SLM MGT 01 308DCEC 2002	Leader ship in Organization	2	0	0	2
8.	SLM MGT 01 309DCEC 2002	Selection, Training and Development	2	0	0	2
8.	SLM MGT 01 301DCEC 2002	Marketing of Services	2	0	0	2
9.	SLM MGT 01 302DCEC 2002	Retail Marketing	2	0	0	2
10.	SLM MGT 01 303DCEC 2002	Rural Marketing	2	0	0	2
	Offered to Other Departments					
1.	SLM MGT 01 301GEC 2044	Personal Selling and Salesmanship 2		0	4	4

# **Semester-IV**

# **Group I: Marketing & Finance**

Compul	ulsory Course							
S. No.	Course Code	Course Name	L	Т	D	Credit		
1.	SLM MGT 01 401 C 66012	Research Project	6	6	0	12		
	Core Courses (al	L	T	P	Credit			
2.	SLM MGT 01 402 C 3104	Customer Relationship Management	3	1	0	4		
3.	SLM MGT 01 403 C 3104	Integrated Marketing Communication	3	1	0	4		
4.	SLM MGT 01 404 C 3104	Financial Derivatives	3	1	0	4		
5.	SLM MGT 01 405 C 3104 Merger and Acquisition		3	1	0	4		
	Compulsory Skill Development Elective Course							
1	SLM MGT 01 401SEEC 3100	Entrepreneurship Development	0	0	0	0		
		Offered to other department						
1.	SLM MGT 01 401 GEC 0244	Interpersonal Skills	0	2	4	4		
-	ipline Centric elective course (Compulsory) –One course to be opted from the Specialization are in which one course was opted in third semester							
1.	SLM MGT 01 401DCEC 2002 International Marketing			0	0	2		
2.	SLM MGT 01 402DCEC 2002	OCEC 2002 International Financial Management		0	0	2		
3.	SLM MGT 01 403DCEC 2002	2	0	0	2			

Group II: Finance & Human Resource Management Compulsory Course

S. No.	Course Code	Course Name	L	T	D	Credit
1.	SLM MGT 01 401 C 66012	Research Project	6	6	0	12
	Core Courses (all four to be opted)				P	Credit
2.	SLM MGT 01 404 C 3104	Financial Derivatives	3	1	0	4
3.	SLM MGT 01 405 C 3104	Merger and Acquisition	3	1	0	4
4.	SLM MGT 01 406 C 3104	Compensation Management	3	1	0	4
5.	SLM MGT 01 407 C 3104	Strategic Human Resource Management		1	0	4
Compulsory Skill Development Elective Course						
6.	SLM MGT 01 401SEEC 3100	Entrepreneurship Development	0	0	0	0
		Offered to other department				
1.	SLM MGT 01 401 GEC 0244	Interpersonal Skills	0	2	4	4
Discipline Centric elective course (Compulsory) –One course to be opted from the Specialization are in which one core course was opted in third semester						n which
1.	I. SLM MGT 01 401DCEC 2002 International Marketing			0	0	2
2.	SLM MGT 01 402DCEC 2002	International Financial Management	2	0	0	2
3.	SLM MGT 01 403DCEC 2002	Cross Cultural Management	2	0	0	2

Group III: Human Resource Management & Marketing

Compu	Compulsory Course						
S. No	o Course Code Course Name			T	D	Credit	
1.	SLM MGT 01 401 C 66012	Research Project	6	6	0	12	
	Cor	re Courses (all four to be opted)					
2.	SLM MGT 01 406 C 3104	Compensation Management	3	1	0	4	
3.	SLM MGT 01 407 C 3104	Strategic Human Resource Management	3	1	0	4	
4.	. SLM MGT 01 402 C 3104 Customer Relationship Management			1	0	4	
5.	5. SLM MGT 01 403 C 3104 Integrated Marketing Communication				0	4	
	Compulsory Skill Development Elective Course						
6.	SLM MGT 01 401SEEC 3100	Entrepreneurship Development	0	0	0	0	
		Offered to other department					
1.	SLM MGT 01 401 GEC 0244	Interpersonal Skills	0	2	4	4	
	Discipline Centric elective course (Compulsory) –One course to be opted from the Specialization are in which one						
core cou	e course was opted in third semester						
1.	1. SLM MGT 01 401DCEC 2002 International Marketing		2	0	0	2	
2.	SLM MGT 01 402DCEC 2002	International Financial Management		0	0	2	
3.	SLM MGT 01 403DCEC 2002	Cross Cultural Management	2	0	0	2	

#### **Admission Criteria and Procedure**

#### **Master of Business Administration:**

A student who has cleared Bachelor's degree in any discipline from a recognized Indian or foreign university (foreign recognition to be as per AIU list) with at least 50% marks aggregate or equivalent grade can apply for admission.

A student willing to take admission in Central University of Haryana has to appear for Central Universities' Common Entrance Test (CUCET). CUCET is conducted jointly by nine Central Universities, namely, Central University of Haryana, Central University of Jammu, Central University of Jharkhand, Central University of Kashmir, Central University of Karnataka, Central University of Kerala, Central University of Punjab, Central University of Rajasthan and Central University of Tamil Nadu. This test is conducted for the students of 10+2, Bachelor Degree holders and Master Degree holders to obtain admission to the UG / Integrated Programme, Post-Graduate Programme and the Research Programme respectively in these nine Central Universities.

All the Students are required to register themselves online on the University website after declaration of results of CUCET to appear for the Counselling. The students whose name figures in the merit list as displayed on the University website and Notice-Boards are required to present themselves with all relevant documents in original at the time of Counselling. Students whose name appear in merit list are offered admission.

#### Ph.D.

A candidate shall be eligible for admission to the Ph.D. programme, if he/she has qualified Master's Degree in the subject concerned/allied/cognate subjects with at least 55% marks in aggregate. The candidates shall appear for a written test conducted by the University to be followed by an interview to be conducted by the concerned Department, which shall carry weightage of 80% and 20% respectively. The candidates who have qualified UGC/CSIR/JRF/NET/SLET or are Teacher Fellowship holders or have passed M. Phil programme with course work recognized by the U.G.C. as per UGC Regulations (Minimum Standards and Procedure for award of M.Phil. /Ph.D. Degree, 2009) shall be exempted from appearing for the written test. Such applicants will, however, be required to appear for the personal interview. In case of the candidates exempted from the written test, the interview shall carry 100% weightage.

# **Brief Faculty Profile**

#### 1. Dr. Anand Sharma, Head of the Department

Designation: Associate Professor

Qualification: MBA, PhD

Specialization: Finance and Accounting Experience: 17 years Teaching Experience



Dr Anand Sharma is presently Associate Professor and Head of Department of Management Studies. Prior to joining Central University of Haryana, he served Bharti Vidyapeeth University Pune as associate professor and programme head (MBA). Dr Sharma is post graduate in Business Administration with specialization in Finance and Accounting. He accrued his doctorate in Application of Risk Management with special reference to Derivative Trading. His area of interest includes financial and management accounting, financial management, financial derivative and risk management. He has written more than thirty papers/ chapters in various journals and edited books. He has presented papers in various national and international conferences/ seminars and workshops. He has delivered various invited lectures and chaired technical sessions in conferences and seminars. Apart from his teaching assignments, he has successfully undertaken various administrative assignments, such as OSD Examination, Warden Boys Hostel, Nodal officer AISHE etc. Dr Sharma has been associated with GGSIPU, Delhi and The institute of chartered financial analyst of India as guest faculty for executive MBA Programme. He has been associated with television and radio programs as subject expert for National Institute of Open Schooling. He has more than 17 years of teaching experience.

#### 2. Dr. Sunita Tanwar

Designation: Assistant Professor

Qualification: B.Sc. (Computer Sc.), MBA, NET, Ph.D.

Specialization: HR/Marketing

Experience: 12 years



Dr. Sunita Tanwar is an expert in the field of Organisation Behaviour, Human Resource Management and Entrepreneurship having 12 years of extensive teaching and research experience. She is presently working as an Assistant Professor in Department of Management Studies. She had supervised 6 PhD and 1 M.Phil thesis. Dr. Tanwar has published three books and edited two books on research methodology. She is on the advisory and editorial board of number of National and International Journals. Dr. Tanwar has more than 27 publications in the National and International Journals of repute. She has chaired the technical sessions of International Conference and National Seminar. She has supervised more than 200 Research Projects of MBA students. She has got a corporate teaching experience in organisations like Kean India, Errickson Gurgaon. Dr. Sunita is a certified Entrepreneurship educator from National Entrepreneurship Network in association with DST, NSTEDB and Wadhwani Foundation. She is certified in Essentials of Entrepreneurship: Thinking and Learning from University of California, Irvine and Completed an online course on Understanding Research Methodology from University of London & SOAS.

#### 3. Dr. Ajai Pal Sharma

Designation: Assistant Professor Qualification: MBA, PhD

Specialization: Marketing and HRM

Experience: 09 Years



Dr. Ajai Pal Sharma, is Assistant Professor in the Department of Management Studies. He holds M.Phil and Ph.D degrees along with PG degree in Management with specialization in Marketing and HR. He has also qualified UGC-NET in Management as well as in Public Administration. He has more than twenty eight years of experience including more than eight years exclusively in academics in addition to 20 years with Indian Air Force. He is an active professional individual member of AIMA and has more than twenty eight research articles to his credit in journals of national and international repute. He has organized, participated and contributed a number of research papers in various national and international conferences, workshops and seminars. He has also supervised more than fifty management students for writing their research projects. Presently he is supervising five PhD scholars and one has already been awarded PhD degree under his guidance. He is also working on a Major Research Project awarded by ICSSR with a grant-in-aid of Rs 9 Lakhs.

#### 4. Ms. Divya

Designation: Assistant Professor Qualification: MBA; Ph.D. (pursuing)

Specialization: HR/Marketing

Experience: 1.5 Year (Corporate), 3 Years (Teaching)



Ms. Divya, Assistant professor in Department of Management Studies is having Experience of 1.5 years of Corporate and 3 years in Teaching. She is an MBA, Associate in Life Insurance from Insurance Institute of India, Mumbai and pursuing Ph.D. from Delhi School of Management, Delhi Technological University, Delhi. She joined Central University of Haryana in December 2013. Her area of specialisation is HR/ Marketing, additional to this she is given the charge of Training and Placement Coordinator of the Department. Recently she has undergone for 2 weeks training named UKIERI HE Leadership Development Programme which was organised by MHRD & Britsih Council, UK. Other than this she has attended 4 Workshops in various Academic Institutions of the Country and 1 Short Term Course on the ICT uses in Education from University of Kashmir, Kashmir. For the professional development, she has completed orientation course in 2014 from Central University of Hyderabad. In 3 Years of Academic Experience, she has published 6 Research papers in Refereed journals.

### 5. Dr. Ajay Kumar

Designation: Assistant Professor

Qualification: MBA, PhD Specialization: Marketing

Experience: 2 Years (Corporate), 6 Years (Teaching)



Dr Ajay Kumar is MBA and PhD in Marketing. He started his career as Executive - Marketing Communication during his stint with corporate in marketing domain. Subsequently, he started his teaching assignment in 2010. Since 2010, he has been talking and discussing with students matters relating to Marketing, Consumer Behavior, Brand Management, Research Methodology & Marketing Research. During his teaching career, he has taught in J K Business School, Gurgaon; NIIT University, Neemrana; and Central University of Himachal Pradesh, Dharamshala. Currently, he is serving in Central University of Haryana as Assistant Professor in Department of Management Studies. As a result of his keen interest in research, his research work has been accepted for presentation in Indian Institute of Management, Ahmedabad (IIM – A); Indian Institute of Management, Calcutta (IIM – C); Indian Institute of Management, Lucknow (IIM – L) and Indian Institute of Management, Indore (IIM – I) among many others. He have several research papers to his credit in journals of repute being published by prestigious publishers including Palgrave, Springer. His research interest includes Marketing, Consumer Behavior, Brand Management, and Research Methodology & Marketing Research.

#### **Departmental Infrastructure**

Department of Management studies has shifted in its permanent state of the art building. The department is having air conditioned classrooms, faculty rooms, scholar room and seminar hall. Research scholars are provided with computer, printer and scanner facility.

# Research Thrust Area (Details of Research Scholars and Areas of interest)

# **PhD Scholars (2011-12)**

Sr No	Roll No	Name	Research Supervisor	Торіс
1	1376	Bajrang	Dr Anand Sharma	A Study of Financial Inclusion among Rural Household in Rural Haryana
2	1377	Suyesh Mishra	Dr Sunita Tanwar	E Banking in Public and Private Sector Banks in India: An Analogy
3	1380	Ravinder Kaur	Dr Ajai Pal Sharma	Price Behavior of Selected Sensex Stocks: Fundamental and Technical Analysis

# **PhD Scholars (2012-13)**

Name	Roll No	Name	Research Supervisor	Торіс
1	1701	Rajesh Kumar	Dr A P Sharma	A comparative study of service quality among banks in India
2	1702	Arun Yadav	Dr Sunita Tanwar	A study of perception of FDI in multi brand retail in India
3	1703	Irfan Khan	Dr Sunita Tanwar	A study of impact of Islamic Finance on valuation of companies in India
4	1704	Sarvendu Tiwari	Dr A P Sharma	A study of Impact of mutual fund on Indian Capital Market

# **PhD Scholars (2014-15)**

Sr. No	Roll No	Name	Research Supervisor	Торіс
1	5041	Arun Yadav	Dr A P Sharma Investigation of Problems and Prospects of Mobil Broadband Services in Mass adoption: A Case Stu South Haryana	
2	5042	Bhagat Singh	Dr Sunita Tanwar	Competitive Intelligence and Development Strategy of Indian Higher Education Sector
3	5043	Geeta Rani	Dr A P Sharma	Impact of Social marketing Initiatives on Female Feticide: A Case Study of Selected Districts of Haryana
4	5044	Jayant	Dr Sunita Tanwar	Impact of Financial Derivative on Indian Stock Market
5	5045	Priya	Dr Sunita Tanwar	Impact of Micro Financing Initiatives of SHGs on Women Empowerment: A Study of Selected Districts of Haryana
6	5046	Purnima Singh	Dr A P Sharma	Shifting Paradigm of Corporate Social Responsibility: An Analysis of Selected Organizations of Sonbhadra Region
7	5047	Sarita	Dr Sunita Tanwar	Investors Behavior towards Investment Pattern: A Study with Reference to Stock Market Investors in Haryana

# **PhD Scholars (2015-16)**

Sr No	Roll No	Name	Remarks
1		Nisha	Course work completed. Topic is yet to be finalized.

#### **Events Organised**

#### **Industrial Visits**

Department regularly organizes industrial visits for all batches to reputed industries to provide real corporate life exposure to the students of MBA programs. Some of the industries visited are as under:

- 1. Havells Industries, Neemrana 27<sup>th</sup> April 2011
- 2. Hotel Radisson Blu, Delhi 20th September 2011
- 3. Medicaman Biotech, Bhiwadi 20th September 2011
- 4. Havells Industries, Neemrana 27th April 2011
- 5. Parle G Industries, Neemrana 16<sup>th</sup> April 2014
- 6. Medicamen Biotech, Bhiwadi 1<sup>st</sup> November 2014
- 7. Hero Moto Corps, Dharuhera 1st November 2014
- 8. Parle G Industries, Neemrana 12<sup>th</sup> March 2016
- 9. Havells Industries, Neemrana 12th March 2016

#### **Invited Talks**

Sr. No.	Resource Person	Affiliation of Speaker	Dates
1	Dr Vinod Kumar	Khalsa College, Delhi University	13 <sup>th</sup> April 2016
2	Prof Sanjeev Kumar	SMS, GGSIPU, Delhi	16 <sup>th</sup> January 2015
3	Prof A K Garg	Fairleigh Dickinson University, Canada	8 <sup>th</sup> January 2015
4	Prof Naval Kishore	IGNOU, Delhi	3 <sup>rd</sup> December 2014
5	Prof C P Gupta	DFS, South Campus, DU	17 <sup>th</sup> September 2014
6	Prof G L Sharma	LBS Institute of Management	31st January 2012
7	Mr Jasmeet Singh	Financial Expert	28 <sup>th</sup> November 2011

#### **Highlights and Achievements**

- 1. Four GIAN (Global Initiatives for Academic Network) programs conducted by the department
- 2. Dr. Ajai Pal Sharma is awarded a grant of Rs. 9 (Nine) Lakh by ICSSR, New Delhi to carry out a Major Research Project (for two years) entitled "Impact of Panchayati Raj Institutions on Rural Transformation: A Study of Selected Districts of Haryana".
- 3. Dr. Bharti is pursuing Post-Doctoral Fellowship under the supervision of Dr. Ajai Pal Sharma being awarded by UGC under UGC scheme (Dr. S Radhakrishnan Post-Doctoral Fellowship in Humanities and Social Sciences)

#### Students placed in Government/Private Organizations

Sl. No.	Name of Student	Organizations where Placed	Designation
1	Renu Bala	Indian Army	Commissioned Officer (Lieutenant)
2	Ravinder Kaur	Central University of Haryana	Assistant Professor in Commerce
3	Suyash Mishra	Central University of Haryana	Assistant Professor in Retail Management (B. Voc.)
4	Bajrang	Central University of Haryana	Assistant Professor in Management (B. Tech)

Sl. No.	Name of Student	Organizations where Placed	Designation
5	Maheshwar	IOCL (Indian Oil Corporation Limited)	Marketing Officer
6	Prashant Kaushalya	Union Bank of India	Probationary Officer
7	Rohit Sharma	Punjab & Sindh Bank	Marketing Executive
8	Pritam Singh	RPS group of Institute, Balana, Mahendergarh	Asst. Professor
9	Lokesh Jindal	Sarv Haryana Gramin Bank Ltd	Bank P O
10	Mohit Gupta	Executive/Owner	Moothut Finance/ Own Business
11	Shovan	Honda Cars	Assistant Sales Manager
12	Shaym Sunder	PRBS College, Ateli	Asstt. Professor
13	Satish Kumar	PNB Metlife Insurance	Marketing Executive
14	Naveen Kumar	Halla Visteon Climate Systems India Pvt Ltd, Bhiwadi	Finance Executive
15	Ankit Arora	Own Business – Advertising agency and garments	Owner/ Partner
16	Ritesh Sharma	SMS India, Noida	Marketing Executive
17	Hitlal	Hindustan Rubber Industries, Gurgaon	Finance Executive
18	Jagpravesh	HDFC ERGO, Ludhiana	Sales Officer
19	Hukam Singh	Nippun Steel, Nimrana	Marketing Executive
20	Keshav Kumar	HDFC Bank	Executive
21	Surbhi Bhargava	Yamaha Motors	Finance Executive
22	Arvind	CONCORP	Management Trainee
23	Surender	Omaxe Ltd	Executive
24	Chirag Malik	V-Konnect Associates	Management Trainee

#### Research Projects, MOU, Consultancy, Awards, Collaborations, Academic Projects

- 1. Awarded a grant of Rs. 9 (Nine) Lakh by ICSSR, New Delhi to carry out a Major Research Project (for two years) entitled "Impact of Panchayati Raj Institutions on Rural Transformation: A Study of Selected Districts of Haryana".
- 2. Dr. Bharti is pursuing Post-Doctoral Fellowship under the supervision of Dr. Ajai Pal Sharma awarded by UGC under UGC scheme (Dr. S Radhakrishnan Post-Doctoral Fellowship in Humanities and Social Sciences)
- 3. MOU with NCUI, New Delhi
- 4. Association with BSE and SEBI for investors awareness programs
- 5. Association with National Entrepreneurship Network

#### **Future Roadmap**

- 1. Centre for Corporate training through tailor made short term MDPs/ EDPs
- 2. Centre for research in co-operatives management and entrepreneurship.
- 3. Department is planning to set up investors consultancy centre for financial inclusion.
- 4. Centre for Small Business Development, Marketing and Brand research.

# **Department of Commerce**

The Department of Commerce came into existence in the year 2011, under the School of Law, Governance, Public Policy, and Management. It offers M.Com. programme. The Department initially had 10 seats. Keeping in view the increasing demand and popularity of the subject, the number of seats was increased to 20 in 2014–15, which was further increased to 30 in 2015-16. So far, 4 batches of students have completed their M.Com. programme from the Department.

#### **Programs Offered and Number of Seats**

The Department is offering the M.Com. programme, with 30 intake, two-year (four-semester) full-time programme.

#### **Programme Outcome**

Programme outcome describe what the students are able to do after completing the programme. Learning outcomes of the M.Com. programme are as follows:

- 1. Awareness about all the functional areas of the business and complexities of the business environment
- 2. Work effectively, individually as well as in a team, in real business situation.
- 3. Demonstrate an ability to start business.
- 4. Ability to identify and evaluate different source of information for managerial decision making.
- 5. Consideration for ethical issues while taking any business decision.
- 6. Employment in different areas like Accounting, Banking, Finance, Marketing and HRM.
- 7. Ability to conduct research in different areas of management and business.

# Scheme of the M.Com. Programme Semester I

S.No.	Course Code	Course Title	L	Т	P	Credit
1.	SLM COM 1 1 01 C 4105	Managerial Economics	4	1	0	5
2.	SLM COM 1 1 02 C 4105	Management Accounting	4	1	0	5
3.	SLM COM 1 1 03 C 4105	Business Environment	4	1	0	5
4.	SLM COM 1 1 04 C 4105	Statistical Analysis	4	1	0	5
5.		To be taken from other department	4	1	0	5

#### Semester II

S.No.	Course Code	Course Title	L	T	P	Credit
1.	SLM COM 1 2 05 C 4105	Financial Management	4	1	0	5
2.	SLM COM 1 2 06 C 4105	Human Resource Management	4	1	0	5
3.	SLM COM 1 2 07 C 4105	Marketing Management	4	1	0	5
4.	SLM COM 1 2 08 C 4105	Organisational Behaviour	4	1	0	5
5.	SLM COM 1 2 03 GE 2002	Operations Research (compulsory)	2	0	0	2

S.No.	Course Code	Course Title	L	T	P	Credit
6.	Any One of the following three	e courses	4	1	0	5
	SLM COM 1 2 01 DCEC 4105	Industrial Relations and labour laws				
	SLM COM 1 2 02 DCEC 4105	Consumer Behaviour				
	SLM COM 1 2 03 DCEC 4105	Financial Markets, Institutions and Services				

#### **Semester III**

S.No.	Course Code	Course Title	L	T	P	Credit
1.	SLM COM 1 3 09 C 4105	International Business	4	1	0	5
2.	SLM COM 1 3 10 C 4105	Business Research Methods	4	1	0	5
3.	SLM COM 1 3 11 C 4105	E-Commerce	4	1	0	5
4.	SLM COM 1 3 04 DCEC 0202	Seminar Paper(Compulsory)	0	2	0	2
5.		To be taken from other department	4	1	0	5
6.		Any One of the following three courses	4	1	0	5
	SLM COM 1 3 05 DCEC 4105	Working Capital Management				
	SLM COM 1 3 06 DCEC 4105	Services Marketing				
	SLM COM 1 3 07 DCEC 4105	Selection, Training & Development of Human Resource				

#### **Semester IV**

S. No.	Course Code	Course Title	L	T	(D)	Credit
1.	SLM COM 1 4 12 C 4105	Business Policy and strategic Management	4	1	0	5
2.	SLM COM 1 4 13 C 4105	Corporate Governance and social responsibility	4	1	0	5
4.	SLM COM 1 4 15 C 4105	Securities Analysis & Portfolio Management	4	1	0	5
5.	SLM COM 1 4 16 C 04610	Project Report	0	4	6	10

List of Generic Elective Course (GEC) offered by the department to students of other departments.

S.No.	Course Code	Course Title	L	T	P	Credit
		Offered in Semester I				
1.	SLM COM 11 01 GE 3104	Fundamentals of Investment	3	1	0	4
2.	SLM COM 11 02 GE 3104	Consumer Protection	3	1	0	4
		Offered in Semester III				
3.	SLM COM 13 04 GE 3104	Entrepreneurship Development	3	1	0	4
4.	SLM COM 13 05 GE 3104	Income Tax law & Practice	3	1	0	4
5.	SLM COM 13 06 GE 3104	Negotiation and Conflict Management	3	1	0	4

#### **Admission Criteria and Procedure**

Admissions to M.Com. programme are made through CUCET (Central Universities Common Entrance Test).

#### **Essential qualifications required**

A candidate seeking admission to M.Com. Programme must have:

1. Passed B.Com. (Hons.) degrees from a recognized Indian or foreign university (foreign recognition to be as per AIU list) with at least 50% marks or equivalent grade

Or

2. Passed B.Com. (Pass) or B.Com. Degree from a recognized Indian or foreign university (foreign recognition to be as per AIU list), with at least 55% marks or equivalent grade.

()r

3. Passed B.A. (Hons.) economics degree from a recognized Indian or foreign university (foreign recognition to be as per AIU list), with at least 50% marks or equivalent grade.

Or

4. Passed B.B.S., B.B.A., B.I.F.A. or B.B.E. degree from a recognized Indian or foreign university (foreign recognition to be as per AIU list), with at least 60% marks or equivalent grade.

**Note:** 5% relaxation in aggregate of marks for SC/ST candidates.

#### **Brief FacultyProfile**

#### 1. Dr. Suman, Incharge of the Department

**Qualification** : Ph.D. **Experience** : 8 Years

**Research Area/ Interest**: Finance and Human Resource Management

**Publication** : 08 Research papers

#### **Membership Details**

- 1. Member, Academic Council, Central University of Haryana, Mahendergarh.
- 2. Member, Board of Studies of the Commerce Department, Central University of Haryana, Mahendergarh.
- 3. Member, Internal Quality Assurance Cell (IQAC), Central University of Haryana, Mahendergarh.
- 4. Former Member, Admission committee, Central University of Haryana, Mahendergarh.
- 5. Member, Group for the Promotion of Art, Culture and Heritage, Central University of Haryana, Mahendergarh.

#### **Important Post Held**

- 1. Incharge Department of Commerce, Central University of Haryana, since January, 2014.
- 2. Incharge Department of Mathematics, Central University of Haryana, from April 22, 2015 to August 8, 2015.
- 3. Incharge Department of Statistics, Central University of Haryana, from April 22, 2015 to August 8, 2015.

#### 2. Dr. Ravinder Kaur

Qualification:Ph.D., M.Com, NET & JRF in Commerce, NET & JRFExperience:3 years & 02 months (regular), 07 months (contractual)

**Research Area/ Interest**: Finance and Marketing **Publication**: 10 Research papers

#### Membership of academic & research bodies

- 1. Member, Group for the Promotion of Art, Culture and Heritage, CUH.
- 2. Member, Advisory Committee for Career, Counselling, Training and Placement Cell, CUH
- 3. Member, Standing Committee (Admissions) for 2016-17, CUH.
- 4. Member, Centre for Community Development and UBA, CUH.
- 5. Member, Discipline Committee, CUH.

#### **Awards**

1. S.R.F. – U.G.C. in Management

#### 3. Mr. Sachin

**Qualification** : M.Com, MBA, UGC-JRF and NET

**Experience** : 5 + years

**Research Area/ Interest**: Accounting and Finance

#### Membership of Academic & Research Bodies

- 1. Life Member, Indian Accounting Association
- 2. Life Member, Indian Commerce Association

#### **Administrative Responsibilities**

- 1. Convener, SC/ST Cell of Central University of Haryana.
- 2. Liaison Officer of Central University of Haryana.
- 3. Former Officer-in-charge, Boys Hostel Mess of CUH.
- 4. Former Member, Examination (Review and Reform) Committee of CUH.
- Former Member, Committee to frame University Rules/Guidelines for charging/exemption of Admission, hostel and other kind of fees from students belonging to SC/ST/OBC/Minority/ PWDs.
- 6. SC/ST Representative, Internal Complaint Committee for Prevention, Prohibition and Redressal of Sexual Harassment at CUH.

#### **Department Infrastructure**

Physical infrastructure and learning resources are adequate in the department which make the environment conducive for learning. The department has well furnished class rooms which are equipped with LCD projector and white board and 24\*7 Wi-Fi based internet facility, faculty rooms in state of the art new building.

#### **Research Thrust Areas**

Research programmes have been approved in the department and will be commenced from the next session (2017-18). As of now, Dissertation is mandatory for the Students of the M.Com (IV Sem) programme and they have been showing their interest in the following areas.

- 1. Finance
- 2. Accounting
- 3. Human Resource Management
- 4. Marketing

#### **Events Organised**

During the last three years following activities were organised in the Department:

- 1. Extension lecture was organized on the topic "Legal Aspects of Advertising in India" by Prof. D.P.S. Verma, Former Professor, Department of Commerce, Delhi School of Economics, Delhi University.
- 2. Extension lecture was organized on the topic "Emerging Trends in E-Commerce" by Prof. Nasib Singh Gill, Department of Computer Science, MDU, Rohtak.
- 3. Extension lecture was organized on the topic "HRD in Organizations" by Dr. A. Ravichandran, Associate Professor., Satyawati College (Eve), Delhi University.
- 4. Extension lecture was organized on the topic "Financial Management Using Microsoft Excel", by Dr. Hem Chand Jain, Associate Professor., DDU College, Delhi University.
- 5. Extension lecture was organized on the topic "Recent Developments in Marketing Practices in India" by Prof. D.P.S. Verma, Former Professor Department of Commerce, Delhi School of Economics, Delhi University.
- 6. Celebration of Education Day by conducting Discussion sessions of students and poster making competition.
- 7. Organized Quiz Competition in the Department.
- 8. Discussion on Union Budget.
- 9. Group Discussion on the topic Education system in India, Reservation Policy, FDI and Child Labour etc.
- 10. Workshop Organized on the Topic 'Trading in Stock Market' in Collaboration with Management Dept and Economics Dept.
- 11. Industrial Visit at Parle Biscuits Pvt. Ltd. in Bahadurgarh, Haryana
- 12. Recently first Alumni meet was organized in the Department.

#### **Future Roadmap**

- 1. Organisation of Extension Lectures will be continued by inviting experts from different renowned universities and institutions.
- 2. Regular industrial visit of students will be organised to provide practical exposure of business houses and their workings to the students.
- 3. Conference/Seminar/Workshop will be organized on contemporary issues.
- 4. Research Programme to be commenced from the next session.



Prof. DPS Verma during the Lecture



Industrial visit at Parle Biscuits Pvt. Ltd. in Bahadurgarh (April 23, 2016

## **Department of Law**

The Department of Law, established in the year 2010, under School of Law, Governance, Public Policy and Management Studies. Department has been imparting legal education to the students and the needy as well.

#### **Programme Offered**

The Department of Law is presently running with its Master of Laws (LL.M.) programme—A two years full time programme consisting of four semesters (CBCS-based).

#### **Number of Seats**

LL.M.: 20

#### **Programme Outcome**

Education is a life-long learning process and can never be confined to a Paper-degree rather it should always be coupled with ethical and moral based education. To meet this end, LL.M Programme of Department of Law provides a very wide scope to its students. After having a research based Master Degree in the form of LL.M from the Department, there exists lots of avenues towards employability for the pass out students like: in teaching, judiciary, practising law, in research institutes, MNC's and Government Departments also prefer LL.M. passed legal advisors.

#### **Scheme of the Course**

#### Semester I

Sr. No.	Nomenclature of Course	Core/ Elective	Course Code	L	Т	P	Credits
1	Jurisprudence	Core	SLM LAW 01 101 C 4105	4	1	0	5 Credits
2	Indian Constitutional Law and Emerging Challenges	Core	SLM LAW 01 102 C 4105	4	1	0	5 Credits
3	Legal Education and Research Methodology	Core	SLM LAW 01 103 C 4105	4	1	0	5 Credits
4	Interpretation of Statutes	Elective	SLM LAW 01 101 E 4105	4	1	0	5 Credits
5	Intellectual Property Rights	Generic Elective	SLM LAW 01 102 E 4105	4	1	0	5 Credits
6	As provided by other Departments:-	Elective					

#### Semester II

Sr. No.	Nomenclature of Course	Core/ Elective	Course Code	L	T	P	Credits
1	Judicial Process	Core	SLM LAW 01 201 C 4105	4	1	0	5 Credits
2	Constitutional Law (Comparative)	Core	SLM LAW 01 202 C 4105	4	1	0	5 Credits

Sr. No.	Nomenclature of Course	Core/ Elective	Course Code	L	T	P	Credits
3	Law and Social Transformation	Core	SLM LAW 01 203 C 4105	4	1	0	5 Credits
4.	Family law	Elective	SLM LAW 01 201 E 4105	4	1	0	5 Credits
5	Law relating to Cyber Crimes	Generic Elective	SLM LAW 01 202 E 4105	4	1	0	5 Credits
6	As provided by other Departments:-	Elective					

#### Semester III

Sr. No.	Nomenclature of Course	Core/ Elective	Course Code	L	Т	P	Credits
1	General Principles of Criminal Law	Core	SLM LAW 01 301 C 4105	4	1	0	5 Credits
	Specializa	ation: Consti	tutional Law and Human F	Rights			
2	Constitutionalism: Power of Judicial Review	Elective	SLM LAW 01 301 E 4105	4	1	0	5 Credits
3	Mass Media and Constitutional Democracy	Elective	SLM LAW 01 302 E 4105	4	1	0	5 Credits
4	International Law of Human Rights	Elective	SLM LAW 01 303 E 4105	4	1	0	5 Credits
5	5 As provided by other Departments:-						

NOTE: The topic for the Dissertation with the supervisor will be assigned in the beginning of the 3rd Semester by the Department of Law and the students are required to submit their dissertation work by the end of the 4th Semester.

#### **Semester IV**

Sr. No.	Nomenclature of Course	Core/ Elective	Course Code	L	Т	P	Credits	
1	Dissertation	Core	SLM LAW 01 401 C 003015	0	0	30	15	
	Specialization: Constitutional Law & Human Rights							
2	Human Rights: Constitution of India	Elective	SLM LAW 01 401 E 4105	4	1	0	5 Credits	
3	International Humanitarian Law & Refugee Law	Elective	SLM LAW 01 402 E 4105	4	1	0	5 Credits	
4	International Environmental Law & Sustainable Development	Elective	SLM LAW 01 403 E 4105	4	1	0	5 Credits	

#### **Admission Criteria and Procedure**

Students are being admitted to LL.M programme of the Department of law through a National Level Central Universities Common Entrance Test (CUCET).

#### Minimum Eligibility for admission in LL.M Programme

Candidates having three years / five years LL.B Degree from a recognized Indian or foreign university (As per AIU list) with at least 50% marks or equivalent grade in aggregate.

#### **Brief Faculty Profile**

#### 1. Dr. Pardeep Singh

**Qualification** : LL.M., Ph.D. (KUK), PG Dip. in ADR (ILI, New Delhi)

**Experience** : 6 Years

**Research Area/Interest**: Constitutional Law, Jurisprudence and ADR

#### Membership of Academic Bodies and Important Post Held

1. Teacher-in-Charge, Department of Law, CUH

- 2. Teacher-in-Charge, Department of Environmental Science, CUH, April 22, 2015- August 8, 2015.
- 3. In-Charge, Legal Section, CUH
- 4. Member, Academic Council of Central University of Haryana
- 5. Member, School Board of School of Law, Governance, Public Policy and Management Studies.
- 6. Member, Board of Studies, Department of Law, Central University of Haryana
- 7. Convenor, CUH Legal Aid Clinic.
- 8. Editor, *Journal of Central University of Haryana*—An International Multidisciplinary Refereed Research Journal
- 9. Member, Official Language Implementation Committee of CUH
- 10. Member, Library Committee, Central University of Haryana
- 11. Member, Centre for community Development, Central University of Haryana

#### 2. Dr. Anju

**Qualification** : LL.M., Ph.D. **Experience** : 4 Years

**Research Area/Interest**: Crimes and women, family Law & Corporate Law.

#### Membership of Academic Bodies and Important Post Held

- 1. Member, Editorial Board, Annual Report (2014-15), Central University of Haryana.
- 2. Warden, Girl's Hostel, Central University of Haryana.
- 3. Member, Innovation Club, Central University of Haryana
- 4. Member, Internal Complaints Committee (ICC) for Prevention, Prohibition & Redressal of Sexual Harassment of Women at Workplace
- 5. Member, Publication Division, Central University of Haryana for session (2015-16)
- 6. Coordinator, CUH Legal Aid Clinic, Central University of Haryana.

- 7. Member, Board of Studies, Department of Environment Science, Central University of Haryana
- 8. Member, Board of Studies, Department of Law, Central University of Haryana

#### 3. Dr. Samiksha Godara

**Qualification** : LL.M. (Criminal Law), UGC-NET, Ph.D. (Cyber Crime)

**Research Area/Interest**: Criminal Law, Cyber Law

#### Membership of Academic Bodies and Important Post Held

1. Discipline Committee – Member

- 2. Internal Quality Assurance Cell (IQAC)–Member
- 3. Board of Studies (Department of Education)–Member
- 4. Software Purchase Committee–Member
- 5. Hostel Guidelines Committee–Member
- 6. Intellectual Property Rights (IPR) Cell–Convenor/Coordinator
- 7. CUCET 2015 Coordination Committee–Member
- 8. Movie Club Legal Expert
- 9. New Education Policy (NEP) Discussion Committee Member
- 10. Internal Complaints Committee (ICC) for Prevention, Prohibition & Redressal of Sexual Harassment of Women at Workplace Member
- 11. Committee to discuss the Utility of Shops in the University Member

#### 4. Mr. Rakesh Meena

**Qualification** : M.A. in Sanskrit, LL.B, LL.M

**Experience** : 4 Years plus

**Research Area/Interest**: Human Rights, International Humanitarian Law

#### **Membership of Academic Bodies and Important Post Held**

- 1. Member SC-ST Cell
- 2. Member, Cell for the Persons with Disability

#### **Department Infrastructure**

Department has adequate infrastructure in its newly constructed Building. Presently, all the class rooms are Wi-Fi enabled. LCD projectors are being used in the class-rooms. Also, Department has its own online research database 'Manupatra' for legal research. Recently, the Department has set up its Moot Court for preparing the students for their overall development to succeed in today's competitive environment.

#### **Research Thrust Area**

Department's faculty has a wide variety of research interests. From the session 2014-16, the credits assigned to Dissertation has been increased from 6 to 15. Department is offering specialization in Constitutional Law and Human Rights to the students of LL.M Programme.

#### Research Projects, MOU, Consultancy, Awards, Collaborations, Academic Projects

1. Faculty of Department have applied for 5 Research Projects to various Funding Agencies/ Institutions like: UGC, National Institute of Rural Development and Panchayati Raj, Lok Sabha, NHRC etc.

2. Recently Department of Law has organised its first Alumni Meet—Retrace, on dated 7-10-2016.

#### **Event Organised**

- 1. National Seminar 'Inclusive Democracy: People, Power & Progress' in May, 2012.
- 2. Organisation of a Mega Lok Adalat in collaboration with HALSA & Punjab & Haryana High Court at District Court, Narnaul (Feb., 2012)
- 3. National Workshop on Right to Education (RTE) at transit campus, CUH, Gurgaon. 2012.
- 4. Month long academic celebration for creating and sharing knowledge featuring—Conference/symposia/Colloquium/Panel Discourse/institutional academic activities
- 5. Constitution Day Lecture by Prof. Nirmala Joshi, JNU, New Delhi on 26 Nov., 2011.
- 6. Constitution Day Lecture by Dilip C Mandal, Sr. Journalist, on 26 Nov., 2014
- 7. Human Rights Day Celebration by screening a speech of Malala Yousafzai which she delivered at UN. (10 December, 2014)
- 8. Constitution Day Lecture "Constitution of India: Contemporary challenges" by Prof. V K Agarwal, VC, Jagan Nath University, Jaipur on 26 Nov., 2015
- 9. Public Lecture on "Institution of Lokayukta—An Imperative for Good Governance" delivered by Justice Pritam Pal, Lokayukta, Haryana State, 23 September, 2015.
- 10. NHRC sponsored One Day National Training programme/Workshop on Human Rights on Dt. 12 April, 2016.
- 11. Department in association with Mahendergarh District Legal Services Authority organised one Day Seminar on "Democratization of Access to Justice for all through legal literacy" on Dt. 9-11-2016
- 12. Essay Writing Competition on the theme 'Indian Constitutional Democracy and Emerging Challenges' on the eve of Constitution Day on dt. 25-11-2016.
- 13. Legal Literacy Camps, Survey, Exhibitions, Skits/Nukkud Natak.



NHRC sponsored One Day Workshop/Training Programme on Human Rights at University held on dated 12 April, 2016.

Nukkad Natak being enacted by students of Law Department during Legal Literacy Camp organised on November 9, 2013.



# **SCHOOL OF CHEMICAL SCIENCES**

**Department of Chemistry** 

### SCHOOL OF CHEMICAL SCIENCES

#### • Department of Chemistry

#### **Department of Chemistry**

The Department of Chemistry started functioning in the academic year 2013. This relatively small Department consisted of three contract faculty and a DST Inspire faculty in its formative years (2013-2015). Remarkably, within three years of its formation, the Department was successful in attracting established researchers of high repute to join it. The Department has grown substantially since to include a full Professor, one Adjunct Professor, four Assistant Professors, one DST Inspire faculty, and one DST Young Scientist (Fast-track project) at present. The Department offers M.Sc. and Ph.D. programme in Chemistry. The intake for M.Sc. students is 30 per year and a total of 61 M.Sc. students are studying currently. The research activities of the Department initiated with the admission of three CSIR-JRF qualified Ph.D. scholars in 2016. The intake of M.Sc. students will be increased to 40 per year from 2017. Similarly admission of more Ph.D. scholars is expected to strengthen the Department in the immediate future. The Department is set to shift to its new Academic Complex building and is in the process of recruiting two Associate Professors. The research activities of the Department will be strengthened by recruiting independent researchers through prestigious national schemes such as the DST Inspire faculty fellowship and national post-doctoral fellowships. The Department is now in the process of building up research hardware facilities consisting of spectroscopy equipment, analytical and process equipment, and computational facilities. The Department hopes to become a centre of excellence for academic and industrial research in topics of current social relevance, such as development of technologies leading to sustainable chemicals, polymers, industrial materials, and fuel. Developing processes for "waste to wealth" will also be a major theme of our Department, particularly waste agricultural residues to valuable products.



Picture of students and faculty members of Chemistry Department with Hon'ble VC, Registrar and Chief Guest Professor V.S. Parmar, on formation of Chemical Society of CUH, March 31, 2016.

#### **Programmes Offered and Number of Seats**

M.Sc. (Chemistry) : 30 Seats (uptake increased to 40 seats from June 2017)
 Ph.D. (Chemistry) : As per the availability of research supervisors (3 ongoing)

#### Programme-wise Scheme of Syllabus and Examination

M.Sc. (Chemistry)

#### **SEMESTER-I**

Sr. No.	Course code	Course title	L	Т	P	Hrs/ week	Credits		
1.	SCS CH 1101 C 4004	Inorganic Chemistry-I 4 0 0		4	4				
2.	SCS CH 1102 C 4004	Organic Chemistry-I 4 0 0 4		4	4				
3.	SCS CH 1103 C 4004	Physical Chemistry-I 4 0 0		4	4				
4.	SCS CH 1104 C 0044	Chemistry Laboratory-I	0	0	4	8	4		
5.	Elective (GEC)	To be taken from other 4		0	0	4	4		
		Department							
	Total Credits								

#### **SEMESTER-II**

Sr.	Course code	Course title	L	T	P	Hrs/	Credits	
No.						week		
1.	SCS CH 1201 C 4004	Inorganic Chemistry-II	4	0	0	4	4	
2.	SCS CH 1202 C 4004	Organic Chemistry-II 4 0 0 4		4				
3.	SCS CH 1203 C 4004	Physical Chemistry-II	4	0	0	4	4	
4.	SCS CH 1204 C 0044	Chemistry Laboratory-II 0		0	4	8	4	
5.	SCS CH 1205 DCEC 4004	Sustainable and Green Chemistry (compulsory)	4	0 0 4		4		
6.	SCS CH 1206 DCEC 2002	seminar Paper (compulsory)	2	0	0	2	2	
7	Elective (GEC)	To be taken from other Department	4	0 0 4			4	
Total Credits 2								

#### **SEMESTER-III**

Sr. No.	Course code	Course title	L	Т	P	Hrs/ week	Credits	
1.	SCS CH 1309 C 4004	Applications of Spectroscopy	4	0	0	4	4	
2.	SCS CH 1310 C 5106	Specialization paper-III (Inorg./Org./ 5 1 0 6 Phy.)					6	
3.	SCS CH 1311 C 5106	Specialization paper-IV (Inorg./Org./ Phy.)	5	1 0 6		6		
4.	SCS CH 1304 DCEC 4004	Seminar Paper (compulsory)	4	4 0 0 4		4		
5.	GEC	To be taken from other Department	0	0	0	4	4	
6.		Any one of the following three courses						
	SCS CH 1301 DCEC 4004	Medicinal Chemistry	4	0	0	4	4	
	SCS CH 1302 DCEC 4004	Advanced Computational Chemistry	4 0 0 4		4	4		
	SCS CH 1303 DCEC 4004	Organic Chemistry of Polymers	4	0 0 4			4	
Total Credits 28								

#### **SEMESTER-IV**

Skill Enhancement Elective Course (Compulsory and exclusively for Chemistry students)

Sr. No.	Course code	Course title	L	T	P	Hrs/ week	Credits
1.	SCS CH 1401 DCEC 002424	Dissertation	0	0	30	30	24
					Tot	tal Credits	24

#### List of Generic Elective Course (GEC) offered by the Department to students of other Departments\*

S. No	Course code	Course title	L	Т	P	Hrs/ week	Credits			
	Offered in Semester I									
1.	SCS CH 1207 GE 4004	Environmental Friendly Processes for Sustainable Development	4	0	0	4	4			
	Offered in Semester II									
1.	SCS CH 1207 GE 4004	Basics of Medicinal Chemistry	4	0	0	4	4			
		Offered in Semester III								
1.	SCS CH 1304 GE 4004	General Polymer Chemistry	4	0	0	4	4			
2.	SCS CH 1305 GE 4004	Environmental Chemistry	0	0	4	4	4			
	Offered in Semester IV									
1.	SCS CH 1402 GE 4004	Chemistry of Materials	4	0	0	4	4			

L: Lectures; T: Tutorial; P: Practical: Credits; Total Credit Requirements: 96 to 104

#### Ph.D. (Chemistry)

No.	Course code	Course	Course title	Credits					
		type							
1	SCS CH 3101 C 6006	Core	Research Methodology, Quantitative methods	6					
			and Computer Applications for Chemistry						
Any one of the following									
2	SCS CH 3102 E 6006	Elective	Solid State and Supramolecular Chemistry	6					
3	SCS CH 3 103 E 6006	Elective	Advanced Computational Chemistry	6					
4	SCS CH 3 104 E 6006	Elective	Advanced Organic Synthesis	6					
5	SCS CH 3 105 E 6006	Elective	Sustainable and Green Chemistry	6					
6	SCS CH 3 106 E 6006	Elective	Medicinal Chemistry	6					
7	SCS CH 3 107 E 6006	Elective	Spectroscopic Techniques for Chemists	6					

#### **Admission Procedure and Criteria:**

#### M.Sc. (Chemistry)

All students admitted to M.Sc. program in Chemistry are selected on merit basis from amongst those who have appeared for CUCET and opted for CUH. Minimum eligibility conditions for admission to M.Sc. (Chemistry) programme are :

B.Sc. (Hons.) Chemistry from any recognized Indian or Foreign University (Foreign recognition to be as per AIU list) with 50% or above marks or equivalent grade in aggregate.

or

Graduation in any branch of Science or Engineering with Chemistry and Biology/Mathematics as two of the Subjects of study with 55% or above marks in aggregate. All the government rules, regulations and

norms pertaining to selection of all categories of citizens belonging to general, OBC, SC/ST, PwD, Defence quota, sports quota, etc. are followed strictly, and are as mentioned in the University Ordinance.

#### Ph.D. (Chemistry)

Admission to PhD course is based on CUCET and personal interview. Applicants who who have qualified UGC/CSIR/JRF/NET/SLET or holder of Teacher Fellowship or have passed M. Phil programme with course work recognized by the U.G.C. as per UGC Regulations (Minimum Standards and Procedure for award of M.Phil. /Ph.D. Degree, 2009) shall be exempted from appearing for CUCET.

#### **Brief Faculty Profile**

A brief profile of each faculty member is as follows:

#### 1. Dr. Anjanikumar J. Varma, Ph.D.

Professor & Head, Chemistry Department

Dean (School of Chemical Sciences)

Dean (Research & Academic Affairs)

Qualifications: Ph.D. Experience: 37 Years

Research Interest: Polymer Chemistry, Polysaccharides, Biorefineries

Email: anjanikumar@cuh.ac.in; aj.varma@yahoo.com

Mobile: +91-9527293268

**Research Areas:** Polymer Chemistry & Materials, Cellulose and Nanocellulose, Biomass Platforms and Renewable Materials Building Blocks, Biorefineries, Developing research methodology for sustainable products from Biomass by synergizing biotechnology and chemical methodologies

#### **Selected Publications: (Out of 72)**

- 1. S. Pal, S. Joy, P. Kumbhar, K. D. Trimuke, A. J. Varma and S. Padmanabhan, Effect of mixed acid catalysis on pretreatment and enzymatic digestibility of sugarcane bagasse, *Energy and Fuels*, **2016**, 30, 7310.
- 2. P.R. Sharma and A.J. Varma, Supramolecular transitions in native cellulose I during progressive oxidation reaction leading to quasi-spherical nanoparticles of 6-carboxycellulose, *Carbohydrate Polymers*, **2014**, 113, 615.
- 3. P. R. Sharma and A. J. Varma, Functional nanoparticles from cellulose: engineering the shape and size of 6-carboxycellulose, *Chem. Commun.* **2013**, 49, 8818.
- 4. R. Singh and A. J. Varma, Towards biodegradable elastomers: green synthesis of carbohydrate functionalized styrene-butadiene-styrene copolymer by click chemistry, *Green Chemistry*, **2012**, *14*, 348.

#### **Patents**

- 1. A. J. Varma, P. R. Sharma and D. Sarkar, Synthesis of nanostructured carboxycellulose from non-wood cellulose, (2014) WO 2014195971 A4 (22 Jan. 2015).
- 2. A. J. Varma, Process for fractionating sugarcane bagasse into high alpha-cellulose pulp, xylan and lignin, US Pat. 8529731 dated 10 Sept. 2013.

#### Awards, Honors & Fellowships

1. Fellow of Association of Carbohydrate Chemists (India) for his contributions to Cellulose Chemistry and Technology (2014)



- 2. Fellow of Biotech Research Society of India for outstanding contributions to Industrial Biotechnology (Thiruvananthapuram, Nov., 2011)
- 3. CSIR-NCL Scientist-of-the-year Award 2011 for outstanding research (Jan., 2012)
- 4. Life-time Achievement Award in Cellulose Chemistry and Technology by Association of Carbohydrate Chemists & Technologists of India, (Dehra Dun, Jan., 2014)
- 5. National VASVIK Industrial Technology Award winner for Chemical Technology transferred to Indian Industry (Gujarat, Oct., 2011)
- 6. UNIDO-ICS Expert Group Member on Biomass Valorization (Italy, 2006-2011)
- 7. Editorial Board Member of Elsevier Journal "Carbohydrate Polymers" (UK) (2004-contd)
- 8. Editorial Board Member of "Trends in Carbohydrate Research" (India) (2009-contd.)
- 9. President, Society of Polymer Science (India) (Pune Chapter) (2009-2014)
- 10 Invited Speaker and Chairperson at Symposia in many countries- USA, UK, Germany, Italy, China, Turkey, Denmark, Egypt, France, Sweden, Denmark, (1995-2011)

#### Basic Research, Applied Projects / Industrial Consultancy Reports

- 1. Nodal Officer for CSIR 12 Five Year Plan Biomass Program (6 CSIR laboratories) (2012-2017)
- 2. Biofuel Program (multi-institutional, NMITLI) : CSIR-Industry project on Waste agricultural residues (natural products) to biofuel (ethanol) (2007-2012)
- 3. CSIR-Industry project on Waste agricultural residues to value-added polymer products (two projects) (2002-2007) (successful from lab scale to pilot plant, commissioning, and demonstration at industrial site) (AWARD WINNING TECHNOLOGY) (2002-2007)
- 4. Technology Report to Godawari Sugar Mills on Separation of Cellulose, Hemicellulose and Lignin from Sugarcane Bagasse (2008)
- 5. Standard Operating Procedures for analysis of Cellulose, Hemicellulose and Lignin, submitted to Godawari Sugar Mills (Mumbai)
- 6. Consultant to Dhampur Sugar Mills on Value-addition to Agricultural Biomass (New Delhi) (2008)
- 7. Nitrex Chemicals, Gurgaon, Consultancy report on Methyl cellulose) (2004)
- 8. Pidilite Industries, Mumbai, (Consultancy report on Hydroxyethylcellulose)
- 9. General Electric, USA, (Project and report on Heat stable cellulose) (1996-1998)
- 10. General Electric, USA, (Building blocks for polycarbonates from naturally occurring materials: Cashew Nut Shell Liquid based polymerizable monomers, US Patent received) (1998-2001)
- 11. DST project on Hydrophilic-hydrophobic balance of polymers (1988-91)
- 12. DST project on inositol based polyfunctional crown ethers (1995-1998)
- 13. DST project on structural and functional mimicry of biosystems: carbohydrate laced synthetic polymers as microbial nutrient (2003-2005)
- 14. Unilever, UK, (Castor oil based polyurethanes and monomers) (1992-1995)

#### 2. Prof. Virinder S. Parmar

Adjunct Faculty

Qualification: M.Sc., Ph.D. Experience: +40 Years

Research Interest: Synthetic Organic Chemistry

Email: virparmar@gmail.com Mobile: +91-98818528933



#### Research Area

Synthetic Organic Chemistry, Nucleic Acid Chemistry, Bio-catalysis, Green Chemistry, Polymer, Synthesis of Natural Products & Enzymology

#### **Publications**

453+ Research Papers and 8 Books

#### **Selected Publications**

- 1. P. Kumar, A. K. Singh, V. Bahadur, C. Len, N. G. J. Richards, V. S. Parmar, E. V. Van der Eycken and B. K. Singh, Microwave-Assisted, Metal-Free, Base-Mediated C–N Bond Formation/Cleavage: Synthesis of Benzimidazo [1,2-a] quinazoline Derivatives, *ACS Sustainable Chemistry & Engineering*, 2016, 4, 2206.
- 2. A. Kumar, Z. Li, S. K. Sharma, V. S. Parmar and E. V. Eycken, An expedient route to imidazo[1,4]diazepin-7-ones via a post-Ugi gold-catalyzed heteroannulation, *Organic Letters*, 2013, 15, 1874.
- 3. S. G. Modha, A. Kumar, D. D. Vachhani, J. Jacobs, S. K. Sharma, V. S. Parmar, L. V. Meervelt and E. V. Eycken, A diversity-oriented approach to spiroindolines: Post-Ugi gold-catalyzed diastereoselective Domino cyclization, *Angew. Chemie.Int. Ed.*, **2012**, 51, 9572.
- 4. S. Malhotra, M. Calderon, A. K. Prasad, V. S. Parmar and R. Haag, Novel chemoenzymatic methodology for the regioselective glycine loading on polyhydroxy compounds, *Org. Biomol. Chem.*, **2010**, 8, 2228.

#### Research Guidance

Supervised 48 Ph.D. students, 14 M.Phil. students and 16 Post-doc Fellows

#### Awards/Recognitions

- 1. Fellow of Royal Society of Chemistry, London.
- 2. Council Member of National Organic Symposium Trust (NOST, Bangalore).
- 3. Council Member of Research Council of the Regional Research Laboratory (RRL, CSIR), Jammu.
- 4. Editorial /Board Member of ChemSusChem, Biocatalysis and Biotransformation, Natural Product Communications, Medicinal & Aromatic Plants Abstracts and Mendeleev Communications etc.
- 5. INSA-nominated Affiliate Member of the International Union of Pure and Applied Chemistry (IUPAC).

#### 3. Dr. Rajeev S. Menon

**Assistant Professor** 

Qualification: M.Sc., Ph.D. Experience: +11 Years

Research Interest: Organic synthesis, Catalysis, Medicinal Chemistry

Email: rajeevmenon@cuh.ac.in Mobile: +91-8685867929

#### Research Areas

- 1. Development of green and economic synthetic methodologies
- 2. Targeted synthesis of biologically active natural products and analogues
- 3. Exploration of the Chemistry of electron deficient allenes



#### **Selected papers:** Total number of publications (35) / h-index (19)

- 1. S. Undeela, G. Ravikumar, J. B.Nanubolu, K. K. Singarapu and **Menon, R. S.**, Facile synthesis of 1-benzoazepine derivatives via gold-catalyzed regioselective cycloisomerization reactions of *N*-(*o*-alkynylaryl)-*N*-vinyl sulfonamides, *Chem. Commun.*, 2016, 52, 4824.
- 2. P. R. Joshi, J. B. Nanubolu and **R. S. Menon**, Noveloxygenative and dehydrogenative [3+3] benzannulation reactions of α,β-unsaturated aldehydes and γ-phosphonylcrotonates mediated by air: A regioselective synthesis of 4-hydroxybiaryl-2-carboxylates, *Org. Lett.*, **2016**, *18*, 752.
- 3. A. Kumar, S. Thadkapally and **R.S. Menon**, Base-mediated cyclocondensation of salicylaldehydes and 2-bromoallyl sulfones for the synthesis of 3-sulfonylchromene derivatives and their regioselective Friedel-Crafts heteroarylation reactions, *J. Org. Chem.*, **2015**, *80*, 11048.
- 4. S. Undeela, S. Thadkapally, J. B. Nanubolu, K. K.Singarapu, **R. S.Menon**, Catalyst-controlled divergence in cycloisomerisation reactions of N-propargyl-N-vinylsulfonamides: gold-catalysed synthesis of 2-sulfonylmethy 1 pyrroles and dihydropyridines, *Chem. Commun.*, **2015**, *51*, 13748.
- 5. Joshi, P. R.; Undeela, S.; Reddy, D. D.; Singarapu, K. K.; **Menon, R. S**. "Regioselective Synthesis of Substituted Arenes via Aerobic Oxidative [3+3] Benzannulation Reactions of α,β-Unsaturated Aldehydes and Ketones, *Org. Lett.*, **2015**, *17*, 1449.

#### Professional Recognitions, Awards and Fellowships

- 1. Early Career Research Award by SERB-DST, India (2017)
- 2. Ramanujan Fellowship from SERB-DST, India (2011)
- 3. Australian Research Council (ARC) post-doctoral fellowship (2008)
- 4. Alexander von Humboldt post-doctoral fellowship (2005)
- 5. CSIR Junior and Senior Research Fellowships (2000-05)

#### 4. Dr. Manoj Kumar Gupta

**Assistant Professor** 

Qualification: M.Sc., Ph.D., CSIR NET-JRF & GATE

Experience: +6 Years

Research Interest: Synthetic Organic Chemistry, Medicinal Chemistry

Email: mkgupta@cuh.ac.in Mobile: +91-9728739075

#### Research Area

- 1. Technology based synthetic organic transformations.
- 2. Development of new methods in organic syntheses and its application towards the total synthesis of bio-active natural products.
- 3. Medicinal chemistry and chemical biology.

**List of Papers:** Total number of publications (37) / h-index (15)

#### **Selective Publications**

1. K. O'Reilly, **M. K. Gupta**, H. Gandhi, V. P. Kumar, K. S. Eccles, S. E. Lawrence and T. P. O'Sullivan, Cinchona-catalysed, enantioselective synthesis of β-peroxycarboxylic acids, β-peroxyesters and β-peroxyalcohols, *Curr. Org. Chem.*, **2016**, *20*, 2633.



- 2. Z. Li, **M. K. Gupta** and T. S. Snowden, One-carbon homologation of primary alcohols and the reductive homologation of aldehydes involving a Jocic-type reaction, *Eur. J. Org. Chem.* **2015**, 7009.
- 3. **M. K. Gupta**, Z. Li and T. S. Snowden, Preparation of one-carbon homologated amides from aldehydes or primary alcohols, *Org. Lett.*, **2014**, *16*, 1602.
- 4. **M. K. Gupta** and T. P. O'Sullivan, Recent applications of gallium and gallium halides as reagents in organic synthesis, *RSC Adv.*, **2013**, *3*, 25498.
- 5. **M. K. Gupta**, Z. Li and T. S. Snowden, One-pot synthesis of trichloromethylcarbinols from primary alcohols, *J. Org. Chem.*, **2012**, *77*, 4854.
- 6. J. S. Yadav, **M. K. Gupta**, I. Prathap M. P. Bhadra, K. Mohan and B. Jagannadh, Synthesis and cellular uptake of cell delivering 2,6-pyridinediylbisalkanamide submicron-sheets in HeLa cells, *Chem. Commun.*, **2007**, 3832.

#### **Professional Recognitions, Awards and Fellowships**

- 1. Fast Track Young Scientist Start-up Research Grant in Chemical Sciences awarded by SERB (2013)
- 2. Ireland's Champions of EU Research awarded by Seventh EU Framework Programme Ireland (2012)
- 3. EU Marie-Curie International Incoming Fellowship awarded by Marie-Curie Actions (EU) in (2010)
- 4. Asia Outstanding Thesis Award (First Prize) by Eli-Lilly & Company, USA (2009)
- 5. Selected for Director's Special Appreciation Award for SRF by CSIR-IICT Hyderabad, India (2007)
- 6. Selected for Best SRF Award by CSIR-IICT Hyderabad, India (2005)
- 7. Selected for Best JRF Award by CSIR-IICT Hyderabad, India (2004)

#### **Funded Project (Ongoing):**

Fast Track Young Scientist Startup Research Grant funded by Science & Engineering Research Board (SERB), New Delhi, Amount Rs. 29,87,333/- (For three years)

#### 5. Dr. Prakash Kanoo

**Assistant Professor** 

Qualification: M.Sc., Ph.D. (JNCASR, Bangalore)

Experience: +4 Years

Research Interest: Porous Materials, Metal-Organic Frameworks

Email: prakashkanoo@cuh.ac.in

Mobile: +91-9036011443

#### Research Area

- 1. Design and synthesis of porous materials
- 2. Adsorption and separation science in metal-organic frameworks
- 3. Mechanical properties of metal-organic frameworks

#### List of Published Papers & Reviews in Peer Reviewed Journals

Total number of publications (23) / h-index (17)



#### **Selective Publications**

- 1. **P. Kanoo**, R. Haldar, S. K. Reddy, A. Hazra, S. N. Bonakala, R. Matsuda, S. Kitagawa, B. Sundaram, T. K. Maji, Crystal dynamics in multi-stimuli responsive entangled metal-organic frameworks, *Chem. Eur. J.*, **2016**, *22*, 15864.
- 2. L. Li., R. Matsuda, I. Tanaka, H. Sato, **P. Kanoo**, H. J. Jeon, M. L. Foo, A. Wakamiya, Y. Murata and S. Kitagawa, A crystalline porous coordination polymer decorated with nitroxyl radicals catalyzes aerobic oxidation of alcohols, *J. Am. Chem. Soc. (Communication)*, **2014**, *136*, 7543.
- 3. **P. Kanoo**, R. Matsuda, H. Sato, L. Li, H. J. Jeon and S. Kitagawa, In situ generation of functionality in a reactive haloalkane-based ligand for the design of new porous coordination polymers, *Inorg. Chem. (Communication)*, **2013**, *52*, 10735.
- 4. **P. Kanoo**, S. K. Reddy, G. Kumari, R. Haldar, C. Narayana, S. Balasubramanian and T. K. Maji, Unusual room temperature CO<sub>2</sub> uptake in a fluoro-functionalized MOF: Insights from Raman spectroscopy and theoretical studies, *Chem. Commun.*, **2012**, *48*, 8487.
- 5. **P. Kanoo**, R. Haldar, S. T. Cyriac and T. K. Maji, Coordination driven axial chirality in a microporous solid assembled from an achiral linker via in situ C-N coupling, *Chem. Commun.*, **2011**, *47*, 11038.
- 6. **P. Kanoo**, R. Matsuda, M. Higuchi, S. Kitagawa and T. K. Maji, New interpenetrated copper coordination polymer frameworks having porous properties, *Chem. Mater.*, **2009**, *21*, 5860.

#### **Professional Recognitions, Awards and Fellowships**

- 1. Start-Up Research Grant from Science and Engineering Research Board, India for 3 years (2015)
- 2. DS Kothari Postdoctoral Fellowship from UGC, India for Working at IISc, Bangalore (2015)
- 3. JSPS Postdoctoral Research Fellowship for Working at Kyoto University, Japan (2012)
- 4. ICAM-I2CAM Junior Travel Award for Attending a Gordon Research Conference Held at Holderness, NH, USA during (2011)
- 5. Poster Award in International Winter School on Chemistry and Physics of Materialsat JNCASR, Bangalore (2010)
- 6. Awarded JRF by CSIR, Govt. of India in 2007 (SRF from 2009-2012)
- 7. Qualified GATE-2007 with All India Rank 45 (Percentile, 99.04)
- 8. Gold Medal from Assam University, Silchar for securing 1st class 1st position in M.Sc. (2005)

#### **Funded Project (Ongoing)**

Fast Track Young Scientist Startup Research Grant funded by Science & Engineering Research Board (SERB), India, Amount Rs. 32,00,000/- (For three years)

#### 6. Dr. Azaj Ansari

**Assistant Professor** 

Qualification: Ph.D. (IIT Bombay), NET-JRF & GATE

Experience: +1 Years

Research Interest: Inorganic/ Theoretical Chemistry

Email: azaj@cuh.ac.in Mobile: +91-9820824839



#### Research Area

- 1. To understand the electronic structure, energetic formation and magnetic properties of inorganic complexes
- 2. To calculate and predict the spectroscopic properties such as EPR, UV-Visible spectra and Mossbauer of Inorganic complexes.
- 3. To understand the reaction mechanism involving regio-selective hydroxylation, epoxidation, C-H bond activation and proton coupled electron transfer reactions of high-valent metal complexes
- 4. To understand the mechanism of energy transfer in photoredox catalysis.

#### **List of Published Papers Peer Reviewed Journals**

Total number of publications (8) / h-index (5)

#### **Selective Publications**

- 1. P.Jayapal, A. Ansari and G. Rajaraman, *Inorg. Chem.*, **2015**, *54*, 11077.
- 2. A. Ansari, P. Jayapal and G. Rajaraman, Angew. Chem. Int. Ed. 2015, 54, 564.
- 3. **A. Ansari**, and G. Rajaraman, *Phys. Chem. Chem. Phys.* **2014**, *16*, 14601.
- 4. **A. Ansari**, A. Kaushik and G. Rajaraman, *J. Am. Chem. Soc.*, **2013**, *135*, 4235.

#### **Awards & Fellowships**

- 1. **Best Oral Presentation Award in** the "Catalysis Scholars Meet 2014 (*CATSCHOL 2014*)", Institute of Chemical Technology, Mumbai, India, 4th March 2014.
- 2. **Best Poster Presentation Award in** the "*Chemical Frontiers 2014 (CF2014*)", at Majorda Resort, Goa, India, 6<sup>th</sup>-9<sup>th</sup> August 2014.
- 3. CSIR-Junior and Senior Research Fellowship (2011-2016)
- 4. GATE Fellowship in Chemical Science (2010)

#### **Funded Project (Ongoing)**

- 1. Science & Engineering Research Board (SERB) grant (ECR/2016/001111; Sanctioned amount INR. 40,89,000/- in September 2016) for three years
- 2. Project title: Understanding Mechanism of Energy Transfer in Photoredox Catalyst and Its Applications in Catalytic Transformation Reactions.

#### 7. Dr. Anurag Prakash Sunda

**DST INSPIRE Faculty** 

Qualification: M.Sc., M.Phil., Ph.D., NET-JRF & GATE

Experience: +3 Years

Research Interest: Physical/Materials and Theoretical Chemistry

Email: anurag@cuh.ac.in Mobile: +91-9982560724



**Research Areas:** Molecular Dynamics Simulations of Composite Polymer Membranes & Ionic Liquids - A molecular probing of Protic Ionic Liquid doped composite membrane can provide new physical insights to develop more efficient anhydrous electrolytes for emerging energy technologies such as fuel cells, batteries, and super-capacitors etc.

#### **Selected Publications**

- 1. A. Mondal, **A. P. Sunda**, and S. Balasubramanian, Thermal Phase Behavior and Ion Hopping in 1,2,4-Triazolium Perfluorobutanesulfonate Protic Organic Ionic Plastic Crystals, *Phys. Chem. Chem. Phys.*, **2016**, *18*, 2047.
- 2. **A. P. Sunda**, Ammonium-based Protic Ionic Liquid Doped Nafion Membrane as Anhydrous Fuel Cell Electrolyte, *J. Mater. Chem. A*, **2015**, *3*, 12905.
- 3. **A. P. Sunda**, A. Mondal, and S. Balasubramanian, Atomistic Simulations of Ammonium-based Protic Ionic Liquids: Steric Effects on Structure, Low Frequency Vibrational Modes and Electrical Conductivity, *Phys. Chem. Chem. Phys.*, **2015**, *17*, 4625.
- 4. **A. P. Sunda** and A. Venkatnathan, Molecular Dynamics Simulations of Side Chain Pendant of Perfluorosulfonic Acid Polymer Electrolyte Membrane, *J. Mater. Chem. A*, **2013**, *1*, 557.

#### Awards & Fellowships

- SERB International Travel Support (2016) for "EMN Meeting on Fuel Cell" held at KOREA-ROK
- 2. DST INSPIRE Faculty Award (2015) by Department of Science & Technology, New Delhi.
- 3. Rajat Jayanti Science Communication Fellowship (2011) by NCSTC DST, New Delhi.
- 4. UGC-Junior and Senior Research Fellowship (2010-2014)
- 5. GATE Fellowship in Chemical Science (2009)

#### **Project Funding**

- 1. DST INSPIRE Project [IFA14-MS-31]: INR 35,00,000/- @7.0 Lacs p. a. for five years
- 2. Title: Ab initio Molecular Dynamics simulation of Ionic Liquid doped Polymer Electrolyte Membranes and Platinum Electrode Interface (Since March 11, 2015; Ongoing)
- 3. Rajat Jayanti Vigyan Sancharak Fellowship Project [CO/S/TR/F09/2012]:
- 4. INR 2,29,000/- for one year (2013; Completed)

#### Membership

1. Life Time Member of Chemical Research Society of India (CRSI) [LM 1847]

#### 8. Dr. Suja T. D.

**DST-SERB Young Scientist Scheme** 

Qualification: M.Sc., Ph.D.

Experience: +6 Years

Research Interests: Organic Synthesis/ Medicinal Chemistry

Email: suja@cuh.ac.in Mobile: +91-9728739056

#### **Research Areas**

- 1. Development of synthetic methodologies including 1,3-dipolar cycloaddition reactions
- 2. Development of novel anticancer agents

#### Total number of publications in Peer Reviewed Journals: 12

#### **Selected Publications**

1. K. V. L. Divya, A. Meena and **T. D. Suja**, A unified approach for the synthesis of pyrazole-fused heterocyclic and carbocyclic motifs via one-pot condenzation and intramolecular dipolar cycloaddition reaction, *Synthesis*, **2016**, 4207. (as corresponding author).



- **2. T. D. Suja**, K. V. L. Divya, L. V. Naik, A. R Kumar and A. Kamal, Copper-catalyzed three-component synthesis of aminonaphthoquinone-sulfonylamidine conjugates and in-vitro evaluation of their antiproliferative activity, *Bioorg. Med. Chem. Lett.* **2016**, *26*, 2072 (as corresponding author).
- 3. C. M. Chu, M. S. Hung, M. T. Hsieh, C. W. Kuo, **T. D. Suja**, J. S. Song, H. H. Chiu, Y. S. Chao and K. S. Shia, Bioisosteric replacement of the pyrazole-3-carboxamide moiety of rimonabant. A novel series of oxadiazoles as CB1 cannabinoid receptor antagonists, *Org. Biomol. Chem.*, **2008**, *6*, 3399.
- 4. V. Nair and **T. D. Suja**, Intramolecular 1, 3-Dipolar Cycloaddition Reactions in Targeted Syntheses, *Tetrahedron*, **2007**, *63*, 12247.
- 5. V. Nair, **T. D.Suja** and K. Mohanan, A Convenient Protocol for C-H Oxidation Mediated by an Azido Radical Culminating in Ritter-type Amidation, *Tetrahedron Lett.*, **2005**, *46*, 3217.

#### **Awards & Fellowships**

- 1. SERB- Young Scientist Project Award- awarded by SERB-DST, India in August 2013
- 2. Post-doctoral fellowship in the research group of Prof. Anthony Day's group at the Australian Defense Force Academy, UNSW, Canberra, Australia (2009)
- 3. Post-Doctoral Fellow in the research group of **Prof. Martin G. Banwell** at Research School of Chemistry, Australian National University (ANU), Canberra, Australia (2008-09)
- 4. Post-Doctoral Fellow in the research group of **Dr. Kak-Shan Shia** at the National Health Research Institutes, Taiwan (2007-08)
- 5. Top in the hottest article list of the Journal Tetrahedron: Intramolecular 1, 3-Dipolar Cycloaddition Reactions in Targeted Syntheses. Nair, V.; Suja, T. D. *Tetrahedron* **2007**, *63*, 12247 (First in Top 25 hottest articles for October-December 2009)
- 6. CSIR Junior and Senior Research Fellowships (2002-2007).

#### **Project Funding**

Fast track project titled "Design and Synthesis of Natural Product Analogues Aimed at the Discovery of Anticancer Therapeutics" awarded by SERB, India in August 2013 (31 Lacs, ongoing).

#### **Infrastructure in the Department**

The Chemistry Department has adequate office and faculty office space, classrooms and laboratories for conducting practical courses in all specializations such as Organic, Inorganic, Physical and Polymer Chemistry. Several advanced equipment are being purchased, such as spectrophotometers, chemical process equipment, computational facilities, etc., in order to conduct advanced doctoral and post-doctoral research. A seminar room is available for conducting student competitions such as speeches, tutorials, invited lectures, etc.

#### Thrust Areas of Research of the Department

The Department overall has expertise in all core areas of chemistry such as organic, inorganic, physical and polymer chemistry, and experience in multi-disciplinary areas which includes industrial process chemistry, biotechnological solutions, effluent treatment protocols. This combined expertise will be used, often in collaboration with other Departments, to tackle and contribute to nationally important projects on waste-to-wealth, bio refineries, green chemistry approaches for mitigating environmental problems, bioenergy sources, chemistry for health such as medicinal chemistry, development of biosensors, medical polymeric products for external and internal applications, etc.

#### Events organized and planned

#### **Past Activities**



Picture of Inaugural Function of
National Conference on EcoFriendly Chemistry, 29 Sept. 2016

Picture of audience: National Conference on Recent Trends in Eco-friendly Chemistry, 29 Sept. 2016





#### Activities of Chemistry Department Sept. 2015 to Dec. 2016

- 1. September 02, 2015: Special Lecture on Biomass based Technologies for Sustainable Development by Prof. A. J. Varma, National Chemical Laboratory-Pune
- 2. September 11, 2015: Science Exhibition [Science Model and Experiments: Live demonstrations to school and college students]
- 3. September 22-24, 2015: Workshop on Thin Film and Vacuum Technology (Jointly organized with Department of Physics). Chief Guest: Dr. R. K. Garg, Sr. Scientist from CEERI, Pilani
- 4. February 28, 2016: National Science Day Celebration. Theme: Focus on smart cities Chief Guest: Prof. C. R. Babu (Emeritus Scientist, DU, New Delhi)
- 5. March 31, 2016: Inauguration of Chemical Society of CUH (for Young Khorana's)
- 6. Chief Guest: Prof. V. S. Parmar (DU, New Delhi).
- 7. April 27-29, 2016: 3-Day Workshop on **Techniques of Materials Processing**. jointly with Department of Physics, and in collaboration with TAS Delhi, DU, CEERI-Pilani, KUK.
- 8. August 07, 2016: Speech Competition for M.Sc. Students on topics related to Green and Sustainable Chemistry.
- 9. September 08, 2016: Industry lecture by Dr. V. K. Gupta, Sr. VP, RIL, R&D, Navi Mumbai.

- 10. September 29, 2016: One Day National Conference- Recent Trends in Ecofriendly Chemistry. Chief Guest: Prof. Gurmeet Singh (DU, New Delhi)
- 11. Special Invitees: Prof. A. Ramanan (IIT-Delhi), Prof. S. Sen (Shiv Nadar University, Noida), Prof. E. Srinivasan (Central University of Rajasthan, Ajmer), Prof. Indresh Kumar (BITS, Pilani)
- 12. October 04, 2016: Special Research Interaction of Ph.D. students with Prof. Rita Kakkar (DU, New Delhi)



Picture of Industry Lecture on Chemistry by Dr.V.K.Gupta, Sr. VR, R&D, RIL, Mumbai, on 8 Sept. 2016

#### **Future planned activities for 2017**

- 1. Two Day National Conference
- 2. Science Day Celebration (Feb 2017)
- 3. Student, faculty and invited expert seminars on topics of social relevance pertaining to chemistry (energy sciences, value from waste materials, scientifically planned waste disposal, health, smart cities, carbon trading, Life cycle analysis of products)

#### **Highlights and Achievements**

The Department is still very young and in its formative stages, yet the progress has been substantial. The Department is offering up-to-date, essential and relevant post-graduate courses for the chemistry students as well as other departments in interdisciplinary mode, in keeping with the UGC requirements of choice based credit system. For example, we are offering a course on "Sustainable Chemical Processes and Environment Friendly Technologies" which is highly popular among students of a number of other departments and are greatly appreciated by them. We feel this is "one of a kind" course with contents which few other universities are able to design and put together. Further almost each department faculty member has funded grant-in-aid projects of over Rs. 30 lacs each. The department faculty is also industrial consultants and carries out industrial projects, often multi-institutional. Two of the senior faculty is also Honorary Visiting Professors at universities in India and abroad. Doctoral research has commenced

in the department, and newly designed courses on research methodology taking into account modern thoughts and social needs of our country. It is a matter of pride that our department gets applications for doctoral research opportunities from many CSIR JRF qualified candidates.

# Research Projects, MOU, Consultancy, Awards, Collaborations, Academic Projects Funded projects of faculty- Chemistry Department, CUH

#### 1. Professor A. J. Varma

- (i) Consultant and past Project Leader of Reliance Industries project carried out at National Chemical Laboratory, Pune, on microstructure of Polybutadiene and Styrene-Polybutadiene synthetic elastomers (Rs. 45 Lacs per year).
- (ii) Advisory Consultancy to M/s. Hindustan Gum & Chemicals Ltd. (MP Birla Group), Bhiwani, for developing new product lines of their galactomannan natural polymer. (Rs.3 lacs per year)

#### 2. Dr. Rajeev S. Menon, Assistant Professor

i) Ramanujan Fellowship Research Grant SR/S2/RJN-05/2011

**Title:** Gold-Catalysed Organic Transformations: Novel pathways for Carbon- Carbon Bond Formations and Rearrangements

Funding Agency: SERB) Dept. of Science and Technology (DST), New Delhi, India

**Duration**: 5 years (January 2012-January 2017, ongoing)

**Grant Amount: INR 31 Lacs** 

ii) Early Carrier Research (ECR) Grant (ECR/2016/001401)

**Title:** Exploiting the synthetic potential of unsaturated sulfones in heterocyclic construction and alkaloid synthesis

Funding Agency: SERB, Dept. of Science and Technology (DST), New Delhi, India

**Duration**: 3 years (January 2017-January 2019)

**Grant Amount:** INR 43 Lacs.

#### 3. Dr. Manoj K. Gupta, Assistant Professor

i) Fast track project (SB/FT/CS-132/2012)

Title: Synthesis of biologically interesting compounds, anti-HIV activity of lignin and analogues

Funding Agency: SERB, Dept. of Science and Technology (DST), New Delhi, India

**Duration**: 3 years (April 2014 – March 2017, on-going)

**Grant Amount**: INR 29,87,333/-

#### ii) UGC/FRPS project

**Title**: Towards the total synthesis of bioactive natural products: New drug discovery and development

Funding Agency: UGC. New Delhi

**Duration**: 3 years (2017-2020)

**Grant Amount**: 11,15,000/-

#### 4. Dr. Prakash Kanoo, Assistant Professor

**Fast track project (YSS/2014/000983)** 

Title: Halogen Bond Supported Recognition in Supramolecular Self-Assemblies and Hybrid

Nanospaces

Funding Agency: SERB, Dept. of Science and Technology (DST), New Delhi, India

**Duration**: 3 years (January 2016 - December 2018)

Grant Amount: INR 32 Lacs.

#### 5. Dr. Azaj Ansari, Assistant Professor

#### Early Carrier Research (ECR) Grant (ECR/2016/001111)

Title: Understanding Mechanism of Energy Transfer in Photoredox Catalyst and Its Applications in

**Catalytic Transformation Reactions** 

Funding Agency: SERB, Dept. of Science and Technology (DST), New Delhi, India

**Duration**: 3 years (January 2017-January 2019, Sanctioned)

**Grant Amount: INR 40.89 Lacs** 

#### 6. Dr. Anurag P. Sunda, DST-INSPIRE Faculty

#### DST INSPIRE Project [IFA14-MS-31] Research Grant

**Title :** Ab initio Molecular Dynamics simulation of Ionic Liquid doped Polymer Electrolyte Membranes and Platinum Electrode Interface

Funding Agency: Dept. of Science and Technology (DST), New Delhi, India

**Duration**: 5 years (March 2015 - March 2020, ongoing)

Grant Amount: INR 35,00,000/- @7.0 Lacs p. a. for five years

#### 7. Dr. Suja T. D., SERB-Young Scientist

Fast track project (CS-179/2013).

Title: Design and Synthesis of Natural Product Analogues, Discovery of Anticancer Therapeutics

Funding Agency: SERB, Dept. of Science and Technology (DST), New Delhi, India.

**Duration:**3 Years (July 2014-July 2017, ongoing)

Grant Amount: INR 310000/-

#### **Future Roadmap**

The Department has ambitious plans to expand the scope of teaching new courses, introduce more specialized degrees, admit more students and doctoral researchers, and build-up a world class research infrastructure with state-of-the-art equipment, so that the students passing out from here are an asset to every organization they enter. We strive collectively to enable our graduates to work for national development, and also to carry out cutting edge research, develop innovative products and processes of use to society at large. It is with this vision that we plan to introduce a 5-year integrated M.Sc. course, and new specializations of M.Sc. (Polymer Chemistry), M.Sc. (Polymer Technology), and M.Sc. (Chemical Technology).

# SCHOOL OF COMPUTER SCIENCE AND INFORMATICS

**Department of Library and Information Science Department of Computer Science & Information** 

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- Department of Library and Information Science
- Department of Computer Science & Information

### **Department of Library and Information Science**

With the objective of imparting quality education in the field of Library and Information Science, the Central University of Haryana, Mahendergarh launched the Department of Library and Information Science from the academic session 2014-2015 under the School of Computer Science and Informatics. The Department currently offers two years (Full-Time) PG Degree Programme, which is divided into four semesters and based on Choice Based Credit System (CBCS).

#### **Programmes Offered, Duration and Eligibility**

Sr. No.	Name of the Programme	Minimum Duration (Years)	Eligibility	No. of Seats
1.	M. Lib. I. Sc.	2 Years	Graduation from any recognized University with a minimum 50% Marks or equivalent grade in aggregate (45% for SC/ST or differently able categories)	20

#### **Faculty Profile**

Sr. No	Name of Faculty	Qualifications	Area of Interest/ Specialization	Experience
1.	Dr. Pawan K. Saini	Ph.D., M. Phil, M. Lib.I. Sc. & PGDCA	Library automation and digital library, ISB, Citation analysis	13.6 years
2.	Mr. Vivek Minz	Master of Library & Information Sciences	Use of ICT in Library, Library Management, Bibliometric Research	-

#### **Faculty Publication**

1. Conference/Seminar and Workshop attended: 06

2. Articles Published in Journals: 09

3. Papers Published in Books: 02

#### Infrastructure

Total Number of Class Rooms	04
Class Rooms with ICT Facility	02
Research Scholar Room	02
LCD Projectors	02
Computer	01
Printer	01
Library facility	More than 250 Text and Reference Books, 100 Journals under UGC-INFONET

#### **Research Thrust Area**

- IT Applications in Libraries
- Human Resource Development in Libraries
- Public Library Information System
- Human Resource Management
- User Studies
- Citation Analysis

#### **Events Organized**

• One Day National Workshop on "Importance & Use of Copyrights, Patent, Citation, Impact Factor & Plagiarism Research Publication" held on November 27, 2015.

#### **Highlights and & Achievements**

a) NET/JRF/GATE Qualified: 01

b) Placements:

1. Name of the student : Chander Kiran Chahar

Academic Year : 2014-2015

Name of the Organization : RDS Sr. Secondary School Rewari, Haryana

Designation : Librarian Salary package : 2.4 lacks

2. Name of the student : Sushil Kumar Berwa

Academic Year : 2014-2015

Name of the Organisation : Smt . Ramkumari P.G. Mahila Mahavidyalaya,

Mukundgarh - Mandi (Jhunjhunu) Rajasthan

Designation : Librarian Salary package : 2.3lacks

3. Name of the student : Rakesh Kumar Gadwal

Academic Year : 2014-2015

Name of the Organisation : Smt. Ramkumari P.G.Mahila Mahavidyalaya

Mukundgarh - Mandi (Jhunjhunu) Rajasthan

Designation : Assistant Librarian

Salary package : 1.5 lacks

Name of the student : Satyaveer

Academic Year : 2014-2015

Name of the Organisation : Sambal College of Education Sikar

Designation : Lecturer cum Librarian

Salary package : 2.5 lacks

5. Name of the student : Mahesh Kumar Saini

Academic Year : 2014-2015

Name of the Organisation : SS Modi CBSE School Jhunjhunu

Designation : Librarian Salary package : 2.2 lacks

#### **Future Roadmap**

- Diploma in Library and Information Science (DLIS, 1Year)
- Bachelor of Library and Information Science (BLIS, 1 Year)
- Post Graduate Diploma in Library Automation and Networking (PGDLAN)
- M. Sc. in Special Librarianship

## **Department of Computer Science & Information**

Department of Computer Science, Central University of Haryana, was opened in the academic year 2013-14 for offering MCA programme. This *Department* is functioning under the School of Computer Science & Informatics which is the founding department of the School. Department of Computer Science offers PG programme i.e. MCA of three years duration which is divided into six semesters & based on Choice Based Credit System (CBCS).

#### Programme Offered and No. of Seats

Programme offered	No of Seats
M.C.A.	30

#### **Programme Objective**

With the objective of imparting quality education in the field of Computer Science, the Central University of Haryana has launched the Department of Computer Science and Information Technology in the year 2013-14 under the School of Computer Science and Informatics.

The department has been established to design and offer courses with the twin objectives of producing world class computer professionals to keep pace with the R & D activities in this fast emerging and changing field of computer applications. It believes in close interaction with the industry on a regular basis to keep pace with ever changing scenario of the IT industry.

The Department currently offers Master of Computer Applications (MCA), which is a Three Year (Full-Time) Degree Program. The course curriculum is so designed that it gives an edge to our students over others in almost every area of computer applications.

#### **Programme Outcome**

On completion of the course, students from the Computer Science programme will be able to:

- Have a solid understanding of the theory and concepts underlying computer science
- Apply knowledge of Computer Science to appropriate fields
- Analyse a computational problem
- Identify various solutions to a problem
- Understand current computational concepts and research about latest technologies
- Use current technologies, skills and tools for computing practice
- Understand responsibilities of computer science professionals
- Understand the need of computer science in society

#### **Scheme of the Course**

#### M.C.A

The Scheme is as follows:

#### SEMESTER – I

SN	Course code	Course title	L	Т	P	Credit
1.	SCS CSC 01 01 C 01 4004	Computer Fundamentals and Problem Solving through C	4	0	0	4
2.	SCS CSC 01 01 C 02 3003	Discrete Mathematical Structures	3	0	0	3
3.	SCS CSC 01 01 C 03 4004	Linux and Shell Programming 4		0	0	4
4.	SCS CSC 01 01 C 04 0044	Computer Lab I 0		0	4	4
5.	SCS CSC 01 01 DCEC 01 0022	Seminar I (Compulsory)	0	0	2	2
6.		Any one of the following courses:	3	0	0	3
	SCS CSC 01 01 GEC 01 3003	Fundamentals of IT	3	0	0	3
	SCS CSC 01 01 DCEC 02 3003	Computer Oriented Numerical and Statistical Methods				
	SCS CSC 01 01 DCEC 03 3003	Software Engineering				

#### SEMESTER - II

SN	Course code	Course title		Т	P	Credit
1.	SCS CSC 01 02 C 05 3003	Object Oriented Systems and C++	3	0	0	3
2.	SCS CSC 01 02 C 06 3003	Digital Design and Computer Organisation	3	0	0	3
3.	SCS CSC 01 02 C 07 4004	Data Structures using C/C++	4	0	0	4
4.	SCS CSC 01 02 C 08 0044	Computer Lab II		0	4	4
5.		To be taken from other department	3	0	0	3
6.		Any one of the following courses:	3	0	0	3
	SCS CSC 01 02 GEC 02 3003	Computer Oriented Optimization Techniques	3	0	U	3
	SCS CSC 01 02 GEC 03 3003	Internet Fundamentals				
	SCS CSC 01 02 DCEC 04 3003	System Modeling and Simulation				
	SCS CSC 01 02 DCEC 05 3003	Software Project Management				

#### SEMESTER – III

SN	Course code	Course title	L	T	P	Credit
1.	SCS CSC 01 03 C 09 4004	Database Management Systems	4	0	0	4
2.	SCS CSC 01 03 C 10 4004	Operating Systems	4	0	0	4

	3.	SCS CSC 01 03 C 11 4004	Computer Networks		0	0	4
4	4.	SCS CSC 01 03 C 12 0044	Computer Lab III		0	4	4
	5.		To be taken from other department	3	0	0	3
(	6.		Any one of the following courses				
		SCS CSC 01 03 GEC 04 3003	Internet Fundamentals		0	0	3
		SCS CSC 01 03 DCEC 06 3003	Design and Analysis of Algorithm				
		SCS CSC 01 03 DCEC 07 3003	Cryptography				

#### SEMESTER – IV

SN	Course code	Course title		T	P	Credit
1.	SCS CSC 01 04 C 13 3003	Web Engineering	3	0	0	3
2.	SCS CSC 01 04 C 14 3003	Theory of Computation	3	0	0	3
3.	SCS CSC 01 04 C 15 4004	Programming in JAVA	4	0	0	4
4.	SCS CSC 01 04 C 16 0044	Computer Lab IV		0	4	4
5.	SCS CSC 01 04 DCEC 08 0022	Seminar/ Presentation (Compulsory)		0	2	2
6.		To be taken from other department		0	0	3
7.		Any one of the following courses:				
	SCS CSC 01 04 GEC 05 3003	Emerging Trends and Technologies	3	0	0	3
	SCS CSC 01 04 DCEC 09 3003	Digital Image Processing				
	SCS CSC 01 04 DCEC 10 3003	Advanced Computer Architecture				

#### SEMESTER - V

SN	Course code	Course title		T	P	Credit
1.	SCS CSC 01 05 C 17 4004	Computer Graphics	4	0	0	4
2.	SCS CSC 01 05 C 18 4004	Mobile Communication and Android Application Development		0	0	4
3.	SCS CSC 01 05 C 19 4004	Complier Design	4		0	4
4.	SCS CSC 01 05 C 20 0044	Computer Lab V		0	4	4
5.		Any two of the following courses:				
	SCS CSC 01 05 GEC 06 3003	E- Commerce	3 0		0	3
	SCS CSC 01 05 GEC 07 3003	Multimedia Technologies				
	SCS CSC 01 05 DCEC 11 3003	Data Warehousing and Data Mining				
	SCS CSC 01 05 DCEC 12 3003	Artificial Intelligence	3	0	0	3

#### SEMESTER – VI

#### SKILL ENHANCEMENT ELECTIVE COURSE

#### (Compulsory and exclusively for MCA students)

$\mathbf{S}$	N	Course code	Course title	L	T	P	Credit
1		SCS CSC 01 06 SEEC 01 0066	Major Project	0	0	24	24

A candidate may be admitted to the Master's Degree programme if he/she has obtained a Bachelor's degree under 10+2+3 system, recognized by the University, or a degree recognized as its equivalent, provided that such a candidate has attained the minimum eligibility/qualification at the time of admission, as decided by the University from time to time. Candidates are admitted on basis of CUCET score.

#### **Faculty Profile**

Sr.	Name	Designation	Qualification	Years of Experience	Areas of Specialization/ Interest				
No.					opecianización, interest				
1.	Ms. Sangeeta Rao	Assistant Professor	M.Tech., NET, GATE	2 years 9 months	Data Structure, Wireless Sensor Network				
		Publications: 5 papers in journals/conference proceedings							
2.	Ms. Neha Yadav	Assistant Professor	M.Tech., NET, GATE	month	Machine translation, Natural Language Processing				
	Publications: 2 papers in journals/conference proceedings								

#### **Department Infrastructure**

- 1. Four class rooms
- 2. 18 Computer System and 2 Projectors
- 3. 11 Faculty Room including 2 Professor rooms,4 Associate Professor rooms and 5 Assistant Professor rooms
- 4. Computer Laboratory
- 5. Software Availability as per Syllabus Requirement (ORACLE, Visual Studio, etc.)
- 6. Department Office, Reception Room, Room for Training and Placement Cell, Store Room

#### **Events Organized**

- Organised a Two day National Level Workshop on Cisco Networking under the banner of India's Biggest Networking Championship organized by ACES ACM -IIT Delhi & IBNC India
- 2. After the workshop a Mega Competition of IBNC-2015 on the basis of the two day workshop was held
- 3. In this competition, two winners of Central University of Haryana competed at IIT Delhi in March 2015 in association with IBNC India and ACES ACM-IIT Delhi
- 4. Two Day Workshop on "Android Application Development" by Experts from i3indya Technologies on 12-13 February 2016

- 5. One day "Python workshop-Beginners Level" organized by Department of Computer Science on 4th Feb 2017
- 6. A 1 day PhP workshop has been planned for month of March 2017
- 7. 1 day "Python workshop-Intermediate level" has been planned for month of April 2017

#### **Highlights and & Achievements**

- 1. Mr. Jeetam Singh and Mr. Prince have been selected at Reppify India Pvt. Ltd. For training cum placement program.
- 2. Mr. Mandeep has been selected for 6 month internship at ISRO Ahmedabad.
- 3. 9 students are going to C-DAC Mohali for 6 month internship for working on current technologies JAVA and Big Data.
- 4. Mr. Ram Kumar Gupta (MCA 1st Year) won the FIRST PRIZE in open competition on the topic "TOUR AND TRAVELS" organised by Dept. of Hotel Management, CUH.
- 5. Ms. Komal Salgotra (MCA 1st year) won the First prize in making the 'Best out of waste' competition on world tourism day 2016.
- 6. Mr. Abhishek (MCA 1st year) has won the second prize in collage making competition on world tourism day 2016.
- 7. Students from MCA 1st year have conducted various training programs in nearby villages and schools for promoting Cashless India.
- 8. Two winners of Central University of Haryana competed at IIT Delhi in March 2015 in Mega Competition of IBNC-2015 in association with IBNC India and ACES ACM-IIT Delhi.
- 9. One student among them was the finalist and had been offered free internship program by the organizers.
- 10. Mr. Deepak (MCA 3rd sem) and Mr. Rahul (MCA 5th sem) actively participated in the plantation drive on 15 August, 2015.
- 11. Mr. Deepak (MCA 3rd sem) participated in one day National Seminar on "Cooperation for Co-operators" held on 13 October, 2015.
- 12. Students have participated in various NSS events, cultural and theatre events, blood donation camps, Swachh Bharat Abhiyan and various plantation drives organized in campus.
- 13. Mr. Pawan, Mr. Pankaj Bhardwaj and Mr. Rahul (MCA 5th sem) have participated in a Street Play organized by NSS in the Jant village.
- 14. Mr. Pawan, Mr. Deepak, Mr. Arun (MCA 5th sem) and Mr. Aaquib Bhatt (MCA 3rd sem) won the first prize in a National Level Theatre event and enacted "Jan Se Mann Ki Jai Ho" play organized at G.D. Goenka University.
- 15. Mr. Pankaj, Mr. Deepak Kumar and Mr. Pawan (MCA 5th sem) donated blood in a Blood Donation Camp at Chaudhary Ranbir Singh University, Jind.
- 16. Mr. Pankaj, Mr. Pawan and Mr. Rahul (MCA 5th sem) participated in a play "Janmotsav" organized on Hindi Diwas at CUH.
- 17. Students have participated as volunteers in various activities conducted by Legal Aid Clinic, Women Empowerment Cell during the last three years.
- 18. Mr. Pawan and Mr. Deepak (MCA 5th sem) have been part of various Sports Activities conducted in the universities.

#### **Future Roadmap**

- 1. Smart class rooms
- 2. MCA integrated 5 –year may be started
- 3. Research Programmes Ph.D., M. Tech., M.Phil.
- 4. One industrial tour per semester
- 5. Workshops/Seminar/Conference per semester
- 6. Certified Lab



Photo of One Day Workshop on "Python-Beginners' Level" on 4th February 2017 in collaboration with Python express Society.

Photos of Two Day Workshop on "Android Application Development" on 12-13 February 2016 in collaboration with i3indya Technologies.



# SCHOOL OF PHYSICAL AND MATHEMATICAL SCIENCES

Department of Physics
Department of Statistics
Department of Mathematics

# SCHOOL OF PHYSICAL AND MATHEMATICAL SCIENCES

- Department of Physics
- Department of Statistics
- Department of Mathematics

# **Department of Physics**

The department of Physics was established in 2013 as a part of School of Physical and Mathematical Sciences (SPMS). It offers a postgraduate (M.Sc. Physics) programme and a Ph.D (via Central University Common Entrance Test) programme even though the admission to Ph.D. Programmes are yet to be made. The syllabi of the department have been updated recently to make it more dynamic, focused and vibrant to cater to the needs of the modern learning community and to equip them to face challenges and compete globally. The Department completely follows the Choice Based Credit System. We have a student to teacher ratio of 10:1. The department shall be proposing a 5-year Integrated M.Sc. (Physics) Programme.

#### **Teaching Posts Sanctioned and Filled:**

Name of the Post	Sanctioned	Filled
Professor	1	1*
Associate Professor	2	1**
Assistant Professor	4	3*
Others		1#

<sup>\*</sup>Contractual; \*\*Deputation;=Visiting Faculty

#### **Diversity of Teaching Staff**

Percentage of faculty who are graduates (Ph.D.)	Percentage
of this university	Nil
from other universities within the State	Nil
from universities from other States	100%
from universities outside the country	Nil

#### Student's Statistics for M.Sc. (Physics) Programme

Academic No. of Applications Received (for admission		Sele	Selected		Pass Percentage	
Session	through CUCET)	Male	Female	Male	Female	
2013-14	156	4	5	100	100	
2014-15	1666	19	11	100	100	
2015-16	1836	14	16	100	100	
2016-17	3021	19	10	Result awaited	Result awaited	

#### **Student's Statistics for Ph.D. Programme in Physics:**

Academic Session	No. of Applications Received (for admission through CUCET)	Selected		Pass Percentage	
Academic Session		Male	Female	Male	Female
2016-17	245	Nil	Nil	NA	NA

#### **Programmes Offered**

We offer two programmes

- 1. Masters of Science (M. Sc.)
- 2. Doctor of Philosophy (Ph. D.).

#### **Programme Outcomes**

Student passing out of department of Phyics will have:

- 1. An ability to apply knowledge of Physics and science.
- 2. An ability to design and conduct experiments, as well as to analyze and interpret data.
- 3. An ability to design a system, components, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability.
- 4. An ability to function on multidisciplinary teams.
- 5. An ability to identify, formulate, and solve Physics problems.
- 6. An understanding of professional and ethical responsibility
- 7. An ability to communicate effectively
- 8. A recognition of the need for and an ability to engage in life-long learning
- 9. A knowledge of contemporary issues
- 10. An ability to use the techniques, skills, and modern physical tools

#### **Number of Seats**

Course Offered	No of Seats
M.Sc. (Previous)	30
M.Sc. (Final)	30
Ph.D.	02

#### **Scheme of the Programme**

M.Sc. (Physics) under Choice Based Credit System (CBCS)

#### **Course Type**

- Core Course (CC)
- Generic Elective Course (GEC)
- Discipline Centric Elective Course (DCEC)
- Skill Enhancement Elective Course (SEEC)

#### Semester I

Course	Course Code	Credits	Course Type
Mathematical Methods in Physics	SPMS PHY 01 101 CC 3104	4	CC
Classical Mechanics	SPMS PHY 01 102 CC 3104	4	CC
Quantum Mechanics	SPMS PHY 01 103 CC 3104	4	CC
Laboratory I	SPMS PHY 01 104 CC 0066	6	CC
Numerical Methods and Programming	SPMS PHY 01 101 GEC 3104	4	GEC*
Modern Optics	SPMS PHY 01 102 GEC 3104	4	GEC*
<b>Introduction to Experimental Physics</b>	SPMS PHY 01 103 GEC 3104	4	GEC*
Seminar Presentation I	SPMS PHY 01 101 DCEC 0202	2	DCEC

#### Semester II

Course	Course Code	Credits	Course Type
Statistical Mechanics	SPMS PHY 01 201 CC 3104	4	CC
Classical Electrodynamics	SPMS PHY 01 202 CC 3104	4	CC
Electronics	SPMS PHY 01 203 CC 3104	4	CC
Laboratory II	SPMS PHY 01 204 CC 0066	6	CC
Latex for Science & Mathematics	SPMS PHY 01 201 GEC 3104	4	GEC*
<b>Environmental Physics</b>	SPMS PHY 01 202 GEC 3104	4	GEC*
<b>Computational Physics</b>	SPMS PHY 01 201 DCEC 3104	4	DCEC
Advanced Quantum Mechanics I	SPMS PHY 01 202 DCEC 3104	4	DCEC
Seminar Presentation II	SPMS PHY 01 203 DCEC 0202	2	DCEC

This GEC\* course can only be taken by the students of other departments. The department may offer more than one elective courses depending on specialization and strength of faculty members, and the student has to opt one of them.

#### **Semester III**

Course	Course Code	Credits	Course Type
Atomic, Molecular Physics and Laser	SPMS PHY 01 301 CC 3104	4	CC
Nuclear & Particle Physics	SPMS PHY 01 302 CC 3104	4	CC
Solid State Physics	SPMS PHY 01 303 CC 3104	4	CC
Laboratory III	SPMS PHY 01 301 DCEC 0066	6	DCEC
<b>Physics of Electronic Material and Devices</b>	SPMS PHY 01 302 DCEC 3104	4	DCEC
<b>Electronic Communication</b>	SPMS PHY 01 303 DCEC 3104	4	DCEC
Thin Film and Integrated Devices	SPMS PHY 01 304 DCEC 3104	4	DCEC
Laser & Spectroscopy	SPMS PHY 01 305 DCEC 3104	4	DCEC
Microprocessor and Microcontroller	SPMS PHY 01 306 DCEC 3104	4	DCEC
Physics of Nanomaterials	SPMS PHY 01 307 DCEC 3104	4	DCEC
<b>Nuclear Physics: Interaction and Model</b>	SPMS PHY 01 308 DCEC 3104	4	DCEC
Advanced Quantum Mechanics II	SPMS PHY 01 309 DCEC 3104	4	DCEC
<b>Advanced Statistical Mechanics</b>	SPMS PHY 01 310 DCEC 3104	4	DCEC

#### **Semester IV**

Course	Course Code	Credits	Course Type
Project/Dissertation	SPMS PHY 01 401 PROJ 00024	24	PROJECT
Nonlinear Dynamics	SPMS PHY 01 402 SEEC 3100	_	SEEC
Astrophysics, Gravitation and Cosmology	SPMS PHY 01 403 SEEC 3100	_	SEEC

Ph.D. (Physics) according to Choice Based Credit System (CBCS)

#### **Course Type**

- Core Course (CC)
- Discipline Centric Elective Course (DCEC)

**Total Credits: 20 [four course each of 5 credits]** 

#### Semester I

Course	Course Code	Credits	Course Type
Research Methodology and Computer Applications	SPMS PHY 02 101 CC 4105	5	CC
Tools and Techniques	SPMS PHY 02 102 CC 4105	5	CC
	Group A		
Advanced Statistical Physics	SPMS PHY 02 101 DCEC 4105	5	DCEC
<b>Special Topics in Condensed Matter Physics</b>	SPMS PHY 02 102 DCEC 4105	5	DCEC
Nonlinear Dynamics	SPMS PHY 02 103 DCEC 4105	5	DCEC
Stochastic Phenomena	SPMS PHY 02 104 DCEC 4105	5	DCEC
Nanotechnology and Ion beam	SPMS PHY 02 105 DCEC 4015	5	DCEC
Semiconductor Physics	SPMS PHY 02 106 DCEC 4015	5	DCEC
Nonlinear Optics	SPMS PHY 02 107 DCEC 4105	5	DCEC
	Group B		
<b>Computational Physics</b>	SPMS PHY 02 107 DCEC 4015	5	DCEC
<b>Experimental Methods</b>	SPMS PHY 02 108 DCEC 4015	5	DCEC

The courses (1) Research Methodology and Computer Applications and (2) Tools and Techniques are compulsory. From the aforesaid Discipline Centric Elective Courses (DCEC), any two subject specific papers, one paper each from Groups A and B, have to be taken.

The department may offer more than one elective courses depending on specialization and strength of faculty members, and the student has to opt one of them.

Admission criteria and procedure

Course	Eligibility	Number of seats
Master of Science (Physics)	B. Sc. (Hons.) physics from any recognized Indian or foreign university (foreign recognition to be as per AIU list) with 50% or above marks or equivalent grade in aggregate.	30
	Graduation in any branch of Science or Engineering with Physics and Mathematics as two of the Subjects of study with 55% or above marks or equivalent grade in aggregate.  A candidate shall be eligible for admission to the Ph.D. programme, if he/she has qualified Master's Degree in the subject concerned/allied/cognate subjects at least 55% marks in aggregate.	
Ph.D.	The candidate shall appear for a written test conducted by the University to be followed by an interview to be conducted by the concerned Department, which shall carry weightage of 80% & 20% respectively. The candidates who have qualified UGC/CSIR/JRF/NET/SLET or are Teacher fellowship holders or have passed M.Phil. Programme with course work recognized by the UGC as per UGC regulations (Minimum standards and procedure for award of M.Phil./Ph.D. degree, 2009) shall be exempted from appearing for the written test. Such applicants will, however, be required to appear for the personal interview. In case of candidates exempted from the written test, the interview shall carry 100% weightage.	02

#### **Faculty profile**

#### 1. Prof. Nawal Kishore

Date of Birth: 13.10.1954

Institution : Department of Physics

Central University of Haryana, Mahendergarh – 123031 (Haryana) INDIA

E-mail: nks54@rediffmail.com; Mob. 09416051041

#### **Academic Qualifications:**

Sr. No.	Degree	Year	Division	University/Institution
1.	Hr. Sec-I	1970	Ist	Board of School Education, Haryana
2.	Hr. Sec-II	1971	Ist	-do-
3.	B.Sc.	1974	Ist	Panjab University
4.	M.Sc.	1976	Ist	K.U.Kurukshetra
5.	Ph.D.	1983	-	IIT Delhi, New Delhi-110016

#### Award/Prize/Certificate etc. won:

Won Merit Certificates for getting third rank in order of merit in M.Sc. in the University and first in B.Sc. in college.

#### **Topic of Ph.D. Thesis:**

MOSSBAUER SPECTROSCOPIC AND OTHER PHYSICAL STUDIES IN SODIUM AND BARIUM BORATE GLASSES CONTAINING IRON

#### **Professional Career:**

Sr. No.	Position held	Duration	University/Institution	
1.	Lecturer	1980-81	Govt. College, Narnaul (Haryana)	
2.	Lecturer	1981-82	Govt. College, Mahendragarh	
3.	Lecturer	1982-86	Govt. College, Narnaul	
4.	Lecturer	1986-90	M.D.University, Rohtak	
5.	Reader	1990-2001	M.D.University, Rohtak	
6.	Professor	2001-2014	G.J.U. of Science & Technology, Hisar	
7.	Professor	2014-2015	CBLU, Bhiwani (After retirement from GJUS&T)	
8.	Professor	2015-	CUH, Mahendergarh	

#### **Foreign Assignments:**

- 1. Provided guidance to Ph.D. students of Yangon University, Myanmar during my visit to that University for the period March 15 to April 11, 2005 and Nov.11 to Dec. 11, 2005. Visits were sponsored by Govt. of India through Ed CIL under Indian Assistance to Ph.D. programme.
- 2. Visited USA for presenting a paper entitled Comparison between Stimulated Raman and Brillouin Scattering Processes in Magnetized Doped III V Semiconductors during International Symposium on Lasers and Applications in Science & Engineering held at San Jose Convention Center (USA) from January 20-25, 2007.
- 3. Visited Muscat (Oman) to represent GJUS&T, Hisar in India Education Fair- 2009 held at Muscat Holiday Hotel during Oct.24-26, 2009.
- 4. Visited Bangkok and Pattaya (Thailand) for participation in international study tour/academic networking event on 'Capacity Building for excellence in Higher Education' held on June 22nd to 26th, 2014 under TEQIP-II.

#### **Administrative Experiences**

- 1. **Convenor**, Purchase Committee, CUH, Mahendergarh. Year 2015-16
- 2. **Convenor**, Rate Contract Committee, CUH, Mahendergarh. Year 2015-16
- 3. **Convenor**, Centre for Innovation, Skill, Employment and Enterpreneurship Development cell (CISED), CUH, Mahendergarh. Year 2015-16
- 4. **Convenor**, Ethical Committee, CUH, Mahendergarh. Year 2016-17
- 5. **Convenor**, Rashtriya Avishkar Abhiyan Club, CUH, Mahendergarh. Year 2015-16
- 6. **Advisory Board Member**, Journal of Central University of Haryana (JCUH), CUH, Mahendergarh. Year 2014-16
- 7. **Teacher-in Charge**, Department of Physics, CUH, Mahendergarh. July 2015-September 2015.

Field of Specialization: Materials Science, Thin Films, Optical Characterization & Spectroscopy

#### **Research Projects:**

No.	Title	<b>Funding Agency</b>	Duration	Amount
1	Electronic and Photo electronic Properties of Modified Amorphous Semiconductors (PI)	DST, New Delhi	3 years (1999-2003)	Rs.17.33. lacs
2	Study of Electronic & Optical Properties of Ion Irradiated Semi-Conductors (Co-PI)	NSC-UGC	4 years (1990-94)	Rs. 1.06 lacs
3	Electronic and Optical Properties of Modified Semiconducting Materials (PI)	UGC	3 years (2003-06)	Rs. 5.34 lacs
4	Study of Electron Paramagnetic Resonance, Electrical and Optical Properties of Oxide Glasses (Co-PI)	UGC	3 years (2004-07)	Rs. 6.06 lacs
5	Development and characterization of Optical Materials for Photonic Systems and Devices (PI)	DRDO	3 years (2008-11)	Rs.4.98 crores
6	Synthesis and Characterization of Nanocomposites / Microcrystallites based glass (PI)	DRDO	3 years (2009 - 12)	Rs. 14.91 lacs
7	Studies on base line radioactivity in environment matrices around nuclear power plant site in Haryana (PI)	DAE-BRNS	3 years (2009-14)	Rs. 16.05 lacs
8	Study of Thermal Electrical and Structural Properties of conducting polymers (Co-PI)	UGC	3 Years (2012 15)	Rs. 10.04 lacs

#### **Departmental Projects**

- 1. DST-FIST (Chairman) funded by DST for 5 years (2006–11) worth Rs. 40 lacs.
- 2. SAP (Member) funded by UGC for 5 years (2007–12) worth Rs. 20 lacs

#### **Courses Taught:**

1. Undergraduate:

Properties of matter, heat and thermodynamics, electricity and magnetism, modern physics, optics, sound, waves and oscillations.

2. Post Graduate:

Classical mechanics, Electronics, Solid State Theory, Statistical Mechanics, Spectroscopy, Quantum Mechanics, Materials Science, Condensed Matter Physics, Nuclear and Particle Physics, Atomic and Molecular Physics.

Pre- Ph.D. Course:

Experimental / Analytical Techniques, Research Methodology

#### Radio talks delivered

Delivered talks on nuclear pollution at AIR Rohtak Station and another talk on Agni Missile.

#### **TV Programmes**

3.

- 1. Delivered programmes on LASER's on DD Hisar
- 2. Delivered TV Programme on Atomic Energy on DD Hisar on 07-10-2008.
- 3. Delivered TV Talk on Glasses- An Introduction on DD Hisar on 29-02-2008.
- 4. Delivered TV Talk on Time Machine on DD Hisar
- 5. Delivered TV Talk on Nano Science and Nano Materials, which has been telecast on D.D. Hisar a number of times in 2009 onwards.
- 6. Delivered two lectures on Crystalline and Amorphous Solids which were telecast as EDUSAT lectures for B.Sc. students by DHE, Haryana.

#### **Research Guiding Experience:**

Ph.D.: Awarded: Twenty One (21); Thesis Submitted: Two

M.Phil: 4

#### **Publications**

1. Research Papers in Journals of International Repute: More than 90

2. Research Papers in Conferences/ Symposia: More than **100** (a) Full papers: More than **15** (b) Abstracts: More than **85** 

3. Books Published: 12

#### Symposia/Conferences/Workshops/Programmes Organised

(a) As Convenor/Chairman/Director

- 1. Organised Faculty Development Programme under TEQIP-II on September 20-28, 2013.
- 2. Organised Staff Development Programme under TEQIP-II on September 26-27, 2013
- 3. Organised Technical Staff Development Programme under TEQIP-II on Sep 27-28, 20134. Organised Workshop on Vacuum, Plasma and Thin film deposition techniques November 24-25, 2014 at CBLU, Bhiwani.
- (b) As Member: National Conference on Photonics and Material Science held by the Deptt. of Applied Physics, GJUS&T, Hisar on March 20-21, 2014.

#### 2. Dr. Aditya Saxena

Associate Professor and Head Department of Physics
Department of Physics Deshbandhu College
Central University of Haryana University of Delhi
Mahendergarh-123029 Kalkaji
Haryana New Delhi-110019



#### **Academic Qualifications: -**

- 1. Ph.D. in Physics from University of Delhi, Degree awarded in March 2005.
- 2. Masters in Physics from Ramjas College, University of Delhi (1998) with first division (61.7%).
- 3. B.Sc. (Hons.) in Physics from Ramjas College, University of Delhi (1996) with first division (68.9%).

#### Research:-

- 1. Total No of Publications: 23
- 2. Chapters in Book: 1
- 3. No. of Books Edited: 11

#### Responsibilities and Contribution to Corporate Life: -

- 1. Coordinator, Deen Dayal Upadhyay Kaushal Kendra, Central University of Haryana, since 17.08.2016
- 2. Director, Internal Quality Assurance Cell, Central University of Haryana, since 17.08.2016
- 3. Editor-in-Chief, University Newsletter-2016, Central University of Harvana
- 4. Editor, Science Section, University Magazine Aditi-2016, Central University of Haryana
- 5. Convener, University Prospectus Committee-2016, Central University of Haryana
- 6. Convener, Online Admission Committee-2016, Central University of Haryana

- 7. Superintendent of Examination, Semester end Examination May-2016, Department of Physics, Central University of Haryana
- 8. Member, Organizing Committee, Annual Cultural Festival-SPANDAN-2016, Central University of Haryana
- 9. Organizing Secretary, National Science Day Celebrations-2016, Central University of Haryana
- 10. Member, Organizing Committee, University Convocation-2016, Central University of Haryana
- 11. Superintendent of Examination, Semester end Examination December-2015, Department of Physics, Central University of Haryana
- 12. Member, NAAC Preparatory Committee, Central University of Haryana, for the academic sessions 2015-2017
- 13. Member, Academic Council, Central University of Haryana, since October 2015
- 14. Head, Department of Physics, Central University of Haryana, since October 2015
- 15. Co-Convener Antardvani-2015 Organizing Committee, ILLL
- 16. Member Antardvani-2014 Organizing Committee, ILLL
- 17. Member Antardvani-2013 Organizing Committee, ILLL

#### **Professional Development Activities and Academic Committees:**

- 1. **Member Expert in Physics** of the UGC constituted committee for Choice Based Credit System (CBCS) at Undergraduate Level
- 2. **Member** Implementation and Monitoring Committee for MOOCs Content, Consortium for Educational Communication (CEC), UGC
- 3. **Member** Committee for Services of Media Centres in e-content development for PG subjects under e-PG Pathshala, Consortium for Educational Communication (CEC), UGC
- 4. **Resource Person** "Field Trial of Training Package in Physics at higher Secondary Level", DESM, NCERT, 23-27<sup>th</sup> March, 2015.
- 5. **Member Organizing Committee** Workshop on "*Reproductive biology of Angiosperms*" 16<sup>th</sup>-17<sup>th</sup> March 2015.
- 6. **Resource Person** "Field Trial of Training Package in Physics at higher Secondary Level", DESM, NCERT, 16-20<sup>th</sup> February, 2015.
- 7. **Resource Person** "Field Trial of Training Package in Physics at higher Secondary Level", DESM, NCERT, 26-28th November, 2014.
- 8. **Jury Member** *INSPIRE AWARD National Level Exhibition and Project Competition* (*NLEPC*)- 2014, October 6-8, 2014 organized by Department of Science and Technology, Government of India.
- 9. **Resource Person** "Field Trial of Training Package in Physics at higher Secondary Level", DESM, NCERT, 11-13<sup>th</sup> August, 2014
- 10. **Resource Person** "Development of Training Package in Physics at higher Secondary Level", DESM, NCERT, 10-14<sup>th</sup> March, 2014.
- 11. **Invited Speaker** on e-Content Development under 4-Quadrant approach for Workshop of Paper Coordinators under e-PG Pathshala in 'Comparative Literature', 'Microbiology', and 'Russian Studies'.
- 12. **Member** Committee of Courses, Department of Physics and Astrophysics, Delhi University for the academic session 2013-2014
- 13. **Member Organizing Committee** "Biology and Technology of Cultivable Mushrooms" 18-19<sup>th</sup> February, 2014.

- 14. **Jury Member** *INSPIRE AWARD National Level Exhibition and Project Competition* (*NLEPC*)- 2013, October 8-10, 2013 organized by Department of Science and Technology, Government of India.
- 15. **Member Organizing Committee** Lecture by Dr Pradip Bhatnagar, President Daiichi Sankyo Life Sciences Research Center, India on "Opportunities in Drug Discovery" 22<sup>nd</sup> March, 2013, ILLL, UDSC.
- 16. **Member Organizing Committee** Workshop on "*Intellectual Property Rights*" 21<sup>st</sup> March, 2013, ILLL, UDSC.
- 17. **Jury Member** *INSPIRE AWARD National Level Exhibition and Project Competition* (*NLEPC*)- 2012, October 21-23, 2012 organized by Department of Science and Technology, Government of India.
- 18. **Resource Person** *INSPIRE Internship Programme-2012*, October 1-5, 2012 organized by Deshbandhu College, Delhi University and Department of Science and Technology, Government of India.

#### Faculty Recharge and Training Programmes:-

- 1. **14<sup>th</sup> Refresher Course in Physics,** UGC-ASC,Jawaharlal Nehru University 22<sup>nd</sup> September-17<sup>th</sup> October, 2014. Grade: A
- 2. **101**st four week Orientation Programme, UGC-ASC, Jamia Millia Islamia University 16th July-13th August, 2012. Grade: A

#### **Teaching History:-**

- 1. Teaching M.Sc. Physics students at Central University of Haryana, Mahendergarh, Haryana since 18th September, 2015 as **Associate Professor.**
- 2. Teaching B.Sc. (Hons.) Physics and B.Sc. (Prog.) Physical Science and Applied Physical Science students at Deshbandhu College, University of Delhi, from 1<sup>st</sup> September, 2015 to 18<sup>th</sup> September, 2015 as **Assistant Professor.**
- 3. On deputation as **Fellow Special Projects (Physics)**, Institute of Life Long Learning, South Campus, University of Delhi from 26<sup>th</sup> October, 2012 to 31<sup>st</sup> August, 2015 and involved in e-content creation for the undergraduate courses of Delhi University.
- 4. Teaching B.Sc. (Hons.) Physics and B.Sc. (Prog.) Physical Science and Applied Physical Science students at Deshbandhu College, University of Delhi, from 3<sup>rd</sup> September, 2010 to 26<sup>th</sup> October, 2012 as **Assistant Professor.**
- 5. Taught B.Sc. (Hons.) Physics and B.Sc. (Prog.) Physical Science and Applied Physical Science students at Ramjas College, University of Delhi, from 16<sup>th</sup> July, 2004 to 3<sup>rd</sup> September, 2010 as **Assistant Professor.**
- 6. Taught B.Sc. (Hons.) Electronics (Part-I) and B.Sc.(G) Group-A and Electronics (Part-I) students at SGTB Khalsa College, University of Delhi, for three and half months (1st August 2003 -18th November 2003) as an **Ad-hoc Lecturer.**
- 7. Taught B.Sc. (Gen.) (Part-II) students as **Guest Lecturer** in Swami Shraddhanand College, University of Delhi, for one month (09.02.2001-12.03.2001).

#### **Achievements and Awards: -**

- 1. **Teaching Excellence Award for Innovation** by Delhi University, 2015
- 2. Certificate of Appreciation for Best Innovative Idea for Innovation Project DBC-205 entitled 'A Study of Crop Yield pattern with Climate Change based on various Physical Parameters like Temperature, Rainfall, Humidity, Greenhouse Gases Emission, etc. in

Western Uttar Pradesh to make future predictions for better Crop Management and Yield' as its **PI** by Delhi University, 2015

- 3. Awarded **CSIR-UGC SRF** in Jan. 2002.
- 4. Qualified **CSIR-UGC NET** in June 1999.

#### Title of Ph.D. Thesis:

Ground State Properties Of Bose-Einstein Condensate Of Different Assemblies Of Gaseous Bosonic Atoms Confined In An Anisotropic And Isotropic Magnetic Trap In The Presence Of Two-Body And Three-Body Interactions

#### Name of supervisors:

1. Prof. S. P. Tewari 2. Dr. Poonam Silotia

#### 3. Dr. Hempal Singh

Position: Assistant Professor

Area: Physics

Email: physics.hempal@gmail.com

Mob. No. 9719616207

#### **Educational Qualifications**

- 2016Ph. D., Physics Indian Institute of Technology (IIT) Roorkee Title of Thesis: Optical Properties of High T<sub>c</sub> Superconductors Supervisor: Prof. B. D. Indu, Department of Physics, IIT Roorkee. Awarded On: 09 May 2016.
- 2. M. Sc. 2007, NREC College Khurja, CCS University Meerut with first division.
- 3. **B. Sc. 2005,** JV Jain College Saharanpur, CCS University Meerut with first division.
- 4. **Intermediate 2002,** MD Inter College Saharanpur, UP Board Allahabad with first division.

#### Honors and Awards/Fellowships

- 1. GATE (Graduate aptitute test for engineering) 2009.
- 2. JRF (Junior research fellow, MHRD) July 2009 to July 2011.
- 3. SRF (Senior research fellow, MHRD) from July 2011 to July 2014.
- 4. Funding provided by The Abdus Salam International Centre for Theoretical Physics (ICTP) to present a research paper in a conference at Trieste, Italy during 28 Sep-2 Oct 2015.

#### **Academic Affiliation**

**Assistant Professor** 

September 07, 2016-present.

Department of Physics, Central University of Haryana, Jant-Pali, Mahendergarh, Haryana Pin: 123031.

#### **Course Taught & Responsibilities**

- 1. Mathematical Methods in Physics (M. Sc.).
- 2. Electromagnetic Theory (B.Tech.).
- 3. Modern Physics (B.Tech.).
- 4. M. Sc. I, Practical Lab.
- 5. B. Tech. I, Practical Lab.

#### Research Interest

Major Research Area

Theoretical Condensed Matter Physics.



#### **Specialized Area of Research**

- 1. Theoretical Study of High Temperature Superconductors,
- 2. Study of the Effects of Defects, Impurities and Anharmonicities on Dynamical Properties of High Temperature Layered Superconductors; namely, Optical Properties of High Temperature Superconductors,
- 3. Role of Interacting Potentials in High Temperature Superconductors.

#### **Research Publications**

1. Theory of Electron Density of States of Impurity Induced Anharmonic High Temperature Superconductors.

**Hempal Singh,** Anu Singh, Vinod Ashokan and B.D. Indu Advances in Materials Physics and Chemistry, Vol. 2, pp. 249-254, 2012.

2. Theory of Electronic Heat Capacity of High Temperature Superconductors.

Anu Singh, Hempal Singh and B.D. Indu

International Journal of Science and Advanced Technology, Vol. 2, pp. 51-55, 2012

3. Signature of Anharmonicities in High Temperature Superconductors.

**Hempal Singh**, Anu Singh, Vinod Ashokan and B.D. Indu Indian Journal of Applied Research, Vol. 3, pp.35-38, 2013.

4. Anharmonicity and Impurity Effects on Infrared Absorption in High Temperature Superconductors

Hempal Singh and B.D. Indu

International Journal of Physics, Vol. 4, pp.43-49, 2016.

5. Electrons and Phonons in High Temperature Superconductors.

Anu Singh, **Hempal Singh**, Vinod Ashokan and B.D.Indu Journal of Materials, Vol. 1, pp.1-4, 2013.

6. The Born-Mayer-Huggins Potential in High Temperature Superconductors

Hempal Singh, Anu Singh and B.D. Indu

Modern Physics Letters B, Vol. 30, pp. 1650283.1-1650283.10, 2016.

7. The Electronic Heat Capacity of Superconductor

Anu Singh, Hempal Singh, and B. D. Indu

AIP Advances, Vol. 6, pp. 075102.1-075102-9, 2016.

#### **Paper Presented in Conferences**

- 1. International Conference on Frustration, Disorder and Localization: Statics and Dynamics at The Abdus Salam International Center for Theoretical Physics (ICTP), Trieste, Italy, 28 September 2 October, 2015. (Poster Presentation)
- 2. International Conference on Theoretical and Applied Physics., IIT-Kharagpur, 1-2 December, 2011. (Poster Presentation)
- 3. International Conference on Material Science and Technology, St. Thomas College Pala Kerala, 10-14 June, 2012. (Poster Presentation)
- 4. International Conference on Material Science and Technology, St. Thomas College Pala Kerala, 10-14 June, 2012. (Oral Presentation)
- 5. National Conference on Advances in Physics, IIT-Roorkee, 25-26 Feb,2012.(Poster Presentation).

#### Work Shop, Short Course, Mini-Colloquium attended

- 1. QIP workshop on "Novel correlated electronic materials" on 8th March 2014 at IIT Roorkee.
- 2. Short course on Nanoelectronics on "Nanotechnology Journey from QuantumPhysics to Nanoengineering" on 2nd April 2014 at IIT-Roorkee.
- 3. IEEE-ED Mini-Colloquium on "Nanoscale Device Physics and Reliability" schedule on 19th Sept., 2014 at IIT-Roorkee.
- 4. A Workshop on "Checking of Plagiarism in Scientific Writing using Turnitin Software" Organized by IIT-Roorkee, held at IIT-Roorkee on April 17, 2015.
- 5. Participated in the Indian Physics Association (IPA) Lecture Series and Delivered a talk at the Department of Physics IIT-Roorkee, August 31, 2012.

# **Professional Memberships:**

- 1. Life Time Member of Indian Physics Association (IPA).
- 2. Life Time Member of International Association of Computer Science and Information Technology (IACSIT).
- 3. Life Time Member of Asia-Pecific Chemical, Biological & Environmental Engineering Society (APCBES).
- 4. Membership of Institute of Research Engineers and Doctors (IRED).
- 5. Life Time Member of International Association of Engineers (IAENG).
- 6. Life Time Member of Science and Engineering Institute (SCIEI).

#### **Contribution to the Corporate Life of University:**

- 1. Faculty Advisorof M. Sc. I year students, Department of Physics, CUH.
- 2. Member Board of Studies, Department of Physics, Central University of Haryana.
- 3. Member NAAC Co ordination Committee, Department of Physics, CUH.
- 4. Member Time Table Committee, Department of Physics, CUH.
- 5. Exam Coordinator of End-Semester Examination.
- 6. Internal Examiner of M.Sc. I, Practical Exam, Department of Physics, CUH

#### 4. Jaswant Kumar

Department of Physics

Central University of Haryana, Jant-Pali, Mahendergarh

Email(s) jaswantkyadav@cuh.ac.in



#### **Academic Qualification**

S. No	Degree	Year	Subject	University	% of marks
1	B.Sc. (Hons)	2001	Physics	Delhi University	67.77
2	M.Sc.	2003	Physics	Delhi University	65.90
3.	Ph.D.	2009	Astrophysics/Physics	Delhi University	-

#### Ph.D

Thesis Title	Guides' Name	University	Year of Award
Nature of Clustering of Large Scale Structures	T. R. Seshadri (Prof.)	Delhi University	2009

#### **Work Experience**

S. No.	Positions Held	Name of Institute	From	То
1.	Postdoctoral Research Fellow	Harish-Chandra Research Institute, Allahabad	15-12-2008	07-01-2010
2.	Postdoctoral Research Fellow	Korea Institute for Advanced Studies – Seoul, Korea	18-1-2010	29-02-2012
3.	Postdoctoral Research Fellow	National Astronomical Observatories-CAS, Beijing, China	01-03-2012	31-08-2014

#### **Selected Publications**

S. No.	Author(s)	Title	Name of Journal	Impact Factor	Volume	Page	Year
1.	K Masui et al. including Jaswant K. Yadav	Dense magnetised plasma associated with a fast radio burst	Nature	38.5	528	523	2015
2.	Jaswant K. Yadav, J.S. Bagla, Nishikanta Khandai	Fractal Dimension as a measure of scale of Homogeneity	Monthly Notices of Royal Astronomical Society (MNRAS)	5.1	405	2009	2010
3.	P. Sarkar, <b>Jaswant Yadav</b> , B. Pandey, S. Bharadwaj	The scale of Homogeneity of Galaxy distribution in SDSS DR6	MNRAS	5.1	399	128	2009
4.	J. S. Bagla, Jaswant Yadav, T. R. Seshadri	Fractal Dimension of a weakly clustered distribution and the scale of Homogeneity	MNRAS	5.1	390	829	2008
5.	Jaswant Yadav, S. Bharadwaj, B. Pandey, T. R. Seshadri	Testing Homogeneity on Large scales in SDSS Data Release One	MNRAS	5.1	364	601	2005

#### 5. Dr. Maheshwary

Assistant Professor Department of Physics Central University of Haryana Mahendergarh, Haryana, India. Pin- 123029

Email: maheshwarysingh@gmail.com,

mahe shwary physics@cuh.ac.in

Phone: +91-9407265025

#### **Educational Qualifications**

PhD awarded on 11th Apr, 2016, Physics, Dr. H. S. Gour University, India

Thesis Title: Synthesis and Luminescent Properties of Some Rare Earth Doped Nanophosphors" Thesis Advisor: Prof. R. A. Singh

#### **Areas of Research:**

- 1. Experimental nanotechnology.
- 2. Synthesis of nanomaterials using Chemical Route and study of optical properties of different luminescent nanomaterials.



3. Study of effect on the Luminescent properties of nanomaterials doped with rare earth elements.

#### **Technical Skills:**

- 1. X- ray diffraction measurement and Data analysis.
- 2. PL measurement and Data analysis.
- 3. Raman Spectroscopy via Micro Raman (Renishaw)
- 4. FTIR Spectroscopy by (FT-IR) spectrophotometer (Shimadzu model 8400 S)
- 5. UV-Vis Spectroscopy by UV-Vis Spectrophotometer (Model SL-196) and Data Interpretation.
- 6. High energy planetary ball mill (Model pulverisette 7, Fritsch, Germany).
- 7. Differential Scanning Calorimetry (DSC) and Thermogravimetric Analysis (TGA)

#### Awards, Recognitions and Fellowships:

- 1. Graduate Aptitude Test in Engineering (GATE) qualified (2011).
- 2. Central Research Fellowship (JRF) (From July, 2013 Jan 2015).
- 3. Invited lecture on "Career Opportunity and Guidance in Biotechnology, Industrial Chemistry, Physics and All Science Subjects" Noble College, Sagar, MP, on 15th Feb.2014.

#### **List of Publication in Journals and Proceedings:**

- 1. Papers published in International Refereed Journals (4)
- 2. International and National Conferences and Workshops attended (8)

#### **Contribution in the corporate life of University:**

- 1. Exam Coordinator of End-Semester Examination (Dept. Of Physics), Dec 2016, CUH
- 2. Member, Board of Studies, Department of Physics, Central University of Haryana (Session 2016-17).
- 3. NAAC Coordination Committee- Member.
- 4. Member, Admission Committee of B. Tech Courses.

#### **Department Infrastructure**

Books	Central Library has a good collection of textbooks and reference books under various courses being offered by Dept. of Physics
Digital Library	E-resources
Internet facilities for staff and students	Yes, the entire campus is Wi-Fi enabled
Total number of class rooms (ICT enabled)	Two
Students' laboratories	Three
Research laboratories	Being established

#### **Research Thrust Area of Department**

- I. Experimental Physics
  - 1. Material Science
  - 2. Condensed Matter Physics
  - 3. Nanoscience and Nanotechnology
  - 4. Astronomy & Astrophysics
- II. Theoretical Physics
  - 1. Material Science
  - 2. Condensed Matter Physics

- 3. Nuclear and Particle Physics
- 4. Astronomy & Astrophysics

#### **Events Organized & Planned**

- 1. Quiz competition organized in November, 2014.
- 2. Visit to Surajkund Fair in Faridabad in February, 2015.
- 3. Science Exhibition for school children (first in the series) in September, 2015.
- 4. Visit to various research laboratories in Inter University Accelerator Centre (IUAC).
- 5. New Delhi and Delhi University (DU), Delhi in November, 2015.
- 6. One of the organizing departments of National Science Day in February, 2016. Extension lectures delivered by the following:
  - a. Prof. Shyam Kumar, Department of Physics, Kurukshetra University Kurukshetra in October, 2014.
  - b. Prof. Vinay Gupta, Department of Physics and Astrophysics, Delhi University in November, 2015.
  - c. Dr. Sundeep Chopra, Inter University Accelerator Centre (IUAC) in November, 2015.
  - d. Prof. Shyam Kumar, Department of Physics, Kurukshetra University Kurukshetra in November, 2015.
- 7. 3-Day Workshop on **Vacuum, Plasma and Thin Film Deposition Techniques** (September 22-24, 2015), CUH in collaboration with TAS Delhi.
- 8. 3-Day Workshop on **Techniques of Materials Processing** (April 27-29, 2016) jointly with Department of Chemistry and in collaboration with TAS Delhi, DU, CEERI-Pilani, KUK.
- 9. Prof. R. P. Tandon, Introductory Talk on **Atomic, Nuclear and High Energy Physics**, 25 July, 2016.
- 10. Dr. R. K. Anayath, Director, Technological Institute of Textile and Sciences, Bhiwani invited Talk on **Applications of Technology in Everyday Life**, 19 September, 2016.
- 11. Prof. Vinay Gupta, Department of Physics and Astrophysics, Delhi University gave a talk on **Bio-Sensors** 07 October, 2016.
- 12. Prof. T. R. Seshadri, Department of Physics and Astrophysics, Delhi University presented a seminar on **A Brief History of Our Universe** 25 November, 2016.

#### **Highlights and Achievements of the Department**

MSc student Ms. Neha Pundir' (Batch 2014-16) cleared CSIR-NET in December, 2015.

#### Research Projects, MOU, Consultancy, Awards, Collaboration, Academic Projects.

#### **Research Projects:**

**MOU:** Two MOU's have been signed with following industries/institutes:

- 1. Technology Application Services (TAS), New Delhi, 2015.
- 2. Central Electronics Engineering Research Institute (CEERI), Pilani, 2015.

Consultancy: Nil

Awards: Nil

**Collaboration:** The department has made research collaborations, in addition to the above-mentioned establishments, with the following:

- 1. Inter University Accelerator Centre (IUAC), New Delhi
- 2. Electronic Materials and Devices Laboratory, Delhi University (DU), Delhi

- 3. Kurukshetra University Kurukshetra (KUK), Kurukshetra
- 4. Indian Institute of Technology (IIT) Roorkee, Roorkee.
- 5. Dr. Hari Singh Gour University, Sagar
- 6. Banaras Hindu University (BHU), Varanasi
- 7. IISER, Mohali
- 8. CITA, Toronto Canada
- 9. CMU, Pittsburgh, USA
- 10. KIAS, Seoul, Korea
- 11. NAOC, Beijing, China
- 12. HRI Allahabad, India

#### **Future Roadmap of the Department**

Physics is a state-of-the-art academic teaching and research area based subject with related fields such as electronics, chemistry and material science. Physics has contributed to the strengthening of the economic competitiveness of industry in our country by resolving many technology related industrial issues.

The future evolution of physics will herald the development of new research areas, sow the seed for further industrial advances, and stimulate the young minds that will inherit and lead the field in the next generation. To realize this, it is necessary to clarify a future vision of physics and related fields and outline the direction of subsequent research whilst considering the needs of future society.

**Proposed Programme:** 5-year Integrated M.Sc. (Physics) Programme.

# **Department of Statistics**

The Department of Statistics was established in 2013 as a part of the School of Physical and Mathematical Sciences as an independent Department. The Department of Statistics at Central University of Haryana has an excellent curriculum of M.Sc. Statistics. The courses are designed to develop a class of analytic and inferential aptitude among the students through rigorous practical assignments.

#### **Programmes Offered**

Master of Science (M.Sc.) in Statistics

#### **Programme Outcome**

- 1. The students will be able to solve the real life problems through the use of computer, statistical software(s).
- 2. The students will have good working knowledge of the statistical modeling and the efficient design of studies and construction of effective sampling plans for solving the real life problems.
- 3. The students will be able to understand an area of applications outside the discipline of statistics.
- 4. The students will be able to apply the knowledge and understanding of the statistical methods and techniques that will motivate them to propose ideas for research.

#### Number of Seats Offered: 15

#### **Scheme of the Program:**

#### **SEMESTER I: Total credits: 24 (CC: 20, GEC: 4)**

S. No.	Course Title	Course Code	Credits	Course Type
1.	Analysis and Linear Algebra	SPMS STAT 01 01 01 CC 4004	4	CC
2.	Statistical Methods	SPMS STAT 01 01 02 CC 4004	4	CC
3.	Probability Theory	SPMS STAT 01 01 03 CC 4004	4	CC
4.	Sampling Techniques	SPMS STAT 01 01 04 CC 4004	4	CC
5.	Practical	SPMS STAT 01 01 05 CC 0044	4	CC
6.	GEC (to be taken from other departments)		4	GEC

#### **Courses for other departments (GEC):**

S. No.	Course Title	Course Code	Credits	Course Type
1.	Interdisciplinary Statistics	SPMS STAT 01 01 01 GEC 3014	4	GEC
2	Programming in R	SPMS STAT 01 01 02 GEC 3014	4	GEC

#### SEMESTER II: Total credits: 24 (CC: 16, DCEC: 4, GEC: 4)

S. No.	Course Title	Course Code	Credits	Course Type
1.	Distribution Theory	SPMS STAT 01 02 01 CC 4004	4	CC
2.	Statistical Inference-I	SPMS STAT 01 02 02 CC 4004	4	CC
3.	Linear Models and Regression Analysis	SPMS STAT 01 02 03 CC 4004	4	CC
4.	Practical	SPMS STAT 01 02 04 CC 0044	4	CC
5.	DCEC		4	DCEC
6.	GEC (to be taken from other departments)			GEC

# Courses for students of M.Sc. (Statistics) only (DCEC):

S. No.	Course Title	Course Code	Credits	Course Type
1.	Reliability Theory	SPMS STAT 01 02 01 DCEC 4004	4	DCEC
2.	Survival Analysis	SPMS STAT 01 02 02 DCEC 4004	4	DCEC
3.	Operations Research and Queuing Theory	SPMS STAT 01 02 03 DCEC 4004	4	DCEC
4.	Statistical Computing using C	SPMS STAT 01 02 04 DCEC 4004	4	DCEC

# Courses for other departments (GEC):

S. No.	Course Title	Course Code	Credits	Course Type
1.	Applied Statistics	SPMS STAT 01 02 01 GEC 3014	4	GEC
2.	Operations Research	SPMS STAT 01 02 02 GEC 4004	4	GEC

# SEMESTER III: Total credits: 24 (CC: 16, DCEC: 8)

S. No.	Course Title	Course Code	Credits	Course Type
1.	Design of Experiments	SPMS STAT 01 03 01 CC 4004	4	CC
2.	Econometrics	SPMS STAT 01 03 02 CC 4004	4	CC
3.	Statistical Inference-II	SPMS STAT 01 03 03 CC 4004	4	CC
4.	Practical	SPMS STAT 01 03 04 CC 0044	4	CC
5.	DCEC		4	DCEC
6.	DCEC		4	DCEC

# Courses for students of M.Sc. (Statistics) only (DCEC):

S. No.	Course Title	Course Code	Credits	<b>Course Type</b>
1.	Time Series and Statistical Quality Control	SPMS STAT 01 03 01 DCEC 4004	4	DCEC
2.	Biostatistics	SPMS STAT 01 03 02 DCEC 4004	4	DCEC
3.	Stochastic Process	SPMS STAT 01 03 03 DCEC 4004	4	DCEC
4.	Demography and Vital Statistics	SPMS STAT 01 03 04 DCEC 4004	4	DCEC
5.	Order Statistics	SPMS STAT 01 03 05 DCEC 4004	4	DCEC
6.	Simultaneous Inference	SPMS STAT 01 03 06 DCEC 4004	4	DCEC

# SEMESTER IV: Total credits: 24 (CC: 12, DCEC: 4, Dissertation: 8)

S. No.	Course Title	Course Code	Credits	Course Type
1.	Multivariate Analysis	SPMS STAT 01 04 01 CC 4004	4	CC
2.	Bayesian Inference	SPMS STAT 01 04 02 CC 4004	4	CC
3.	Practical	SPMS STAT 01 04 03 CC 0044	4	CC
4.	Dissertation/Project	SPMS STAT 01 04 01 PROJ 0008	8	Disser-tation
5.	DCEC		4	DCEC

# Courses for students of M.Sc. (Statistics) only (DCEC):

S. No.	Course Title	Course Code	Credits	Course Type
1.	Generalized Linear Models	SPMS STAT 01 04 01 DCEC 4004	4	DCEC
2.	Categorical Data Analysis	SPMS STAT 01 04 02 DCEC 4004	4	DCEC
3.	Decision Theory and Sequential Analysis	SPMS STAT 01 04 03 DCEC 4004	4	DCEC
4.	Statistical Simulation And Computation	SPMS STAT 01 04 04 DCEC 4004	4	DCEC
5.	Actuarial Statistics	SPMS STAT 01 04 05 DCEC 4004	4	DCEC

#### **Admission Criteria and Procedure**

Bachelor's degree in any discipline from a recognized Indian or foreign university (foreign recognition to be as per Association of Indian Universities (AIU) list) with a minimum of 50% aggregate marks or equivalent grade with at least 50% marks in Statistics/Mathematics as one of the papers in the degree course.

The admission to the M.Sc. (Statistics) course is based on the Central Universities' Common Entrance Test (CUCET) score.

#### **Faculty Profile**

#### 1. Dr. Anil Gaur

Name	Anil Gaur
Designation	Assistant Professor
Qualification	M.Sc., M.Phil., Ph.D.
Experience	2 Years
Research Area/Interest	Nonparametric Statistical Inference, Multiple Comparisons
Email	anilgaur@cuh.ac.in, anilgaur8@gmail.com
Membership	Life Member of International Indian Statistical Association. Life Member of the Indian Society for Probability and Statistics.
Research Papers	12
Citations	14
H-index	02
Impact factor range	0 - 0.622
Professional Extension Activities	Refereed four papers for Computational Statistics (Springer). Refereed two papers for Computational Statistics and Data Analysis (Elsevier Science Publishers). Refereed two papers for Journal of Statistical Computation and Simulation (Taylor & Francis). Refereed two papers for Communications in Statistics – Theory and Methods (Taylor and Francis). Refereed one paper for Journal of Korean Statistical Society (Elsevier Science Publishers). Refereed one papers for Communications in Statistics – Simulation and Statistics (Taylor and Francis). Refereed one paper for Hacettepe Journal of Mathematics and Statistics.
Professional Meetings Attended	VIII International Symposium on Statistics and Optimization, Aligarh Muslim University, Aligarh.  National Conference on Advances and Applications in Statistics, Panjab University, Chandigarh.  International Conference on Statistics, Science and Society: New Challenges and Opportunities, IISA and University of Madras, Chennai and Indian Statistical Institute, Chennai.  International Conference on Mathematical Sciences, Science College, Nagpur.  International Conference on Frontiers of Statistics and its Applications, Pondicherry University, Puducherry.  Twenty-First International Conference of Forum for Interdisciplinary Mathematics, Panjab University, Chandigarh.  International Conference on Mathematics, Statistics and Computer Engineering, Vijayawada.  Refresher Course on Computer Applications in Statistics, Indian Statistical Institute, Kolkata.

# Dr. Kapil Kumar

Name	Kapil Kumar
Designation	Assistant Professor
Qualification	M.Sc., M.Phil., Ph.D. and NET (CSIR).
Experience	4 Years
Research Area/Interest	Reliability and Life Testing Experiments, Bayesian Inference.
Email	kapilstats@cuh.ac.in, kapilstats@gmail.com
Membership	Life Member of International Indian Statistical Association.
	Life Member of the Indian Science Congress Association (L22964).
Research Papers	Garg, R., Dube, M., Kumar, K. and Krishna, H. (2016). On randomly censored generalized inverted exponential distribution. To appear in American Journal of Mathematical and Management Sciences. http://dx.doi.org/10.1080/01966324.2016.1236711.
Citations	90
H-index	03
Impact factor range	0 - 1.124
Professional Extension Activities	Refereed five papers for Statistical Methodology (Elsevier Science Publishers). Refereed two papers for Journal of Applied Statistics (Taylor & Francis). Refereed one paper for Journal of Statistical Computation and Simulation (Taylor & Francis). Refereed five papers for International Journal of Systems Assurance Engineering and Management (Springer). Refereed two papers for Electronic Journal of Applied Statistical Analysis (EJASA).
Professional Meetings Attended (include dates)	VIII International Symposium on Statistics and Optimization, December 17-19, 2016 organized by Aligarh Muslim University, Aligarh.  National Conference on Recent Statistical Computing Techniques and their Applications during March 11-12, 2016 organized by Ramanujan College, University of Delhi, Delhi, India.  National Conference on Recent Trends and Developments in Statistics during February 21-23, 2015 organized by M.D. University, Rohtak, India.  National Conference on Statistical Inference, Sampling Techniques and Related Areas during February 18-19, 2014 organized by AMU Aligarh, India.

# 2. Dr. Manoj Kumar

Name	Dr. Manoj Kumar
Designation	Assistant Professor
Qualification	M.Sc., M.Phil., Ph.D.
Experience	2.5 Years
Research Area/Interest	Bayesian Inference, Survival Analysis, Progressive Censoring.
Email	manustats@cuh.ac.in, manustats@gmail.com
Membership	Life Member of Bayesian Society.
Research Papers	13
Citations	36
H-index	04
Impact factor range	0 - 0.397

Professional Extension Activities	Refereed one papers for Journal of Applied Statistics (Taylor & Francis). Refereed one paper for Journal of Statistical Computation and Simulation (Taylor & Francis). Refereed one papers for Journal of Communications in Statistics – Simulation and Computation. Refereed one papers for Austrian Journal of Statistics. Refereed four papers for Journal of Statistics Applications and probability letters. Refereed four papers for Pakistan Journal of Statistics.
Professional Meetings Attended (include dates)	VIII International Symposium on Statistics and Optimization, December 17-19, 2016 organized by Aligarh Muslim University, Aligarh.  National Conference on Computational Mathematics and Operational Research during October 15-16, 2016 organized by BK Birla Institute of Engineering and Technology, Pilani- 333031, Rajasthan, India.

# 3. Dr. Devendra Kumar

Name	Dr. Devendra Kumar
Designation	Assistant Professor
Qualification	M.Sc., M.Phil., Ph.D.
Experience	4 Years and 3 Months
Research Area/Interest	Statistical Inference, Order Statistics, Distribution Theory, Bayesian Estimation
Email	devendrastats@cuh.ac.in, devendrastats@gmail.com
Membership	<ul><li>Indian society for probability and statistics.</li><li>Kerala Statistical Association.</li></ul>
Research Papers	Two reference books have been published in International publisher.  Kumar, D. (2016): The bivariate Pareto model based on ordered random variables,  Mathematical Sciences and Applications E-Notes, 4, 93-104.  Kumar, D., Shahbaz, M. Q. and Dey, S. (2016): Recurrence relations for moments and estimation of parameters of generalized Pareto distribution based on generalized order statistics, Journal of Applied Statistical Sciences, (Accepted).  Kumar, D. (2016): The exponentiated exponential-geometric distribution based on generalized order statistics, Journal of Applied Probability and Statistics, (Accepted).  Dey, S., Kumar, D., Ramos, P. L. and Louzada, F. (2016): Exponentiated Chen Distribution: Properties and Estimation, Communications in Statistics - Simulation and Computation, (Accepted).
Citations	165
H-index	07
I 10-index	10
Professional Extension Activities	Refereed three papers for Communications in Statistics - Theory and Methods (Taylor & Francis).  Refereed four papers for Journal of Statistical Computation and Simulations (Taylor & Francis).  Refereed one paper for Bulletin of the Malaysian Mathematical Sciences Society (Elsevier).  Refereed one paper for Mathematics and Computers in Simulation (Elsevier).  Refereed five papers for American Journal of Mathematical and Management Sciences (Taylor & Francis).  Refereed three papers for Pakistan Journal of Statistics  Refereed two papers for Hacettepe Journal of Mathematics and Statistics.
Professional Meetings Attended (include dates)	VIII International Symposium on Statistics and Optimization, December 17-19, 2016 organized by Aligarh Muslim University, Aligarh.  Bhopal Seminar on Population Transition in India Challenges and Opportunities from 14-16 January 2016, at SHYAM Institute Bhopal, India.  National Conference On Computational Mathematics & Operations Research from 15-16 October 2016 at BK Birla Institute of Engineering and Technology, Pilani, Rajasthan, India

#### **Department Infrastructure**

The present building of the Department is situated at the first floor in Academic Block of the University. The sanctioned teaching posts in the department comprise of 1 Professor, 2 Associate Professors and 4 Assistant Professors. Presently, the department consists of 4 Assistant Professors. The department has two class rooms and two office rooms.

#### **Research Thrust Area**

The research thrust areas of the Department include:

- 1. Nonparametric Statistical Inference
- 2. Multiple Comparisons
- 3. Reliability and Life Testing
- 4. Bayesian Inference
- 5. Survival Analysis
- 6. Order Statistics and Record Values
- 7. Distribution Theory

#### **Events Organized**

- 1. National Workshop of Research Methodology and Data Analysis Using SPSS on 15-20 April, 2015.
- 2. Expert lectures by
  - (a) Prof. Kalpana K. Mahajan, Department of Statistics, Panjab University, Chandigarh
  - (b) Prof. Ravi K. Mahajan, Department of Statistics, University School of Open Learning, Panjab University, Chandigarh
  - (c) Prof. Aquil Ahmed, Department of Statistics and Operations Research, Aligarh Muslim University, Aligarh
  - (d) Prof. Ar vind Pandey, National Institute of Medical Sciences, New Delhi
  - (e) Prof. Madhulika Dube, Department of Statistics, M.D. University, Rohtak
  - (f) Prof. Rajeev Kumar, Department of Mathematics, M.D. University, Rohtak.

#### **Future Plans**

- 1. Starting M.Phil. (Statistics) and Ph.D. (Statistics) courses.
- 2. Starting interdisciplinary research programs leading to Ph.D.

# **Department of Mathematics**

Department of Mathematics, Central University of Haryana was started in the academic year 2014-15 by offering M.Sc. (Mathematics) programme. The Department is functioning under the **School of Physical** & Mathematical Sciences and is the latest addition to the School. The Department of Mathematics currently offers post graduate programme in mathematics (M.Sc. based on choice based credit system (CBCS)). The Department has well qualified teaching faculty consisting of three assistant professors on contract. University is also in the process of recruiting four assistant professors, two associate professors and one professor on regular basis soon. The necessary expertise is available in the research areas of Complex Analysis, Approximation Theory, Numerical Methods, and Topology. The Department is in the process of acquiring computational laboratory with the latest available computational facilities, and also plans to start M.Phil. and Ph.D. programmes in Mathematics in the near future. The department has its society "Central University of Haryana Mathematical Society (CUHMS)". It was inaugurated by Prof. H. P. Dikshit, Former Vice-Chancellor of IGNOU on the occasion of birth day (15th Oct) of Late Dr. A. P. J. Abdul Kalam, former President, India. This society aims to build cooperation between mathematics and the world of science and technology through our publications, research, and community. The purpose of this society is to generate interest in pure and applied Mathematics and Computational science by providing students opportunities to:

- 1. Share ideas and enthusiasm with fellow students and faculty from all relevant departments on campus
- 2. Explore career opportunities
- 3. Make contacts that will last a lifetime
- 4. Develop leadership skills

#### **Programmes Offered:**

At present the department offers Post Graduate Programme in Mathematics, (M.Sc. Mathematics).

#### **Programme Outcome:**

This programme exposes students to a broad spectrum of mathematics. Its utility in the emerging areas of science, engineering and technology is increasing day by day. The programme provides opportunities for postgraduate students to develop and demonstrate knowledge and understanding, qualities, skills and other attributes in, but not limited to, the following areas:

- 1. Knowledge and understanding
- 2. Cognitive skills
- 3. Practical and/or professional skills

#### **Number of Seats offered:**

Student's Intake: 30

#### **Scheme of the Programme:**

Choice Based Credit System (CBCS)

#### **Course Type**

- 1. Core Course (CC) 13
- 2. Generic Elective Course (GEC) 0
- 3. Discipline Centric Elective Course (DCEC) 15

3. Skill Enhancement Elective Course (SEEC)- 02

Total Credit: 96, Semester-wise distribution of credits: 24+ 24 + 24 + 24

#### Semester I

**Total credits: 24 (CC: 20, GEC: 4)** 

S. No.	Course Title	Course Code	L	T	P	Credits
1	Real Analysis	SPMMAT 01 01 CC 01 3104	3	1	0	4
2	Abstract Algebra	SPMMAT 01 01 CC 02 3104	3	1	0	4
3	Complex Analysis	SPMMAT 01 01 CC 03 3104	3	1	0	4
4	Differential Equations and calculus of variations	SPMMAT 01 01 CC 04 3104	3	1	0	4
5	Seminar	SPMMAT 01 01 CC 05 4004	4	0	0	4
6	GEC (to be taken from other departments)		-	-	-	4

The following GEC courses are offered to PG students of other departments only.

Introduction to Mathematical Analysis SPMMAT 01 01 GEC 01 3104

Numerical Methods SPMMAT 01 01 GEC 02 3104

Programming in C SPMMAT 01 01 GEC 03 2124

#### Semester II

**Total credits: 24 (CC: 16, DCEC: 4, GEC: 4)** 

S. No.	Course	Course Code	L	T	P	Credits
1	Linear Algebra	SPMMAT 01 02 CC 01 3104	3	1	0	4
2	Topology	SPMMAT 01 02 CC 02 3104	3	1	0	4
3	Numerical Analysis	SPMMAT 01 02 CC 03 3104	3	1	0	4
4	Mathematical Statistics	SPMMAT 01 02 CC 04 3104	3	1	0	4
5	DCEC		3	1	0	4
6	GEC (to be taken from other departm	nents)	-	-	-	4

#### DCEC (For students of M.Sc. (Mathematics) only)

Rings and Modules SPMMAT 01 02 DCEC 01 3104
Fluid Dynamics SPMMAT 01 02 DCEC 02 3104
Fuzzy Set Theory SPMMAT 01 02 DCEC 03 3104

#### GEC courses offered to PG students of other departments only

Programming in MATLAB

SPMMAT 01 02 GEC 01 2124

Typesetting in LaTeX

SPMMAT 01 02 GEC 02 2124

Numerical Programming in C

SPMMAT 01 02 GEC 03 2124

Discrete Mathematics

SPMMAT 01 02 GEC 04 3104

#### **Semester III**

Total credits: 24 (CC: 20, DCEC: 4)

S. No.	Course	Course Code	L	T	P	Credits
1	Integral Equations	SPMMAT 01 03 CC 01 3104	3	1	0	4
2	Functional Analysis	SPMMAT 01 03 CC 02 3104	3	1	0	4
3	Operations Research	SPMMAT 01 03 CC 03 3104	3	1	0	4
4	Number Theory	SPMMAT 01 03 CC 04 3104	3	1	0	4
5	Seminar	SPMMAT 01 03 CC 05 4004	4	0	0	4
6	DCEC		3	1	0	4

#### DCEC courses for M.Sc. (Mathematics) students only

Wavelet Analysis SPMMAT 01 03 DCEC 01 3104
Theory of Elasticity SPMMAT 01 03 DCEC 02 3104
Object Oriented Programming C++ SPMMAT 01 03 DCEC 03 2124
Information Theory SPMMAT 01 03 DCEC 04 3104
Applied Discrete Mathematics SPMMAT 01 03 DCEC 05 3104

#### **Semester IV**

Total credits: 24 (CC: 4, DCEC: 8, PROJ: 12)

S. No.	Course	Course Code	L	Т	P	Credits
1	Measure Theory and Integration	SPMMAT 01 04 CC 01 3104	3	1	0	4
2	DCEC			1	0	4
3	DCEC			1	0	4
4	Project/Dissertation	SPMMAT 01 04 PROJ	-	-	-	12
5	SEEC		3	1	0	0

#### DCEC courses for M.Sc. (Mathematics) students only

Differential Geometry	SPMMAT 01 04 DCEC 01 3104
Mathematical Modelling	SPMMAT 01 04 DCEC 02 3104
Finite Element Analysis	SPMMAT 01 04 DCEC 03 3104
Mechanics	SPMMAT 01 04 DCEC 04 3104
Advanced Complex Analysis	SPMMAT 01 04 DCEC 05 3104
Cryptography	SPMMAT 01 04 DCEC 06 3104
Advanced Abstract Algebra	SPMMAT 01 04 DCEC 07 3104

#### **Skill Enhancement Elective Course**

(Compulsory and exclusively for M.Sc. Mathematics students, non-credit, only qualifying in nature) this may include a course based on Theoretical/Experimental/Computational Techniques/Methods. The department may offer more than one courses depending on specialization and strength of faculty members, and the student has to opt one of them.

#### **Admission Criteria and Procedure:**

Students having B.A/B.Sc. (Hons.) in Mathematics from any recognized Indian or foreign university with 50% or above marks; or B.A./B.Sc. with Mathematics as one of the subject of study with 55% or above marks or equivalent grade in the aggregate are eligible to apply for the Post Graduate Programme in Mathematics. Selection is based on the result of Central Universities Common Entrance Test (CUCET) and made Online for all Central Universities.

#### **Faculty Profile**

#### 1. Dr. Vikash Siwach (M.Sc. Ph.D., Post Doc.)

Experience: 1 Year

Research Area/Interest: Knot Theory (Low Dimensional Topology)

Email: <a href="mailto:vikash@iitrpr.ac.in">vikash@iitrpr.ac.in</a>
Mobile: +91 9569-254780

#### **Publications:**

- 1. **V. Siwach** and P. Madeti, On Arfinvariant and Trivializing number, Contemporary Mathematics (AMS Proceedings), ISSN 0271-4132, 670 (2016), 345-357.
- 2. **V. Siwach** and P. Madeti, A method for unknotting torus knots, Topology and its Applications (Elsevier), ISSN 0166-8641, 196 (2015), 668-674.
- 3. **V. Siwach** and P. Madeti, Region unknotting number of 2-bridge knots, J. Knot Theory Ramifications (World Scientific), ISSN 0218-2165, 24(11) (2015), 1550053 (20 pages).
- 4. **V. Siwach** and P. Madeti, A sharp upper bound for region unknotting number of torus knots, J. Knot Theory Ramifications (World Scientific), ISSN 0218-2165, 22 (5) (2013), 1350019 (21 pages).

#### **Posts held:**

**Assistant Professor,** Department of Mathematics,

Central University of Haryana, Mahendergarh, India (August 2016 - Till date)

**Assistant Professor,** Department of Mathematics

Dr. B. R. Ambedkar National Institute of Technology Jalandhar, India (Jan 2016- June 2016)

#### **Research Associate**

Department of Mathematics, Indian Institute Science Education and Research Mohali, India (Mar 2015- Jan 2016)

#### 2. Dr. Sharanjeet Dhawan (M.Sc., Ph.D., Post Doc.)

Experience: 4.5 Years

Research Area/Interest: Numerical Analysis

Email: dhawan311@gmail.com Mobile: +91 8222-068222

#### **Publications:**

1. **S. Dhawan**, S. Kapoor, Sheo Kumar, Galerkin least square B-spline approach towards advection-diffusion equation, Applied Mathematics and Computation, 261 (2015), 128-140.

- 2. **S. Dhawan,** S. Arora, S. Kumar, Approximation of advection-diffusion phenomenon with wavelets, Neural, Parallel, and Scientific Computations, (2014), 45-58.
- 3. **S. Dhawan,** D. Grover, S. Kumar, Some travelling wave solutions of soliton family, Int. J. Industrial Mathematics, (2013), 325-339.
- 4. **S. Dhawan,** S. Arora, S. Kumar, Numerical approximation of heat equation using Haar wavelets, Int. J. Pure and Applied Mathematics, (2013), 55-63.
- 5. **S. Dhawan,** R. Kumar, S. Kumar, Multiquadratic quasi interpolation for Burger-Fisher equation, Int. J. Applied Mathematics and Mechanics, (2013), 41-50.
- 6. **S. Dhawan,** S. Kapoor, Sheo Kumar, Numerical method for advection diffusion equation using FEM and B-splines, J. Computational Science, (2012), 429-437.
- 7. **S. Dhawan,** S. Kapoor, S. Kumar, S. Rawat, Contemporary review of distinguish simulation process for the solution of nonlinear Burgers' equation, J. Computational Science, (2012), 405-419.
- 8. S. Kapoor, S. Rawat, **S. Dhawan**, Numerical Investigation of Separated Solitary Waves Solution for KDV Equation through Finite Element Technique, Int. J. Computer Applications, (2012), 27-33.
- 9. **S. Dhawan**, S. Kumar, S. Kapoor, Approximation of Burgers' equation using B-spline Finite Element Method, Int. J. Applied Mathematics and Mechanics, (2011), 61-86.
- 10. **S. Dhawan**, S. Kapoor, Numerical Simulation of Advection-Diffusion Equation, Int. J. Mathematical Modelling and Numerical Optimization, (2011), 13-27.
- 11. **S. Kapoor**, S. Dhawan, B-Spline Finite Element Technique for Advection-Diffusion Equation", International Journal of Applied Mathematics and Mechanics, 6 (2010), 75-94.
- 12. **S. Kapoor**, S. Dhawan, A Computational Technique for the Solution of Burgers Equation", International Journal of Applied Mathematics and Mechanics, 6 (2010), 84-95
- 13. **S. Dhawan**, Sheo Kumar, Approximation of Temperature Distribution in a Solid Body using Semi-Finite Element Technique", Indian Journal of Biomechanics: Special Issue, (2009), 246-250.

#### **Posts held:**

**Assistant Professor,** Department of Mathematics,

Central University of Haryana, Mahendergarh, India (July 2014- Till date)

Assistant Professor, Department of Mathematics

D.A.V. University Jalandhar, India (Aug 2013- June 2014)

#### Post-doctoral fellow (NBHM, Govt of India)

Department of Mathematics, National Institute of Technology Jalandhar, India (July 2012- July 2013)

Assistant professor, Department of Mathematics,

National Institute of Technology Jalandhar, India (July 2011- June 2012)

#### **Memberships:**

Indian Society of Biomechanics.

American Mathematical Society, 2011-12.

Ramanujan Mathematical Society (RMS), 701.

Indian Society of Industrial and Applied Mathematics (ISIAM), D-20.

Indian Society of Theoretical and Applied Mechanics (ISTAM), 844.

Soft computing research society, 024.

International Association of Computer Science and Information Technology (IACSIT), 80340905.

International Association of Engineers (IAENG), 104778.

Indian Society for Heat and Mass Transfer (ISHMT), 618.

#### 3. Dr. Arun Kajla (M.Sc., Ph.D.)

Experience: 6 Months

Research Area/Interest: Approximation theory

Email: <u>rachitkajla47@gmail.com</u> Mobile: +91 8171-354305

#### **Publications:**

- 1. **Arun Kajla**, Ana Maria Acu and P. N. Agrawal, Baskakov-Szasz type operators based on inverse Polya-Eggenberger distribution, Ann. Funct. Anal. (Accepted).
- 2. **Arun Kajla** and P. N. Agrawal, Szasz-Durrmeyer type operators based on Charlier polynomials, Appl. Math. Comput. 268 (2015), 1001 1014.
- 3. **Arun Kajla** and P. N. Agrawal, Approximation properties of Szasz type operators based on Charlier polynomials, Turk. J. Math. 39 (2015), 990 1003.
- 4. **Arun Kajla,** Nurhayat Ispir, P. N. Agrawal and Meenu Goyal, q-Bernstein- Schurer-Durrmeyer type operators for functions of one and two variables, Appl. Math. Comput., 275 (2016), 372 385.
- 5. **Arun Kajla** and P. N. Agrawal, Szasz-Kantorovich type operators based on Charlier polynomials, Kyungpook Math. J. 56 (2016), 877 897.
- 6. Nurhayat Ispir, P. N. Agrawal and **Arun Kajla**, Rate of convergence of Lupas Kantorovich operators based on Polya distribution, Appl. Math. Comput. 261(2015), 322 329.
- 7. P. N. Agrawal, Nurhayat Ispir and **Arun Kajla,** Approximation properties of Bezier-summation-integral type operators based on Polya-Bernstein function, Appl. Math. Comput. 259 (2015), 533 539.
- 8. P. N. Agrawal, Nurhayat Ispir and **Arun Kajla**, GBS operators of Lupas-Durrmeyer type based on Polya distribution, Results. Math. 69 (2016), 397 418.
- P. N. Agrawal, Nurhayat Ispir and Arun Kajla, Approximation properties of Lupas Kantorovich operators based on Polya distribution, Rend. Circ. Mat. Palermo. 65 (2016), 185 - 208.
- 10. P. N. Agrawal, Vijay Gupta, A. Sathish Kumar and **Arun Kajla**, Generalized Baskakov-Szasz type operators, Appl. Math. Comput. 236 (2014), 311 324.
- 11. P. N. Agrawal, Meenu Goyal and **Arun Kajla**, q-Bernstein- Schurer-Kantorovich type operators, Boll. Unione. Mat. Ital., 8 (2015), 169 180.

#### Posts held:

Assistant Professor, Department of Mathematics,

Central University of Haryana, Mahendergarh, India (September 2016- Till date)

#### 4. Dr. Virendra Kumar (M.Sc., Ph.D.)

Experience: 3 Years

Research Area/Interest: Complex Analysis

Email: vktmaths@yahoo.in Mobile: +91 8684-836085

#### **Publications:**

1. **Virendra Kumar** and S. Sivaprasad Kumar, On Certain Properties of Meromorphic Multivalent Functions Defined by a Generalized Dioerential Operator, Acta Universitatis Apulensis, **Accepted**, 2016.

- 2. Rosihan M., **Virendra Kumar**, V Ravichandran, and S. Sivaprasad Kumar, Radius of starlikeness for analytic functions with fixed second coefficient, Kyungpook Mathematical Journal, 2016, **Accepted**.
- 3. S. Sivaprasad Kumar and **Virendra Kumar**, On the Fekete-Szegö inequality for certain class of analytic functions, Acta Universitatis Apulensis, 37 (2014), 211-222.
- 4. S. Sivaprasad Kumar, **Virendra Kumar**, V. Ravichandran and N. E. Cho, Succient conditions for starlike functions associated with the lemniscate of Bernoulli, Journal of Inequalities and Applications, 2013(2013), Art. 176, 13pp.
- 5. S. Sivaprasad Kumar, **Virendra Kumar** and V. Ravichandran, Subordination and superordination for multivalent functions defined by linear operators, Tamsui Oxford Journal of Information and Mathematical Sciences, 29(3) (2013) 361-387.
- 6. S. Sivaprasad Kumar and **Virendra Kumar**, Some sandwich results associated with a generalized linear operator, ROMAI J., 9(2) (2013), 107-118.
- 7. S. Sivaprasad Kumar and **Virendra Kumar**, Fekete-Szegö problem for a class of analytic functions defined by convolution, Tamkang Journal of Mathematics, 44(2) (2013), 187-195.
- 8. S. Sivaprasad Kumar and **Virendra Kumar**, Fekete-Szegö problem for a class of analytic functions, Stud. Univ. Babeÿs-Bolyai Math., 58(2) (2013), 181-188.
- 9. S. Sivaprasad Kumar, **Virendra Kumar**, and V. Ravichandran, Estimates for the Initial Coefficients of Bi-univalent Functions, Tamsui Oxford Journal of Information and Mathematical Sciences, 29(4) (2013), 487-504.
- 10. S. Sivaprasad Kumar and **Virendra Kumar**, On the Fekete-Szegö Inequality for a Class of Analytic Functions Defined by Convolution, Proceedings of the International conference CMCGS-2012, held at Singapore during 30-31 January 2012.

#### **Editor/Reviewer to the Following Journals:**

- 1. Member of "Asian Council of Science Editors".
- 2. Bulletin of Malayasian Mathematical Society (BMMS).
- 3. Kornoup Journal of Mathematics (KJM).
- 4. Member of Editorial Board of Central University of Haryana Journal, An International Journal.

#### **Collaboration:**

- 1. Prof. V. Ravichandran, Department of Mathematics, University of Delhi, Delhi—110007, India.
- 2. Prof. N. E. Cho, Department of Applied Mathematics, Pukyong National University, Busan 608-737, South Korea.
- 3. Dato' Prof. R. M. Ali, School of Mathematical Sciences, University Sains Malaysia (USM), 11800 Penang, Malaysia.

# **Departmental Infrastructure**

Faculty Rooms	02	Well connected with LAN/Wi-Fi with Information and Communications Technology (ICT) facilities
Class Rooms	02	
Computers	03	i7 computers
Printers	02	01-Laserjet 01-Multifunctional-copy, print, fax
Projectors	02	01-Sony, 4000 Lumens 01-Sony, 5000 Lumens
Computational Lab	02*	50-Desktop computers have already been purchased

<sup>\*</sup>The Department is in the process of establishing two Computational Labs one with 30 and another with 20 with latest, Intel i7 computers and software like Matlab, Mathematica, SPSS, Latex and C++.

#### **Research Thrust Areas of Research**

- 1. Complex Analysis
- 2. Numerical Analysis
- 3. Real Analysis
- 4. Approximation Theory
- 5. Knot Theory

# **Events Organized & Planned**

#### Invited/Expert lectures delivered by visiting Dignitaries

S. No.	Name of Faculty	University	Purpose	Year
1	Prof. V. Ravichandran	University of Delhi	Expert Lecture on "Complex Analy sis"	March 2015
2	Dr. Renu Chugh	Maharishi Dayanand University, Rohtak	Expert Lecture on "Real Analysis"	Nov 2015
3	Prof. H. P. Dikshit	Former Vice- Chancellor, IGNOU, Delhi	Invited Talk on "Who will Lead a Revolution for Excellence in Higher Education"	15 <sup>th</sup> Oct, 2015
4	Prof. H. P. Dikshit	Former Vice- Chancellor, IGNOU, Delhi	Expert Lecture on "Computer Aided Geometric Modeling"	15 <sup>th</sup> Oct, 2015
5	Prof. Kuldeep Bansal	GJUST, Hisar, Haryana	Expert Lecture on "Applications of Classical Mechanics"	23 <sup>rd</sup> Nov, 2015
6	Dr. Himmat Bhardwaj	Freelancer, The Memory King of India	Vedic Maths and Memory Enhancement	5 <sup>th</sup> March, 2016
7	Prof. B K. Dass	University of Delhi	Mathematics and Its Applications	28th April, 2016
8	Prof. Kuldeep Bansal	GJUST, Hisar, Haryana	Theory and Applications of Elasticity	28th April, 2016
9	Prof. G. S. Hooda	GJUST, Hisar, Haryana	<ol> <li>On Promotion of Research and Innovation in Indian Universities and Institutes of Higher Education</li> <li>Educational and Cultural values of Mathematics for Mathematics.</li> <li>Statistics Education in India</li> </ol>	14-15 <sup>th</sup> September, 2016
10	Prof. Kuldeep Bansal	GJUST, Hisar, Haryana	Integral Transform and its Applications	7 <sup>th</sup> October, 2016

#### **Highlights and Achievements**

A) Awards / Recognitions Received by Students:

#### 1) At the State/National/International level

- 1. Pooja Yadav, M.Sc 3<sup>rd</sup> semester, has won the third prize in the **State level** yoga Competition organized by Indian Yoga Federation, 2015.
- 2. Shiv Kumar, M.Sc 3<sup>rd</sup> semester, got the first prize in quiz contest in Youth Red Cross Camp (**National level**) Sep 16 22, 2015.
- 3. Beena Kumari, M.Sc 3<sup>rd</sup> semester has won the First position in skit in Youth Red Cross Camp (State level) 30 Aug 04 Sep, 2015.

#### 2) At the District and University level

- 1. Manisha, M.Sc 3<sup>rd</sup> semester won the first prize in Poster Making Competition organized by CUH on August 12, 2016.
- 2. Beena Kumari, M.Sc 3<sup>rd</sup> semester won the prize of the best dedicated volunteer in NSS organized by CUH during March 21 28, 2015.
- 3. Deepika Yadav, M.Sc 3<sup>rd</sup> semester achieved the Second position in slogan writing in NSS camp organized by CUH from March 21 28, 2015
- 4. Manjeeta Kumari, M.Sc 3<sup>rd</sup> semester won the Consolation prize in essay writing in Hindi on "Hindi Diwas" organized by CUH, 2014.
- 5. Avinash Aggrwal, M.Sc 3<sup>rd</sup> semester won the First prize in essay writing in Hindi on "Hindi Diwas" organized by CUH, 2014.
- 6. Pooja Yadav, M.Sc 3<sup>rd</sup> semester, won the Third prize in the District level yoga Competition, Nov 2014.
- 7. Suresh Kumar, M.Sc 3<sup>rd</sup> semester, won the prize of best volunteer in the NSS camp organized by CUH, March 2015.
- 8. A team including Mr. Sumit Bhardwaj and Ms. Bhanu of M.Sc. (Mathematics, III SEM) won the First prize in quiz competition organized by the Department of Mathematics, Statistics and Physics, in Nov 2014.
- 9. A team including Mr. Suresh of M.Sc. (Mathematics, III SEM) won the Third prize in quiz competition organized by the Department of Mathematics, Statistics and Physics, Nov 2014.

#### **Future Roadmap**

- 1. To establish Computational Laboratory in the Department.
- 2. To start B.Sc.-M.Sc. (Mathematics) integrated Programme.
- 3. To start Ph.D. Programme.
- 4. To establish a Departmental Library.
- 5. To organize workshops, conferences, training programmes, seminars, invited talks. This would facilitate skill development and knowledge enhancement among students, researchers and faculties.
- 6. To introduce applied oriented elective papers relevant to the current day needs of the society.

# SCHOOL OF EARTH, ENVIRONMENT AND SPACE STUDIES

Department of Environmental Sciences
Department of Geography

# > SCHOOL OF EARTH, ENVIRONMENT AND SPACE STUDIES

- Department of Environmental Sciences
- Department of Geography

## **Department of Environmental Sciences**

Department of Environmental Sciences under School of Earth, Environment & Space Studies was established in the academic year 2014-15 by offering two years Master's Degree Programme in Environmental Sciences with intake capacity of 30 students. Major aim of the department is to furnish the students with a comprehensive understanding of key environmental issues, and use of a wide range of environmental tools and methods so that they can play leading role in development and application of environmental policies and management. The Department plans to focus its research activities in diverse thrust areas during the coming years. Besides meeting its academic objectives, the Department aims at providing leadership in the area of conservation of environment, rational utilization of natural resources and creation of public awareness. The academic Programme of the Department has been extensively reviewed, revised and updated, keeping in mind the need for sharper focusing, the available expertise at any given time, and committed to changes desired in curriculum of individual courses or specific Programmes.

## **Programmes Offered**

Presently the Department is offering M.Sc. Programme in Environmental Science and shortly going to start M.Phil./Ph.D. Programme in the same subject.

#### **Programme Outcomes**

Environmental Science has become integral part of the activities of the industry and government. It is now primary function and requirement closely tied to question of economic development and government sustainability. It involves devising effective technological and policy measures for the protection and conservation of the environment, natural and cultural heritage and natural resources. The course offers a focused, advance learning experience that will enhance career choice. This Programme will provide background and the necessary skills in the procedure and methods required to deal with issues such as land degradation, rehabilitation, air and water pollution, water resource management, coastal management, climate change and carbon trading, flora and fauna conservation, competition for land use, habitat destruction and deforestation, and energy and minerals depletion. It is belief of the Department to shape the students in such a way so that they can serve our society and nation in fruitful direction.

Number of Seats: 30 Scheme of the Course

M.Sc. (EVS)

The Department has diversified interest in various processes such as earth, atmospheric and biological. Linkages between Ecological and Social processes give an additional dimension to Department's interest, making the work relevant. Therefore, the curriculum has components of disciplinary areas such as physical sciences, atmospheric sciences, environmental biology, and environmental monitoring and management. A detail of the Programme scheme is as follow:

#### Semester I

S. No.	Course code	Course title	Credit				
1.	SEES EVS 1 1 01 C 4004	Fundamentals of Ecology	4				
2.	SEES EVS 1 1 02 C 4004	Natural Resource Conservation & Management	4				
3.	SEES EVS 1 1 03 C 4004	Biodiversity Conservation	4				
4.	SEES EVS 1 1 04 C 00105	Practical I (Ecology & Biodiversity)	5				
5.	General Electives	To be taken from other department	4				
6.		Any one of the following two courses					
	SEES EVS 1 1 01 GE 4004	Foundation course in Ecology and Environment					
	SEES EVS 1 1 02 GE 4004	Environmental Health and Toxicology					
		Semester II					
1.	SEES EVS 1 2 05 C 4004	Environmental Chemistry	4				
2.	SEES EVS 1 2 06 C 4004	Environmental Policies and Laws	4				
3.	SEES EVS 1 2 07 C 4004	Physical Environment	4				
4.	SEES EVS 1 2 08 C 00105	Practical II (Environmental Monitoring & Analysis)	5				
5.	SEES EVS 1 2 03 GE 4004	Global Environmental Issues (compulsory)	2				
6.	SEES EVS 1 2 09 C 0002	Summer Training (Report and Presentation)	3				
7.		Any one of the following three courses	4				
	SEES EVS 1 2 01 DCEC 4004	Environmental Microbiology					
	SEES EVS 1 2 02 DCEC 4004	Forest and Wildlife Ecology					
		Semester III					
1.	SEES EVS 1 3 10 C 4004	Environmental Management and Impact Assessment	4				
2.	SEES EVS 1 3 11 C 4004	Environmental Pollution and Control	4				
3.	SEES EVS 1 3 12 C 00105	Practical III (Environmental Management)	5				
4.	SEES EVS 1 3 03 DCEC 4004	Seminar Paper (compulsory)					
5.	GE	To be taken from other department	4				
6.		Any one of the following two courses					
	SEES EVS 1 3 04 DCEC 4004	Water Quality Management					
	SEES EVS 1 3 05 DCEC 4004	Natural Disaster Management					
	Semester IV						
1.		Dissertation (Research work, Progress Seminar, Report and Viva voce)	20				
2.	SEES EVS 1 4 13 C 4004	Instrumental techniques	4				
3.	SEES EVS 1 4 06 DCEC 4004	Environmental Biotechnology	4				

## \*Skill Enhancement Elective Course (Compulsory and exclusively for Environmental Science students)

### Admission criteria and procedure

The Department follows Central University Common Entrance Test (CUCET) for admission in the current Programme. All students are required to register themselves online on the University website after declaration for results of CUCET to appear for the counselling. The students whose name figures in the merit list as displayed on the University website and Notice-Boards are required to present themselves with all relevant documents in original at the time of counselling.

### **Eligibility Criteria**

B.Sc. (Hons.)/ B.Sc.(10+2+3) with a minimum 50% marks or equivalent (45% for SC/ST).

### **Brief Faculty Profile**

### 1. Dr. Mohini Singh

Designation : Assistant Professor

Qualification : M.Sc., Ph.D., UGC-NET (Environmental Science), NET

Experience : 4 Years

Research Area/Interest : Wastewater Treatment, Dendroremediation, Environmental

Monitoring and Analysis

### **Professional Affiliations**

1. Life Member, IACSIT Environmental Science Society (ESS), Singapore

- 2. Life Member, Asia-Pacific chemical, biological and environmental engineering society, Hongkong
- 3. Life Member, Indian water resource society, IIT, Roorkee
- 4. Annual Member, Annals of Plants and soil research, GKV Society Agra

### **Publications**

- 1. Singh, M. and Srivastava, R.K. 2014. Treatment efficacy of short rotation woody species and their economic appraisal in vegetation filter system. *Annals of Plant and Soil Research*, 16(4): 289-293. [NAAS Rating: 3.66]
- 2. Singh, M. and Srivastava, R.K. 2014. Feasibility of using tuberose (P. tuberosa L.) in horizontal subsurface flow constructed wetland for heavy metal removal from domestic wastewater. *Environmental Progress and Sustainable energy* (accepted) (Manuscript Id.: EP-14-364) [IF: 1.271]
- 3. Singh, M. and Srivastava, R.K. 2013. Feasibility study of starch processing wastewater treatment by fixed bed biofilm sequencing batch reactor. Communicated in *International Journal of Environmental Research*, (Manuscript no.:6606-IJER).
- 4. Singh, M. and Srivastava, R.K. 2014. Short rotation woody crops as vegetation filters and their potential application in the treatment of municipal wastewater. In: Uncovering New Methods for Ecosystem Management through Bioremediation.IGI Global Publishing, Pennsylvania, USA. (Accepted)

### The current Citation indices are (Citations 72; h-index 3; i10-index 2).

### 2. Dr. Mona Sharma

Designation : Assistant Professor

Qualification : M.Sc., Ph.D. (Environmental Sciences), UGC-NET, PGDISM

Experience : 5 Years

Research Area/Interest : Biofuels, Bio hydrogen, Wastewater treatment and Carbon

sequestration using algae

### **Publications**

1. Mona, S., Kaushik, A. and Kaushik, C.P. 2011, Hydrogen Production and metal-dye bio removal by a *Nostoc linckia* strain isolated from textile mill oxidation pond. *Bioresource Technology* (Elsevier) 102, 3200-3205, [IF: 5.039]

- 2. Kaushik A., \*Mona, S. and Kaushik, C.P. 2011. Integrating photobiological hydrogen production with dye-metal bioremoval from simulated textile wastewater, *Bioresource Technology* (Elsevier) 102, 9957-9964. [IF: 5.039]
- 3. Mona, S., Kaushik, A. 2015. Chromium and Cobalt Sequestration using Exopolysaccharides Produced by Freshwater Cyanobacterium *Nostoc linckia, Ecological Engineering* (Elsevier) 82: 121-125 [IF: 3.041]
- 4. Mona, S. and Kaushik, A. 2015. Screening metal-dye-tolerant photoautotrophic microbes from textile wastewaters for biohydrogen production. *Journal of Applied Phycology* (Springer) 27: 1185-1194 [IF: 2.492]
- 5. Mona, S., Kaushik, A. Kaushik, C.P. 2013. Prolonged hydrogen production by Nostoc in photobioreactor and multi-stage use of the biological waste for column biosorption of some dyes and metals. *Biomass & Bioenergy* (Elsevier) 50, 27-35 [IF: 3.411]
- 6. Mona Sharma, Deepak Bansal and Abhishek Chauhan, 2016, "Microalgae: Windows of Opportunity". SBW Publishers, New Delhi, India (ISBN: 978-81-85708-64-5).

### **Book**

1. Mona, S., Kaushik, A. 2015, Biohydrogen Production and biosorption of textile dye from wastewater. Publisher: Lambert Academic Publishing, Germany (ISBN No. 978-3-659-69996-2) pp. 01-133.

### The current Citation indices are (Citations 188; h-index 6; i10-index 6).

### 3. Dr. Anoop Yadav

Designation : Assistant Professor

Qualification : M.Sc., Ph.D. (Environmental Sciences), UGC-NET/JRF

Experience : 5 Years

Research Area/ Interest : Management of solid wastes, Water and air pollution monitoring

and management

### **Publications**

- 1. Yadav A. and Garg, V. K. 2016 Vermiconversion of biogas plant slurry and parthenium weed mixture to manure, International Journal of Recycling of Organic Waste in Agriculture, DOI 10.1007/s40093-016-0140-8, [Springer].
- 2. Yadav A. and Garg, V. K. 2016 Influence of stocking density on the vermicomposting of an effluent treatment plant sludge amended with cow dung, Environmental Science and Pollution Research, 23: 13317-13326 [Springer].

- 3. Yadav A. and Garg, V. K. 2015 "Influence of vermi-fortification on chickpea (Cicerarietinum L.) growth and photosynthetic pigments" International Journal of Recycling of Organic Waste in Agriculture, 4:299-305 [Springer].
- 4. Yadav A. Suthar S. and Garg, V. K. 2015 "Dynamics of microbiological parameters, enzymatic activities and worm biomass production during vermicomposting of effluent treatment plant sludge of bakery industry", Environmental Science and Pollution Research, 22:14702-14709 [Springer].
- 5. Garg V. K., Yadav A, Singh K, Singh M, Bishnoi M and Pulhani V. 2014 "Uranium distribution in ground water in Hisar city, India and health risk assessment", The International Journal of Occupational and Environmental medicine. 5(2), 112-114.

### Membership of academic bodies

Life Membership of 'Biotech Research Society of India', India Life Membership of 'The Indian Science Congress Association', Kolkata (India)

### The current Citation indices are (Citations 386; h-index 9; i10-index 9).

### 4. Dr. Somvir Bajar

Designation : Assistant Professor

Qualification : M.Sc., Ph.D. (Environmental Sciences), PGDISM, NET

Experience : 6.5 years

Research Area/ Interest : Bioremediation, Pollution Monitoring & Control, Bioenergy,

Greenhouse gases abatement

### **Publications**

- 1. Bajar, S., Singh, A., Kaushik, C.P. and Kaushik, A. 2016. Evaluation and Statistical Optimization of Methane Oxidation using Rice Husk Amended Dumpsite Soil as Biocover. Waste Manage. 53: 136–143.[IF: 2.127]
- 2. Singh, A., Bajar, S., and Bishnoi, Narsi R. 2014 Enzymatic hydrolysis of microwave alkali pretreated rice husk for ethanol production by Saccharomyces cerevisiae, Scheffersomyces stipitis and their co-culture. Fuel 116: 699–702. [IF: 3.611]
- 3. Bajar, S., Kaushik, C.P. and Kaushik, A. 2013. Optimization of temperature and moisture content for methane oxidation in acclimatized subtropical landfill soil using Response Surface Methodology. Indian J. Environ. Sc., 17(2): 91-99.
- 4. Singh, A., Bajar, S., Bishnoi, Narsi R. and Singh, N. 2010 Laccase production by Aspergillus heteromorphus using distillery spent wash and lignocellulosic biomass. J. Hazard. Mater., 176: 1079-82 [IF: 4.836]
- 5. Sharma, M., Kaushik, A., Somvir, Bala, K. and Kamra, A. 2008, Sequestration of Chromium by exopolysaccharides of Nostoc and Gloeocapsa from dilute aqueous solutions". J. Hazard. Mater, (Elsevier Publication), 157: 315-318. [IF: 4.836]

### The current Citation indices are (Citations 87;h-index 4; i10-index 4).

### 5. Dr. Manoj Kumar

Designation : Assistant Professor

Qualification : M.Sc., M.Phil., Ph.D. (in Environmental Sciences Jawaharlal

Nehru University), NET/JRF

Experience : Less than 6 months

Research Area/ Interest : Hydrogeochemistry, Biogeochemistry, Environmental Pollution

and Health Risk Assessment

### **Publications**

- 1. Manoj Kumar, AL. Ramanathan, Ritu Tripathi, Sandhya Farswan, Devendra Kumar, Prosun Bhattacharya. 2016. A study of trace element contamination using multivariate statistical techniques and health risk assessment in groundwater of Chhaprola Industrial Area, Gautama Buddha Nagar, Uttar Pradesh, India. Chemosphere. 166; 135–145 [IF: 3.698]
- 2. Manoj Kumar, AL. Ramanathan, Mohammad Mahmudur Rahman, Ravi Naidu. 2016. Concentrations of inorganic arsenic in groundwater, agricultural soils and subsurface sediments from the middle Gangetic plain of Bihar, India. Science of the Total Environment. 573; 1103–1114. [IF: 4.099]
- 3. Manoj Kumar, M.M. Rahman, AL. Ramanathan, Ravi Naidu, 2016. Arsenic and other elements in drinking water and dietary components from the middle Gangetic plain of Bihar, India: Health risk index. Science of the Total Environment. 539; 125–134. [IF: 4.099]
- 4. Alok Kumar, AL. Ramanathan, M. B. K. Prasad, Dilip Datta, Manoj Kumar, Swati Mohan Sappal. 2016. Distribution, enrichment, and potential toxicity of trace metals in the surface sediments of Sundarban mangrove ecosystem, Bangladesh: a baseline study before Sundarban oil spill of December, 2014. Environmental Science and Pollution Research. 23 (9), 8985–8999. [IF: 2.828]
- 5. Virendra Bahadur Singh, AL. Ramanathan, Jose George Pottakkal, Manoj Kumar. 2014. Seasonal variation of the solute and suspended sediment load in Gangotri glacier meltwater, central Himalaya, India. Journal of Asian Earth Sciences. 79, 224–234. [IF: 2.741]

### The current Citation indices are (Citations 41; h-index 3; i10-index 2).

### 6. Virendra Kumar

Designation : Dr. D.S. Kothari- Post Doctoral Fellow Qualification : M.Sc., Ph.D. (Forest Biotechnology)

Experience : 1.4 Years

Research Area/ Interest : Environmental Biotechnology, Lignocellulose Biotechnology

### **Professional Activities**

- 1. Editor in Indian Journal of Microbiology research
- 2. Editor in Journal of Microbiology and Related Research (JMRR)
- 3. Life time membership, European Federation of Biotechnology
- 4. Life time membership, Association of Microbiology of India
- 5. Life time membership, Indian Science Congress

### **Achievements**

- 1. Awarded as Dr. D.S. Kothari- Post Doctoral Fellow (DSK-PDF)in 2015
- 2. Successfully achieved Senior Research Fellowship (SRF-CSIR) in 2012
- 3. Qualified Graduate Apptitute Test for Engneering (GATE) 2010

### **Publications**

- 1. Virendra Kumar, Purnima Dhall, Sanjay Naithani, Anil Kumar, Rita Kumar 2014. Biological Approach for the Treatment of Pulp and Paper Industry Effluent in Sequence Batch Reactor. *J BioremedBiodeg* 5: 218.
- 2. PoojaTripathi, Virendra Kumar, Gyanesh Joshi, Sat Pal Singh, Suresh Panwar, Sanjay Naithani, Raman Nautiyal 2013. A Comparative Study on Physico-Chemical Properties of Pulp and Paper Mill Effluent. *Int. Journal of Engineering Research and Applications* 3:6,811-818.

- 3. Virendra Kumar, Purnima Dhall Rita Kumar, Yogendra Prakash Singh, Anil Kumar 2012. Bioremediation of agro based pulp and paper mill effluent by microbial consortium comprising autochthonousbacteria. *The scientific world journal* doi:10.1100/2012/127014.
- 4. Yogendra Prakash Singh, Purnima Dhall, R M Mathur, R K Jain, Vasanta Vade Thakur, VirendraKumar, Rita Kumar, Anil Kumar 2011.Bioremediation of pulp and paper mill effluent by tannicacid degrading by *Enterobacter* sp. *Water Air and Soil Pollution* 218, 1-4.
- 5. Virendra Kumar, Purnima Dhall, VasantaVaddy Thakur, Rakesh Kumar Jain, Rajeev Mohan Mathur, Sanjay Naithani, Inderjeet Singh Singh, Anil Kumar, Rita Kumar Holistic biological treatment of pulp and paper mill waste water: A pilot scale study (under reviw).

### **Department Infrastructure**

The Department of Environmental Science located on 3<sup>rd</sup> floor of academic block 4, Central University of Haryana. The Department building is fully air-conditioned. The classrooms are well designed that incorporate everything needed for a pleasant learning atmosphere. The wide spacious classrooms contain a white board and also a projector that is used for teaching so a professor can switch to different modes of teaching as and when required so the teaching isn't monotonous and the lectures are put across in the best way possible. Department have fully equipped laboratories for students. The department also have a big seminar hall and departmental office. There are separate chambers for all faculty members.

### **Research Thrust Area**

The following are the thrust areas of the department:

- 1. Wastewater Treatment
- 2. Carbon Sequestration using Algae
- 3. Phytoremediation and Bioremediation
- 4. Biofuels
- 5. Soild Waste Management
- 6. Environmental Pollution monitoring and analysis

### **Events Organised**

- 1. The department celebrated "Environment Week" from 30-05-2016 to 05-06-2016 and organized various competitions (Quiz, Poster Making, Slogan Writing, Photography, Waste to Resource, Rangoli) and special lecture by distinguished speaker Prof. D.K. Sharma, IIT, Delhi was organized to sensitize and create environmental awareness among the students
- 2. The department under the aegis of Eco club, CUH celebrated World Environment Day on 5th June 2015. Various events such as Plantation drive, documentary movie on environmental issues, drawing competition (among students of elementary school, Mahendergarh), special lecture by distinguished speaker Dr. R.N. Yadav was organized to sensitize and create environmental awareness not only among the students but the villagers who were the special invitee.
- 3. Extension lecture on "Climate Change and latest Paris Climate Agreement" by Mr. Jagjeet Sareen, Senior Policy Officer, Climate Department, World Bank, US on March 09, 2016
- 4. Invited Talk on Green Economy- Sustainable Development by Dr. Jayaramulu, Development Catalyst and Green Economist, Founder President Center for Green Economy on March 09, 2016
- 5. Conducted First Alumni Meet on November 04, 2016
- 6. Conducted an Excursion to "Sariska Tiger Reserve", Alwar, Rajasthan on November 24, 2016 for students of M.Sc. Environmental Science to provide practical field learning on the topics covered during their academic semesters

- 7. Organised an Extension Lecture on "Legal Literacy on Water Resource Conservation" by Mr. Rajesh Kaushik, Advocate, Mahendergarh District Court, Haryana on December 22, 2016
- 8. Other activities include student's participation in activities like blood donation camps, environmental awareness rallies, social services schemes, plantation drive etc organized in the university

### **Highlights and Achievements**

- 1. Research collaboration: The Department of Environmental Science has Research collaboration with Indira Gandhi Delhi Technical University for Woman, New Delhi.
- 2. Faculty Publications: Research articles: *International* 30; *National* 08 Books published: 02 Book chapters: *International*-03; *National*-10

### **Achievements of Students**

### Sunil Kumar, M.Sc. Environmental Science-

- 1. The Innovative Project Future Car made was demonstrated in National Science Exhibition at Maulana Azad NIT, Bhopal'in Feb. 26-28th 2015.
- 2. Awarded with Best youth of Haryana by Haryana state Red Cross branch Chandigarh in state level YRC camp held at Panchkula from Aug. 3-8, 2015.
- 3. Awarded with Honor of Mahendragarh by the Education Minister of Haryana, Prof Ram Bilas Sharma and Excise Minister of Haryana Sh. Ghanshyam Shraf in Mahendragarh on Sept. 5, 2015.
- 4. Awarded with Special Youth Award for Best Co-ordination by Indian Red-Cross Society, Haryana branch, Chandigarh in National level YRC camp held at Panchkula from Sept, 16-22, 2015 by Personal Secretary, Governor of Haryana Mrs. Neelam Kashani
- 5. Awarded with 'Aggar Gaurav Samman' at National level in the field of Science and Technology by National Aggarwal Conference held at Agaroha Hissar, Haryana

### Jitendra Kumar, M.Sc. Environmental Science

1. Received First Prize in Quiz competition on National Science Day on 28<sup>th</sup> February 2016 at Central University of Haryana.

### Anish Kumar, M.Sc. Environmental Science

1. Received First Prize in Quiz competition on National Science Day on 28th February 2016 at Central University of Haryana.

### Sanchit Kumar.M.Sc. Environmental Science

1. Received First Prize in Quiz competition on National Science Day on 28<sup>th</sup> February 2016 at Central University of Haryana.

### Geetanjali Tyagi, M.Sc. Environmental Science

1. Awarded with 3<sup>rd</sup> position in Play Competition in National level *Youth Festival "Spandan"* – 2016 in March 2016

### Renju, M.Sc. Environmental Science

1. Awarded with 3<sup>rd</sup> position in Play Competition in National level *Youth Festival "Spandan"* – 2016 held at Central University of Haryana, Mahendergarh in March 2016.

### Razwan Ahmad, M.Sc. Environmental Science

- 1. Awarded with 3<sup>rd</sup> position in Play Competition in National level *Youth Festival "Spandan"* 2016 held at Central University of Haryana, Mahendergarh in March 2016
- 2. Awarded with 1st position in Dance Competition in Red Cross Camp, held at Chandigarh in August, 2016

### Research Projects, MOU, Consultancy, Awards, Collaborations, Academic Projects.

- 1. Sanctioned Research Project: Project entitled "Screening of Indigenous Heavy Metals Tolerant Algal Strains from Recent Indian Station, Bharati, Antarctica for Bioremediation and Hydrogen production" has sanctioned by Council of Scientific and Industrial Research (CSIR), New Delhi in June-2016
- 2. Research collaboration: The Department of Environmental Science has Research collaboration with Indira Gandhi Delhi Technical University for Women, New Delhi.

### **Future Roadmap**

- 1. To introduce the Ph.D. (Environmental Science) Programme with the vision of best world class research facilities
- 2. Outreach and collaboration with all stakeholders in environmental science, engineering and policy
- 3. Student-exchange Programmes
- 4. Initiating short term certificate and degree courses on Industrial Safety Management and Renewable Energy Resources
- 5. To strengthen the existing laboratory and establish an advanced instrumentation lab, departmental library and computer center
- 6. To receive research grants from renowned national and international funding agencies
- 7. Organising national/international conferences, workshops, seminars for disseminating knowledge and awareness among various sections of the society

### **Department of Geography**

The Department of Geography has been established in academic year 2014-15 as a constituent part of the School of Earth, Environment and Space Studies. Presently, the Department offers PG Programme, i.e., M.Sc. (Geography) with the intake capacity of 30 students. The department has an expansion plan to emerge as a distinct and excellent centre in the field of geographical studies across the globe. Geography Department is promoting culture of geographical inquiry not only to enhance the scope and frontiers of Geography as a subject in academic arena but also to produce competent, skilled, sensitive and responsible individuals for the development of the society and national integration through promotion of creativity, innovation, human values and scientific inquiry in to the physical and human aspects of geographical phenomena. In the present global scenario, Geography tries to synthesize the cultural and physical aspects of planet Earth while focusing on spirit of place. The department is also striving to have solutions for various problems, i.e., Global warming, Ozone depletion, loss of biodiversity etc. caused by irrational and insensitive use of nature by human-beings. The department is highly optimistic that it will produce scholars who are equally equipped with technological knowledge as well rationality about sustainable development of mankind and of the planet as well.

### **Programmes and Number of Seats**

Presently the Department is offering M.Sc. Programme in Geography and shortly going to start M.Phil./ Ph.D. Programme in same subject. The number of seats in M.Sc. is 30.

### **Programme Outcomes**

Everything belonging to space and time is geography. The study of geography is thus key to understand different developmental processes which might be physical, human or nteraction of both. The course offers a focused, advance learning experience that will enhance the capacity of students to understand the complex phenomena over the earth. This Programme will provide background and the necessary skills in the procedure and methods required to deal with issues of geography. At the end, it also gives the opportunity to advance the students in many fields of job and career so that they can serve the humankind at great large.

### Scheme of the Course

### M.Sc. (Geography)

The Department has diversified interest in various processes such as earth, atmosphere, ocean and human population. Linkages between physical and human processes, is key interest of geography department, making the work relevant. Therefore, the curriculum has components of disciplinary areas such as physical (land forms, atmosphere, hydrology, ocean, and environment), human (population, settlement, Industry, Agriculture, resources, regional planning) and technology-tools (Cartography, Remote sensing and GIS). A detail of the Programme scheme is follow:

### Semester I

S. No.	Course code	Course title	L	S	P	Credit
1.	SEE GEO 1 1 01 C 4105	Geographical Thought	4	1	0	5
2.	SEE GEO 1 1 02 C 4105	Quantitative Techniques in Geography	4	1	0	5
3.	SEE GEO 1 1 03 C 4105	Geomorphology	4	1	0	5

4.	SEE GEO 1 1 04 C 2125	Interpretation of Topographical Sheets and Morphometric Analysis		1	4	5
5.	To be taken from other depart	ment	3	1	0	4
	Generic Elective Course (GEC) (offered to other depar					
6.	SEE GEO 1 1 01 GE 3104	Population and Development	3	1	0	4
7.	SEE GEO 1 1 02 GE 3104	Biogeography	3	1	0	4
		Semester II				
S.	Course code	Course title	L	S	P	Credit
No.						
1.	SEE GEO 1 2 05 C 4105	Climatology	4	1	0	5
2.	SEE GEO 1 2 06 C 4105	Contemporary Human Geography	4	1	0	5
3.	SEE GEO 1 2 07 C 4105	Advanced Geography of India	4	1	0	5
4.	SEE GEO 1 2 08 C 2125	Practical II: Field Work and Report Writing	2	1	4	5
5.	SEE GEO 1 2 03 GE 2024	Practical III: Computer Aided Statistical Diagrams and Data Processing	2 0		4	4
6.	Any one of the following three courses			1	0	4
	SEE GEO 1 2 01 DCEC 3104	Urban Geography				
	SEE GEO 1 2 02 DCEC 3104	Natural Resource Management				
	SEE GEO 1 2 03 DCEC 3104	Hydrology and Water Resource Management				
		Semester III				
~	S. Course code Course title					
S.	Course code	Course title	L	S	P	Credit
S. No.	Course code	Course title	L	S	P	Credit
	Course code SEE GEO 1 3 09 C 4105	Course title  Interdisciplinary Research Methods and Techniques	4	<b>S</b>	<b>P</b> 0	Credit 5
No.		Interdisciplinary Research Methods and				
<b>No.</b> 1.	SEE GEO 1 3 09 C 4105	Interdisciplinary Research Methods and Techniques	4	1	0	5
1. 2.	SEE GEO 1 3 09 C 4105 SEE GEO 1 3 10 C 4105	Interdisciplinary Research Methods and Techniques Fundamentals of Remote Sensing and GIS Practical IV: Interpretation of Aerial Photographs & Satellite Images and	4	1	0	5
1. 2. 3.	SEE GEO 1 3 09 C 4105 SEE GEO 1 3 10 C 4105 SEE GEO 1 3 11 C 2125	Interdisciplinary Research Methods and Techniques  Fundamentals of Remote Sensing and GIS  Practical IV: Interpretation of Aerial Photographs & Satellite Images and Thematic Mapping  Assignment based Seminar Paper (compulsory)	4 2	1 1 1	0 0 4	5 5 5
1. 2. 3. 4.	SEE GEO 1 3 09 C 4105  SEE GEO 1 3 10 C 4105  SEE GEO 1 3 11 C 2125  SEE GEO 1 3 04 DCEC 0202  To be taken from other departm	Interdisciplinary Research Methods and Techniques  Fundamentals of Remote Sensing and GIS  Practical IV: Interpretation of Aerial Photographs & Satellite Images and Thematic Mapping  Assignment based Seminar Paper (compulsory)	4 4 2 0 3	1 1 1 2 2 1	0 0 4	5 5 5
1. 2. 3. 4.	SEE GEO 1 3 09 C 4105  SEE GEO 1 3 10 C 4105  SEE GEO 1 3 11 C 2125  SEE GEO 1 3 04 DCEC 0202  To be taken from other departm	Interdisciplinary Research Methods and Techniques  Fundamentals of Remote Sensing and GIS  Practical IV: Interpretation of Aerial Photographs & Satellite Images and Thematic Mapping  Assignment based Seminar Paper (compulsory)	4 4 2 0 3	1 1 1 2 2 1	0 0 4	5 5 5
1. 2. 3. 4.	SEE GEO 1 3 09 C 4105  SEE GEO 1 3 10 C 4105  SEE GEO 1 3 11 C 2125  SEE GEO 1 3 04 DCEC 0202  To be taken from other departm  Generic Electi	Interdisciplinary Research Methods and Techniques  Fundamentals of Remote Sensing and GIS  Practical IV: Interpretation of Aerial Photographs & Satellite Images and Thematic Mapping  Assignment based Seminar Paper (compulsory)  Lent  ve Course (GEC) (offered to other depart	4 4 2 0 3 stment	1 1 1 1 2 2 s)	0 0 4	5 5 5 2 4
1. 2. 3. 4.	SEE GEO 1 3 09 C 4105  SEE GEO 1 3 10 C 4105  SEE GEO 1 3 11 C 2125  SEE GEO 1 3 04 DCEC 0202  To be taken from other departm  Generic Electi  SEE GEO 1 3 04 GE 3104	Interdisciplinary Research Methods and Techniques  Fundamentals of Remote Sensing and GIS  Practical IV: Interpretation of Aerial Photographs & Satellite Images and Thematic Mapping  Assignment based Seminar Paper (compulsory)  Lent  ve Course (GEC) (offered to other depart Geography of Natural Hazards and Disasters Cultural Geography	4 4 2 0 3 stments 3	1 1 1 1 2 2 1 ss) 1	0 0 4 0 0	5 5 5 2 4
No. 1. 2. 3. 4.	SEE GEO 1 3 09 C 4105  SEE GEO 1 3 10 C 4105  SEE GEO 1 3 11 C 2125  SEE GEO 1 3 04 DCEC 0202  To be taken from other departm  Generic Electi  SEE GEO 1 3 04 GE 3104  SEE GEO 1 3 06 GE 3104	Interdisciplinary Research Methods and Techniques  Fundamentals of Remote Sensing and GIS  Practical IV: Interpretation of Aerial Photographs & Satellite Images and Thematic Mapping  Assignment based Seminar Paper (compulsory)  ent  ve Course (GEC) (offered to other depart Geography of Natural Hazards and Disasters Cultural Geography  Soil Geography	4 4 2 0 3 stment: 3 3 3	1 1 1 2 2 s) 1 1 1	0 0 4 0 0 0 0	5 5 5 2 4 4
No. 1. 2. 3.	SEE GEO 1 3 09 C 4105  SEE GEO 1 3 10 C 4105  SEE GEO 1 3 11 C 2125  SEE GEO 1 3 04 DCEC 0202  To be taken from other departm  Generic Electi  SEE GEO 1 3 04 GE 3104  SEE GEO 1 3 06 GE 3104  Any one of the following Three	Interdisciplinary Research Methods and Techniques  Fundamentals of Remote Sensing and GIS  Practical IV: Interpretation of Aerial Photographs & Satellite Images and Thematic Mapping  Assignment based Seminar Paper (compulsory)  tent  ve Course (GEC) (offered to other depart Geography of Natural Hazards and Disasters Cultural Geography  Soil Geography  DCEC courses	4 4 2 0 3 stments 3 3 3 3 3	1 1 1 2 2 1 ss) 1 1 1 1	0 0 4 0 0 0 0 0	5 5 5 2 4 4 4 4
No. 1. 2. 3. 4.	SEE GEO 1 3 09 C 4105  SEE GEO 1 3 10 C 4105  SEE GEO 1 3 11 C 2125  SEE GEO 1 3 04 DCEC 0202  To be taken from other departm  Generic Electi  SEE GEO 1 3 04 GE 3104  SEE GEO 1 3 06 GE 3104  Any one of the following Three  SEE GEO 1 3 05 DCEC 3104	Interdisciplinary Research Methods and Techniques  Fundamentals of Remote Sensing and GIS  Practical IV: Interpretation of Aerial Photographs & Satellite Images and Thematic Mapping  Assignment based Seminar Paper (compulsory)  Lent  Ve Course (GEC) (offered to other depart Geography of Natural Hazards and Disasters Cultural Geography  Soil Geography  DCEC courses  Population Geography	4 4 2 0 3 stments 3 3 3 3 3	1 1 1 2 2 1 ss) 1 1 1 1	0 0 4 0 0 0 0 0	5 5 5 2 4 4 4 4
No. 1. 2. 3. 4.	SEE GEO 1 3 09 C 4105  SEE GEO 1 3 10 C 4105  SEE GEO 1 3 11 C 2125  SEE GEO 1 3 04 DCEC 0202  To be taken from other departm  Generic Electi  SEE GEO 1 3 04 GE 3104  SEE GEO 1 3 06 GE 3104  Any one of the following Three	Interdisciplinary Research Methods and Techniques  Fundamentals of Remote Sensing and GIS  Practical IV: Interpretation of Aerial Photographs & Satellite Images and Thematic Mapping  Assignment based Seminar Paper (compulsory)  tent  ve Course (GEC) (offered to other depart Geography of Natural Hazards and Disasters Cultural Geography  Soil Geography  DCEC courses	4 4 2 0 3 stments 3 3 3 3 3	1 1 1 2 2 1 ss) 1 1 1 1	0 0 4 0 0 0 0 0	5 5 5 2 4 4 4 4

	Semester IV								
S.	Course code Course title				D	V	Credit		
No.									
1.	SEE GEO 1 4 01 SEE C 0066	Field based dissertation (including Viva Voce)	4	2	12	6	24		
2.	SEE GEO 1 4 02 SEE C	Self Study Course							

### Admission criteria and procedure

The Department follows Central University Common Entrance Test (CUCET) for admission in the current Programme. All students are required to register themselves online on the University website after declaration of results of CUCET to appear for the counselling. The students whose name figures in the merit list as displayed on the University website and Notice-Boards are required to present themselves with all relevant documents in original at the time of counselling.

### **Eligibility Criteria:**

Graduation from any recognized university (10+2+3) with a minimum 50% marks or equivalent (45% for SC/ST).

### **Brief Faculty Profile**

### 1. Dr. Kheraj

Designation : Assistant Professor and Teacher in charge

Qualification : M.A. (Geography), M.Phil. & Ph.D. (JNU), CSIR-NET-JRF-

SRF

Experience : 1.5 Years

Research Area/ Interest : Population Study, Social Security, Old age, Migration and

Environment

### **Publications**

- 1. Kheraj, Meenaxy, Punia Antushree and Bika Jitendar singh (2015), 'Loneliness among elderly persons: a case study of Rajasthan', International Journal of Multidisciplinary Research and Development, New Delhi, Vol.2, Issue 2, Part-A, pp. 1-4, ISSN 2349-5979 (Impact Factor-3.762)
- 2. Bika Jitendar singh, Kheraj, Bhuyan Bibek and Meenaxy (2015), 'The differently abled population: a spatial analysis from socio regional perspective in India', International Journal of Multidisciplinary Research and Development, New Delhi, Vol.2, issue 3, Part-G, Page 338-345, ISSN 2349-5979 (Impact Factor-3.672)
- 3. Saini Mahesh chand and Kheraj (2015), 'Child labour: social status does matter!', Perspectives in Social Exclusion, Anmol Publications Pvt.Ltd. New Delhi, pp.153-172, ISBN 978-81-261-6368-7
- 4. Kheraj, Meenaxy and Punia Antushree (2015), 'The relation of economic independence and socio-economic and health aspects of the elderly persons: a study of Rajasthan', Issues and Concerns Of Elderly People In India, Book Age Publications, New Delhi, pp. 194-203, ISBN 978-93-83281-51-0
- 5. Punia Antushree, Kheraj and Meenaxy (2015), 'Socio-economic and demographic analysis of elderly of south Asia', Issues and Concerns Of Elderly People In India, Book Age Publications, New Delhi, pp. 194-203, ISBN 978-93-83281-51-0

### Book

1. Kheraj (2012), Child Immunization in India, Lambert Academic Publishing, Germany (ISBN 978-3-659-12055-8)

### Member in Professional bodies

- 1. Life time member of The Deccan Geographical Society of India, Pune, Maharashtra, from 2015
- 2. Member of the National Association of Geographers, India

### Member in different committees of Central University of Haryana

- 1. Convener and member of Board of Studies of Geography Department
- 2. Convener and Member of Moderation (exam) committee, Department of Geography
- 3. Member, Departmental Purchase Committee, Department of Geography.
- 4. Member, Admission Committee, Department of Geography

### 2. Dr. Naresh Kumar Verma

Designation : Assistant Professor

Qualification : M.A. (Geography), M.Phil. & Ph.D. (JNU), UGC-NET

Experience : 3 Years

Research Area/ Interest : Political Geography, Quantitative techniques and Cartogarphy

### **Publications**

### Research Papers

- 1. Patil, S. S, Verma N. K., Problems and Prospects in the North Korean Denuclearisation Process, Indian Pugwash Society, 2007 December 12 (10); 1-5.
- 2. Verma, N. K, Political and Economic Dimensions of Sustainable Development, World Affairs, 2008 June; 12 (2): 164 -171.
- 3. Verma, N. K, Energy Considerations as the Driver of Nuclear Proliferation, the Deccan Geographer 2012 June; 50(2): 29-38.
- 4. Verma, N. K & Rai N. K Regional Development and Energy Security in the Korean Peninsula, Tokyo International Conference on Social Science December 2014; 451- 456.
- 5. Verma N K "Developing an Asian Tsunami Warning System" in MD Publications Pvt. Ltd., (978-8175-33126-6), New Delhi, 2008, pp. 101-107
- 6. Verma N K & Rai N K "Historical prognostication of land use and cropping pattern Rajasthan" in Research India Press, 978-93-5171-002-8, Delhi 2014, pp: 261-292

### Books

- 1. Geopolitics of Nuclear and Energy Resources: A Case Study of Korean Peninsula in the Cold War Era, Verma N K VDM Publishing House Ltd., Saarbrücken, Germany 2010
- 2. Nuclear Programmes of North Korea and Iran: A Comparative Geopolitical Analysis, Verma N K Manak Publishers, New Delhi 2015

### Member in professional bodies

- 1. Life time member of the National Association of Geographers, India from 2012
- 2. Life time member of The Deccan Geographical Society of India, Pune, Maharashtra, from 2012
- 3. Counsellor member, IGNOU study centre, SSN college, New Delhi

### Fellowship and Awards

- 1. Publication grant for doctoral dissertation by the Indian Council of Social Science Research, New Delhi, 2013-14
- 2. International travel grant for conference by the Indian Council of Social Science Research, New Delhi, 2013-2014
- 3. Rajiv Gandhi National Fellowship for SC and ST by the University Grants Commission, New Delhi, 2006-2010

### Membership of Editorial Board

Member, Editorial Review Board: World Academy of Science, Engineering and Technology, USA.

### Member in different committees of Central University of Haryana

- 1. Coordinating activities of Swatcha Bharat Abhiyan at Department level.
- 2. Member, Departmental Purchase Committee, Department of Geography.
- 3. Member, Admission Committee, Department of Geography
- 4. Member, Purchase committee for Hostel (Girls)

### **Achievements of the Students**

Name of the student	Prize	Event	Occasion	Place
Member of winning team- Kho Kho	1st	Kho-Kho	Annual Sports Event	CUH
Reena (6407)	1st	Javelin throw	Annual Sports Event	CUH
	1st	Volley Boll	Annual Sports Event	CUH
Deepika Sharma		Adventure Camp	National Adventure Camp	Pachmarhi, M.P
		Adventure Camp	International Adventure Camp	Pachmarhi, M.P
Ranjana Dalal and Tanisha Sharma	1st	Quiz	World Tourism Day	CUH
Ranjana Dalal	1st	Poster making competition	World Tourism Day	CUH
	1st	Poster making competition	Women panchayat	CUH
Tanisha Sharma	3rd	Collage making competition	World Tourism Day	CUH
Reena (6414)	1st	100m race	Annual Sports Event	CUH
	1st	Long Jump	Annual Sports Event	CUH
	1st	400m race	Annual Sports Event	CUH
Kamlesh	2nd	Discuss Throw	Annual Sports Event	CUH
	2nd	Javelin Throw	Annual Sports Event	CUH
Jitender Yadav	1st	Training Programme	Six weeks Summer Training course for PG students on "Remote Sensing and GIS"	HARSAC

Name of the student	Prize	Event	Occasion	Place
Dheeraj Pal	2nd	Shloka Uccharan	Geeta Mohatshav	Kurukshetra
Reetu Kumari	1st	Adventure Camp	Sports Event (International)	Narkanda
		Adventure Camp	Special Child Training Camp	Manali
	1st	Speech	Speech Competition	Narnaul

### **Department Infrastructure**

The Department of Geography located on 3<sup>rd</sup> floor of new academic block 4, Central University of Haryana. The Department building is fully air-conditioned. The classrooms are well designed that incorporate everything needed for a pleasant learning atmosphere. The wide spacious classrooms contain a white board and also a projector that is used for teaching so that faculty can switch to different modes of teaching as and when required. Department have computer lab and cartography lab. The department also have a big seminar hall and 20 rooms of different size for different purposes (office, faculty, laboratory, class and reading hall).

### Research Thrust Area

The following are the thrust areas of the department:

- 1. Socio-economic, political and health aspects of population (child, women, old age, SC, ST)
- 2. Regional planning and development

### **Events organised**

	Lectures Organized	Date	Convened By					
1	Introduction to Remote sensing and GIS (Resource person -Prof. M.S. Nathawat, IGNOU, New Delhi)	22.09.2014	TIC- Geography					
2	Geography and Tourism (Resource person- Prof. B.C. Vaidiya, CIPOD, SIS, JNU, New Delhi)	November -2015	Dr. Naresh k. Verma and Dr. Kheraj					
3	Questions of Sustainability: Urbanisation and Land use change (Resource person- Prof. Milap Punia, CSRD, JNU, New Delhi)	14.03.2016	Dr. Kheraj					
4	Geoinformatics for Natural Resources Management (Resource person- Dr. R.S. Hooda, Chief Scientist, HARSAC, Hisar)	14.03.2016	Dr. kheraj					
5	Agriculture: Opporturnities and Challenges (Resource person- Prof. Dhyan Kaur, PU, Chandigarh)	12.04.2016	Dr. Aneesh k. Mishra					
6	Climate Change: A Geographical Perspective (Resource person- Prof. Milap Chand Sharma, CSRD, JNU, New Delhi)	22.04.2016	Dr. kheraj					
7	Environmental Knowledge for Climate Change and Disaster Risk Management: Issues in Integrating in Geo Spatial Technology (Resource person -Prof. M.S. Nathawat, IGNOU, New Delhi)	28.04.2016	Dr. kheraj					
	Workshop Organized							
1	Census Data Dissemination (Resource person- Mr. G. Bapuji, Director Census Operation Haryana, Chandigarh)	20.01.2016	Dr. Kheraj, Dr. Naresh Kumar Verma and Dr. Aneesh					
2	Application of Bhuvan and Open Source of GIS							

	Lectures Organized	Date	Convened By					
	Sub Theme-Bhuvan and its applications: Understanding Web based Earth Observation (Resource Person- Ms. Suman Bola, Scientist, ISRO, DoS-PMO, New Delhi)	22.03.2016	Dr. Kheraj					
	Sub Theme- Application of Open source GIS for Resource planning and Management (Resource person- Prof. Mehtab Singh, MDU, Rohtak)		Dr. Kheraj					
	Panel Discussion Organ	nised						
1	Status of Geography in Haryana School Education	22.07.2016	Dr. Aneesh, Dr. Kheraj, Dr. Naresh Kumar Verma and Dr. Sarika					
	Debate Organised							
1	Indian Five Year Plans: Challenges and Opportunities	Sept. 2015	Dr. Kheraj and Dr. Naresh Kumar Verma					
2	Rural Problems and its Remedies	17.02.2016	Dr. Kheraj and Dr. Naresh Kumar Verma					
3	Recent Panchayti Raj Elections in Haryana- Positive and Negative Aspects	24.02.2016	Dr. Kheraj and Dr. Naresh Kumar Verma					
	Outreach Activities	3						
1	Socio-economic survey-Pali Village, Mahendergarh	03 -10 Feb. 2015	Dr. Aneesh Kumar Mishra					
2	Study Excursion- Jaisalmer, Rajasthan	28 Oct02 Nov. 2015	Dr. Kheraj and Dr. Naresh Kumar Verma					
3	Dhosi Hill- A Geographical Visit	12.12.2015	Dr. Kheraj and Dr. Naresh Kumar Verma					
4	Socio-economic survey- Jant and Malra Village, Mahendergarh	03 -10 Feb. 2016	Dr. Kheraj and Dr. Naresh Kumar Verma					
5	Optical Simulation Laboratory (OSL) and Central Library of J.N.U., New Delhi	24.05.2016	Dr. Kheraj					

### **Future Roadmap**

- 1. To expand and strengthen infrastructural facilities for teaching-learning and research. Teaching and research labs including geomorphology labs, RS & GIS lab etc. audio-visual facilities and modern library with e-library facilities are to be developed for providing practical knowledge and skill.
- 2. To introduce M.Phil. & Ph.D. Programmes to enhance research output of the Department.

# SCHOOL OF JOURNALISM, MASS COMMUNICATION & MEDIA

**Department of Journalism & Mass Communication** 

# > SCHOOL OF JOURNALISM, MASS COMMUNICATION & MEDIA

### • Department of Journalism & Mass Communication

The Department of Journalism & Mass Communication is a premier media department under the umbrella of School of Journalism, Mass Communication & Media. The department was established in 2014 and since then the department has carved out a special niche for itself in media education. The department teaches and trains aspiring students to meet challenges in media industries and communication studies. In a world where communication and media is one of the most sought-after fields, the department is committed to groom students in fields like PR & Corporate Communication, Advertising, Print, Electronic Media. Above all, it aims at producing good and responsible media professionals with potential to play roles at both regional and global levels.

### **Programme Offered**

The Department of Journalism & Mass Communication offers Post Graduation level professional course in Journalism & Mass Communication named M.A. (JMC)

### **Programme Outcome**

The master degree programme being offered at the university shall enable the students to:

- 1. Acquire deeper knowledge of theoretical dimensions of the discipline.
- 2. Acquire the requisite and updated practical skills across specialisations.
- 3. Develop professional and communication skills with focus on personality development
- 4. Learn investigation and research procedures in core and cross disciplinary areas.
- 5. Develop problem solving and innovation oriented temper.
- 6. Become a responsible media professional in society with strong ethical base.

### **Scheme of the Course**

### M.A. (JMC)

Semester I						
S. No.	Course Code	Course Title	Credits			
1	SJM JMC 11 01 C 3205	Introduction to Communication	5			
2	SJM JMC 11 02 C 3205	Growth of Media	5			
3	SJM JMC 11 03 C 3115	Print Journalism Practice	5			
4	SJM JMC 11 04 C 3205	Intercultural Communication	5			
5	SJM JMC 11 01 GE 4004	Media Literacy	4			
6	SJM JMC 11 02 GE 4004	Media and Society	4			
		Total Credits	29			

Semester II						
S.No.	Course Code	Course Title	Credits			
1	SJM JMC 12 05 C 3205	Communication Theory	5			
2	SJM JMC 12 06 C 3115	Radio & TV Journalism	5			
3	SJM JMC 12 07 C 3115	PR & Corporate Communication	5			
4	SJM JMC 12 08 C 3115	Media Management	5			
5	SJM JMC 12 09 C 0005	Internship (4-weeks)	5			
6	SJM JMC 12 01 DCEC 2024	Basics of Computer	4			
7	SJM JMC 12 02 DCEC 2024	Graphics and Design	4			
8	SJM JMC 12 03 DCEC 2024	Photography	4			
9	SJM JMC 12 02 SEEC 2010	Communication Skills	0			
		Semester III				
S.No.	Course Code	Course Title	Credits			
1	SJM JMC 13 10 C 2125	Radio & TV Production	5			
2	SJM JMC 1311 C 3115	Advertising	5			
3	SJM JMC 13 12 C 3205	Communication Research	5			
4	SJM JMC 13 04 DCEC 2024	Community Radio	4			
5	SJM JMC 13 05 DCEC 3104	Popular Culture	4			
6	SJM JMC 13 06 DCEC 2024	Visual Communication	4			
7	SJM JMC 13 03 GE 2114	Film Appreciation	4			
8	SJM JMC 13 04 GE 2114	Event Management	4			
		Semester IV				
S.No.	Course Code	Course Title	Credits			
1	SJM JMC 14 13 C 2215	New Media	5			
2	SJM JMC 1414 C 2125	Media Writing	5			
3	SJM JMC 1415 C 3205	Media Laws & Ethics	5			
4	SJM JMC 1416 C 3205	Communication for Development	5			
5	SJM JMC 14 07 DCEC 0408	Project and Portfolio	6			
6	SJM JMC 14 08 DCEC 0408	Dissertation and Portfolio	6			
7	SJM JMC 14 02 SEEC 2010	Soft Skills	0			

### **Admission Criteria and Procedure**

Admission is made through CU-CET (Central Universities Common Entrance Test).

**Course Eligibility:-** Graduation from any recognized university with a minimum 50 % marks or equivalent grade in aggregate.

Total seats for MAJMC course: 20 seats.

Duration of the course: 2 years

### **Faculty Profile**

Sr. No	Name of Faculty	Qualifications	Area of Interest/ Specialization
1	Dr. Pankaj Kumar	Ph.D. (JMC), UGC-NET, M.Phil. (JMC), M.A. (M.C).	Communication Research & Statistics, Radio Journalism (Program and Production)
2	Dr. Rachna Saini	Ph.D., NET-JRF, M.Phil. (JMC) M.A. (JMC)	Community Radio, Radio Program Production, Print Media
3	Mr.Naveen Kumar	Ph.D. (Pursuing) UGC-NET, M.A. (JMC)	TV Production Video Editing
4	Dr. Surender Kumar	Ph.D.NET, M.Phil. (JMC) M.A. (JMC)	Print Production, Film Production

### **Faculty Publication details**

- 1. Dr. Rachna Saini- 07
- 2. Mr. Naveen Kumar-05
- 3. Dr. Surender Kumar-05
- 4. Dr. Pankaj Kumar-07

### **Students Contributions and achievements**

1. Placements & Internship:

### **Placement**

- 1. Mr. Vipin, is working at 'Khabar Fast' as a Stringer.
- 2. Mr. Sushil is working at 'Zee News' Narnaul as a Stringer
- 3. Ms. Shilpa, Mr. Amaldas & Mr. Irshad is working for Narad News.com for freelancer.
- 4. Mr. Vinay & Mr. Rahul are working at Danik Bhaskar, Mahendergarh and Rewari respectively as reporters.
- 5. Mr. Rohitash opened a Media Institute at Jaipur named 'Nation Media Academy'

### **Internship**

- 1. Mr. Himashu Agarwal, completed Internship at Danik Bhasker from 1.6.2015 to 10.7.2015.
- 2. Mr. Rohitash Kuamr completed Internship at ETV 1.6.2015 to 30.6.2015
- 3. Mr. Irshad Khan completed Internship at Media Network of India 12.6.2015 to 30.7.2015
- 4. Mr. Rahul Kumar completed Internship at Danik Bhasker 20.6.2015. to 20.7.2015

- 5. Mr. Vinay Kumar completed Internship at Danik Bhasker15.6.2015 to 15.7.2015
- 6. Mr. Vipin Yadav has completed Internship at Fast Khaber 20.12.2015 to 10.1.2016
- 7. Mr. Dharmender Kumar has completed Internship at MajorMedia 1.6.2015 to 30.6.2015
- 8. Ms. Yasha Jain completed Internship at Amar Ujala, Narnaul 1.6.2015 to 30.6.2015
- 9. Mr. Neel Mani Kumar completed Internship at Danik Bhasker 1.6.2015 to 30.6.2015
- 10. Mr. Amal Das completed Internship at Kairali TV, People, Calicut 15.6.2015 to 4.7.2015
- 11. Ms. Shilpa Shaji completed Internship at Kairali TV, People, Calicut 15.6.2015 to 15.7.2015
- 12. Ms. Sakshi Jain has completed Internship at Punjab Kesri Narnaul 1.6.2015 to 10.7.2015
- 13. Mr. Sushil Sharma completed Internship at Sadhna News Haryana 30.5.2015 to 20.7.2015

### **Other Achievements**

- 1. Mr. Ranjith. E.V. won 1st prize in Badminton Single/Double in Annual Sports Meet, CUH, Mahendergarh on 27<sup>th</sup> March, 2016.
- 2. Mr. Himanshu won Best Creative Volunteer (2015) in NSS

### **Role of Faculty in Corporate Life of the University**

### Dr. Rachna Saini

- 1. Prepared Photo Montage on Central University of Haryana.
- 2. Member- Publication Division Club
- 3. Member, Group for Promotion of Art, culture and Heritage and involved in various activities organized by the group.
- 4. Member, Organizing Committee, Foundation Day.
- 5. Member, Organizing Committee, MatriBhasha Diwas Celebration.
- 6. Member, Organizing Committee, Painting Competition at University Level.
- 7. Member, Organizing Committee, Convocation-2016

### Dr. Naveen Kumar

Prepared Documentary on Central University of Haryana.

### **Events and Activities Organized**

- 1. Department Organized extension lecture visit on Nov 19, 2015 at DUCR, Delhi University & Danik Bhaskar Printing Press.
- 2. Organized Feature Writing Competition on February 5, 2016 at Department level.
- 3. Movie Screening 'Page 3' on November 17, 2015
- 4. Celebrated Swatch Bharat Abhiyaan at Department of JMC on 20 November 2015.
- 5. Organized Feature Writing competition on 5th February, 2015
- 6. Organized Extension Lecture by Raj Kumar Bhardwaj on October 2015.

- 7. Organized Media Quiz Competition on National Press Day 16th February, 2016.
- 8. Media students participated in NDTV on 15th December 2015
- 9. Student visited Zee TV

### **Research Thrust Areas**

The department offers diverse research areas for pursuing research. These include:

- 1. Print Media: Genesis, History, Media roles and forms in contemporary world
- 2. Electronic Media Press, its Operations and Technology
- 3. Radio; Community Radio: History, growth, policies strategies, Community Development through media
- 4. Visual Media, Film Studies

### **Highlights and Achievements**

The Department in its short journey has covered considerable milestones by producing institutional documentary for the university, bringing quarterly Newsletters celebrating important Media days, organizing various competitions among the students, organization of seminars, Guest Lecture series, Industry Visits, participation in Social campaigns and cultural activities etc. These activities may be summed up as following:

- 1. Department organized a seminar on 'Nationality & Media' on 20th October 2015 by eminent speaker Mr. Raj Kumar Bhardwaj (OSD to CM, Haryana)
- 2. Department celebrated National Press Day by organizing Quiz Competition for Media students on November 16, 2016.
- 3. Department organized workshop on Journalistic Writing with senior Journalist Mr. K G Dutt from April 27 to April 29, 2016.
- 4. Department Celebrated Swachh Bharat Abhiyaan on January 21, 2016.
- 5. Department Celebrated National PR Day by organizing National PR Day on April 21, 2016 by organizing various media competitions and also conducted extension lecture on 'PR Challenges and opportunities' by Prof. Rajbir Singh and Mr. C. J. Singh, Director Core PR, Chandigarh.
- 6. Students of Mass Communication participated in NDTV program 'Hum Log' as part of audience.
- 7. Department conducted two media visits for the students i.e. Danik bhaskar Printing Press Rewari and also DUCR, New Delhi on November 19, 2015.
- 8. Department celebrated World Radio Day-2017
- 9. Students of Mass Communication participated in Prakriti National Documentary Film Festival organized by Consortium for educational Communication on December 28, 2016 to December 30, 2016 at NITTTR, Chandigarh.
- 10. Department conducted media visit for students i.e. Zee News on November 18, 2016

### **Future Roadmap**

- 1. To set up a Community Radio for the Central University of Haryana and its surrounding community
- 2. To introduce academic programmes at UG/Certificate/Diploma levels
- 3. Further collaborations with well established Media organisations for Internship, Training and Placements of the student
- 4. Establishment of Chair/ Research Centers to pursue research on new dimensions of Media

# SCHOOL OF INTERDISCIPLINARY AND APPLIED LIFE SCIENCES

Department of Biochemistry
Department of Biotechnology
Department of Microbiology
Department of Nutrition Biology

# > SCHOOL OF INTERDISCIPLINARY AND APPLIED LIFE SCIENCES

- Department of Biochemistry
- Department of Biotechnology
- Department of Microbiology
- Department of Nutrition Biology

### **Department of Biochemistry**

Biochemistry is the most fascinating subject as it deals with the chemical language of Life, be it human, animal, plant or microorganism. Biochemistry is one of the most upcoming and highly demanded subjects in the Indian as well as the foreign universities. The basic foundation in Biochemistry is a necessary pre-requisite for any kind of biotechnological, medical, paramedical and biological research activity. Department of Biochemistry, Central University of Haryana has been established in July 2015 under the arena of School of Interdisciplinary and Applied Sciences (SIAL). The department envisions imparting high quality teaching and research to its students to engross them in the world of applied and basic sciences. The department has infrastructure for research in almost all aspects of biochemistry. The department offers a high quality and interdisciplinary learning environment for post graduate and PhD students within a high powered research program. Department offers exciting research opportunities for postgraduate students and highly personalized training to PhD students. The faculty has a tradition of excellence in teaching, while their research accomplishments have been recognized nationally and internationally in the areas of biochemistry, molecular and cellular biology, gene cloning. The long term research goals for the department are to discover novel drug molecules for therapeutics of human diseases i.e, metabolic diseases, cardiovascular diseases, cancer, and genetic diseases.



### **Programmes Offered and No. of Seats:**

Currently, the department is offering MSc in Biochemistry and PhD in Biochemistry.

Sr. No	Name of the Programme	Minimum Duration (years)	Eligibility	Seats Available
1	Ph.D. (Biochemistry)	As Applicable	i) Master's degree with at least 55% of marks (50% for SC/ST/ Differently Abled Categories) in the relevant subjects. ii) M.Phil./NET/JRF in relevant subject	As per availability of eligible supervisor
2	M.Sc Biochemistry	2 Years	Bachelor Degree in any Discipline with 50% marks in aggregate. 5% weightage shall be given to the candidates with Honours degree while determining the merit.	15

### **Scheme of the Programme**

## M.Sc. Biochemistry Semester I

S.No.	Course code	Course title	L	T	P	Credit
1.	SIAL BC 1 1 01 C 4004	Biomolecules	5	0	0	5
2.	SIAL BC 1 1 02 C 4004	Cell Biology	5	0	0	5
3.	SIAL BC 1 1 03 C 4004	Tools and Techniques in Biochemistry	5	0	0	5
4.	SIAL BC 1 1 04 C 0084	Practical I	0	0	8	4
5.		To be taken from other department	4	0	0	4

### Semester II

1.	SIAL BC 1 2 05 C 4004	Proteins and Enzymes	5	0	0	5
2.	SIAL BC 1 2 06 C 4004	Bioenergetics and Metabolism	5	0	0	5
3.	SIAL BC 1 2 07 C 4004	Immunology	5	0	0	5
4.	SIAL BC 1 2 08 C 0084	Practical II	0	0	8	4
5.	SIAL BC 1 2 02 GE 4004	Bioinformatics (compulsory)	0	3	0	3
6.	SIAL BC 1 2 DCEC	Any one of the following three courses	4	0	0	4
	SIAL BC 1 2 01 DCEC 4004	Plant Biochemistry				
	SIAL BC 1 2 02 DCEC 4004	Nutritional Biochemistry				
	SIAL BC 1 2 03 DCEC 4004	Biochemical Correlation in Disease				

### **Semester III**

1.	SIAL BC 1 3 09 C 4004	Molecular Biology	5	0	0	5
2.	SIAL BC 1 3 10 C 4004	Human Physiology and Hormone Biochemistry	5	0	0	5
3.	SIAL BC 1 3 11 C 0084	Practical III	0	0	8	4
4.	SIAL BC 1 3 12 DCEC 4004	Seminar Paper (compulsory)	0	2	0	2
5.		To be taken from other department	4	0	0	4
6.		Any one of the following two courses	5	0	0	5
	SIAL BC 1 3 05 DCEC 4004	Genetic Engineering and Biotechnology				
	SIAL BC 1 3 06 DCEC 4004	Advances in Genomics and Proteomics				

### Semester IV

### Skill Enhancement Elective Course (Compulsory and exclusively for Biochemistry students)

S. No.	Course code	Course title	L	T	D	Credit
1.	SIAL BC 1 4 01 SEEC 0066	Dissertation	0	0	24	24

### List of Generic Elective Course (GEC) offered to students of other departments

S. No.	Course code	Course title	L	T	P	Credit		
Offered in Semester I								
1.	SIAL BC 1 1 01 GE 4004	Cell Biology	4	0	0	4		
2.	SIAL BC 1 1 02 GE 4004	Principles of Biochemistry	4	0	0	4		
	Offered in Semester III							
3.	SIAL BC 1 3 03 GE 4004	Proteins and Enzymes	4	0	0	4		
4.	SIAL BC 1 3 04 GE 4004	Molecular Biology	4	0	0	4		
5.	SIAL BC 1 3 05 GE 4004	Biochemical correlations in Diseases	4	0	0	4		

### **Admission Criteria and Procedure**

### M.Sc. in Biochemistry

To seek an admission in Master program in Biochemistry and Ph.D. program in Biochemistry, students have to appear in Central Universities' Common Entrance Test (CUCET). The Central Universities' Common Entrance Test (CUCET) is conducted jointly by nine Central Universities, namely, Central University of Haryana, Central University of Jammu, Central University of Jharkhand, Central University of Kashmir, Central University of Karnataka, Central University of Kerala, Central University of Punjab, Central University of Rajasthan and Central University of Tamil Nadu. Currently the department is offering 15 seats for M.Sc. and 05 seats for Ph.D. programs. To appear for the CUCET test for master programs, candidates have to have B.Sc. (Hons.)/B.Sc. in Botany/Microbiology/Biochemistry/Biotechnology/Zoology/Life Sciences/Chemistry with minimum 50% Marks in aggregate.

### Ph.D. in Biochemistry

The candidates those have secured at least 55% marks in M.Sc. in any discipline of life sciences, shall eligible to appear for CUCET followed by an interview to be conducted by the concerned Department, which shall carry weightage of 80% and 20% respectively. The candidates who have qualified UGC/CSIR/JRF/NET/SLET or are Teacher Fellowship holders or have passed M. Phil program with course work recognized by the U.G.C. as per UGC Regulations (Minimum Standards and Procedure for award of M.Phil. /Ph.D. Degree, 2009) shall be exempted from appearing for the CUCET. Such applicants will, however, be required to appear for the personal interview. In case of the candidates exempted from the written test, the interview shall carry 100% weightage.

### **Faculty Profile**

### 1. Dr. Sanjay Kumar

Qualification: Ph.D., CSIR-NET-JRF

Research Areas/ Interests:

- 1. Biomedical Engineering
- 2. Cancer Biology

### **Experience**

- 1. Postdoctoral Fellow at university of Central Florida, Orlando, Florida USA (2013-2014)
- 2. Postdoctoral Fellow at University of Cincinnati, Ohio, USA (2010-2013)
- 3. Assistant Professor in Biochemistry at Central University of Haryana (2015-contd.)

### **Awards**

- 1. **GATE** (Graduate Aptitude Test in Engineering): Qualified (99.7 percentile, All India top ranker)
- 2. **CSIR JRF** (Council of Scientific and Industrial Research Fellowship): qualified
- 3. **SPM** (Shyama Prasad Mukherjee Fellowship): Qualified
- 4. **BARC** (Bhabha Atomic Research Centre): Qualified scientific officer
- 5. **Director of Sports** at Central University of Haryana

### Membership of academic & research bodies

- 1. Chairman: Society of Young Scientists (SYS), AIIMS, Delhi
- 2. American Heart Association (AHA) Member
- 3. Editorial board member of international journals (more than 10)

### **Publication details**

Total Publications : 18 H-index : 4 i10-index : 2

### 2. Dr. Vikas Yadav

**Qualification:** Ph.D., CSIR-NET-JRF

**Research Areas/Interests:** 

- 1. Molecular and Cellular Biology
- 2. Cell Signaling and Diabetes
- 3. Tissue Engineering





### 4. Skeletal Muscle Metabolism

### **Experience**

- 1. Postdoctoral Fellow in Department of Biomedical Engineering, Tufts University, Medford, USA (May 2007-October 2009)
- 2. Postdoctoral Fellow in Dana-Farber Cancer Institute, Harvard Medical School, USA (November 2009-Februray 2011)
- 3. Postdoctoral Fellow in University of Texas, Health Science Center at Houston, USA (February 2011- April 2015)
- 4. Assistant Professor in at Amity Institute of Molecular Medicine and Stem Cell Research (Sept 2015-Dec 2015)
- 5. Ramalingaswami Fellow, Canter for Bioscience and Bioengineering, IIT-Indore (Jan 2016-July 2016)
- 6. Assistant Professor and Ramalingaswami Fellow, Department of Biochemistry, Central University of Haryana, Mahendergarh, Haryana (July 2016-till date)

### Awards

- Ramalingaswami Re-entry Fellowship, Department of Biotechnology (DBT), Govt. of India, Delhi, 2015
- 2. Research Ethics and Teaching Skills (Certificate), University of Texas, Houston, USA, 2015
- 3. Best Oral Presenter (award), University of Texas, Houston, USA, 2014
- 4. CSIR-Senior Research Fellowship, CSIR, India, 2004
- 5. CSIR-Junior Research Fellowship, CSIR, India, 2002
- 6. CSIR-NET (Certificate), CSIR, India, 2001

### Membership of academic & research bodies

- 1. American Society for Microbiologists (ASM)
- 2. Biomedical Engineering Society of America

### **Publication details**

Total Publication : 13 H-index : 10 i10-index : 10

### **Departmental Infrastructure**

Department has all necessary equipments and chemicals needed for Masters/PhD Program. Moreover, we are also in a process of procuring these large equipments.

Name of Equipment					
Agarose Gel Electrophoresis	Micropipettes 0.1-2.5 μl, 0.5-10 μl, 2-20 μl, 5-50 μl, 10-100 μl, 20-200 μl, 100-1000 μl,				
SDS-PAGE Gel Electrophoresis	Double beam UV-Vis Spectrophotometer				
UV Transilluminator	Microscope (Olympus)				
Gel-Doc System	Oven for drying glassware				
Thermo cycler (PCR Machine) T100 Eppendorf	37°C Incubator Shaker				

Name of Equipment				
Spinwin micro centrifuge 1.5 ml	Vortexer			
Refrigerator	Real time PCR			
Microwave oven	Spectrophotometer			
Refrigerated centrifuge	CO <sub>2</sub> incubator			
Rocker Shaker	Cell culture facility (BSL-II)			
Water bath	PCR			
pH Meter	Deep Freezer (-20°C)			
Magnetic stirrer	Autoclave			

### **Research Thrust Areas of the Department**

The metabolic diseases diabetes, obesity and cancer combined accounts for nearly half of the world population. Scientists are trying to figure out the causes behind these devastating diseases. Despite having significant progress in the fundament biology of these disease still there are limited medicines or no medicines available in the market to treat these diseases. The department of biochemistry, Central University of Haryana is actively engaged in the research associated with cancer and diabetes treatment and prevention. Currently the department has two faculty members at the level of assistant professor. Their research thrust are as follows:

### 3. Dr. Sanjay Kumar (Assistant Professor)

### Stem cell therapy

- 1. Pharmacological Preconditioning (treatment with drug) of Stem Cells/Mice/Rat with Tadalafil, a Phosphodiesterase Inhibitor to increase their survival/cardioprotection against ischemic stress. Ischemic model (*in vivo*) made by ligating LAD (left anterior descending coronary artery) and another IR (ischemia/reperfusion) model by ligating LAD for 30 min and followed by reperfusion by releasing the knot. The aim is to elucidate molecular mechanisms/signaling pathways involved in early and late phase of protection, if there any.
- 2. Regulation of cell cycle under ischemic condition in stem cell and todetermine the role of hypoxamir miRNA210 in it.

### 4. Dr. Vikas Yadav (Assistant Professor)

1. Working on diabetes management and molecular remedies to treat diabetes mediated complications. Currently he is Ramalingaswami Fellow and his research has been funded by Department of Biotechnology, Govt. of India, New Delhi.

### Events organized and planned

### 1. Seminar Organised

Date of Event: 04/03/2016

Resource Person/Guest Speaker of the Event: Prof. Kamla Chaudhry

Community participation: Yes

Target Group: Life Sciences Departments

Coordinator(s): Dr. Sanjay Kumar

Brief Write up in 100 words: Prof. Kamla Chaudhry is a professor and Head, Biotechnology, HAU, Hisar. Title of her PhD thesis was "Citric acid production from *Aspergillus niger*".

Her work is on Biofuel and Biopesticides and delivered her lecture on the same. She took BT Cotton gene from *Bacillus thuringenesis* and used it for organic farming.

### 2. Science Day Celebration

Date of Event: 28/02/2016 Title of the Event: Science day

Resource Person/Guest Speaker of the Event: Prof. C. R. Babu

Community participation: Yes Target Group: Science Departments Coordinator(s): Faculties of Sciences

Brief Write up in 100 words: Keynote lecture by C. R. Babu on Conservation and Sustainable Utilization of Biodiversity followed by "Journey as Scientist" by Prof R. C. Kuhad (Vice-Chancellor, CUH). There was a poster competition on the theme "role of

science in making smart cities"

### **Highlights and Achievements**

Department has come into existence in the year July, 2015 under School of Interdisciplinary and Applied Life Sciences. The Department have already published 5 papers in international journals.

Classrooms and Laboratory have been established.

### **Research Projects**

### Name of the Project Investigator: Dr. Vikas Yadav

Name of Funding Agency; Department of Biotechnology; Govt. of India Title of the Project: Role of Nuclear Receptor Coactivator  $PGC1\beta$  in diabetes Mediated Endothelial cell Dysfunction and Angiogenesis

Amount Sanctioned: INR 88 lacs Duration: five years (2016-2021)

### **Future plans**

The long term goal of the department is to develop fully functional Molecular based Genetic Laboratory for diagnostic and research projects. Instruments like RT PCR, HPLC, Flow cytometry, Inverted microscopes, Gel Doc, Electrophoresis, Gel Doc, Western Blot etc to gear up for collaborative research work. The department will also upgrade Immunology and Tissue culture facilities in the department arena in near future. The department will establish a collaborative research environment with other world class National and International Medical and Research institutes. The department has following goals, but not limited to, for the next 4-5 years:

- 1. Establishment of stem cell facility/institute
- 2. Writing grants and secure funds to match international standard in research
- 3. Collaborative initiatives with prestigious organizations
- 4. Student-exchange programs
- 5. Series of Extension Lectures by the Eminent Professors
- 6. Engaging Visiting Professors/Adjunct Faculty
- 7. Organizing Seminars/Conferences/Workshops at regular intervals
- 8. To encourage community service by creating awareness programs on various issues related to nutrition and diseases.

### **Department of Biotechnology**

CUH has taken its first step towards performing cutting edge technological research by starting interdisciplinary courses in biotechnology with the inception of Department of Biotechnology under the umbrella of School of Interdisciplinary and Applied Life Sciences (SIAL) in 2015. The department has faculties from different backgrounds of biotechnology offering a wide research, training, and teaching experience. It is engaged in several research projects funded by different Government of India funding organizations like DST, DBT, MHRD, etc. The department is aimed at training students in the field of biotechnology and encouraging interdisciplinary activities among the faculties. The department also plans to get involved in social outreach activities and guide industries to utilize sustainable technologies.

Department of biotechnology believes in the integration between subjects and allied disciplines such as chemical engineering, chemistry, medicine, energy and solid waste management. The focus of the department is also to develop technologies that seek solutions to real life problems.

### Programs and number of seats offered

M.Sc. in Biotechnology 15 seats Ph.D. in Biotechnology 5 seats

### **Scheme of the Programme**

M.Sc. (Biotechnology)

### **First Semester**

S. No.	Course code	Course title	L	T	P	C
1.	SIAL BT_01_1_01_CC	Principles of Genetics and Molecular Biology	5	0	0	5
2.	SIAL BT_01_1_02_CC	Biomolecules and Metabolism	4	0	0	4
3.	SIAL BT_01_1_03_CC	Cell Biology	5	0	0	5
4.	SIAL BT_01_1_04_CC	Practical I	0	0	12	6
5.	SIAL BT_01_1_01_GEC	Principle of Biotechnology	4	0	0	4

### **Second Semester**

S. No.	Course code	Course title	L	Т	P	C
1.	SIAL BT_01_2_05_CC	Tools and Techniques in Biotechnology	4	0	0	4
2.	SIAL BT_01_2_06_CC	Microbial Process Engineering and Technology	4	0	0	4
3.	SIAL BT_01_2_07_CC	Immunology	4	0	0	4
4.	SIAL BT_01_2_08_CC	Practical II	0	0	8	4
5.	SIAL BT_01_1_02_GEC	Bioinformatics and Biostatistics (compulsory)	0	4	0	4
6.	Any of	ne following two courses		0	0	4
	SIAL BT_01_2_01_DCEC	Genomics and Proteomics				
	SIAL BT_01_2_02_DCEC	Microbial growth, enzyme and fermentation kinetics				

### **Third Semester**

S. No.	Course code	Course title	L	T	P	C
1.	SIAL BT_01_3_09_CC	Cell and Tissue Culture	5	0	0	5
2.	SIAL BT_01_3_10_CC	Genetic Engineering	5	0	0	5
3.	SIAL BT_01_3_11_CC	Seminar Paper	0	4	0	4
4.	SIAL BT_01_3_12_CC	Practical III	0	0	12	6
5.	Any of the following two courses			0	0	4
	SIAL BT_01_3_03_DCEC	Agricultural Biotechnology and IPR				
	SIAL BT_01_3_04_DCEC	Medical Biotechnology				

### **Fourth Semester**

S. No.	Course code	Course title	L	T	P	C
1.	SIAL BT_01_4_01_SEEC	Dissertation	0	0	24	24

### Admission criteria and procedure for PG and PhD programs

### M.Sc (Biotechnology)

Admission to M.Sc program is through CUCET entrance examination that is based on the CUCET score. A candidate having a bachelor degree under 10+2+3 system, recognized by the university, or a degree recognized as its equivalent is admissible to master program.

### Ph.D. ((Biotechnology)

Presently, department is offering admission to Ph.D. programme through CUCET examination.

The candidates who have qualified UGC/CSIR-JRF/NET/SLET/GATE, or are Teacher Fellowship holders, or have passed the M. Phil. programme with course work recognised by the U.G.C., as per the UGC Regulations (Minimum Standards and Procedure for award of M.Phil./Ph.D. Degree, 2009), shall be exempted from the written test.

### **Faculty and Fellows**

### 1. Dr. Kashyap Dubey

Associate Professor & Head Department of Biotechnology, Central University of Haryana, Jant-Pali Mahendergarh,-123031, Haryana Teaching Experience: >9 years (since May 2007)



### Research area

Bioprocess engineering, Water for health

### **Important Posts held:**

Head, Department of Biotechnology, CUH, Mahendergarh, Haryana Head/Coordinator, Department of Biotechnology, UIET, MDU, Rohtak, Haryana Coordinator, TEQIP-II, UIET, MDU, Rohtak, Haryana

### Awards/Achievements

Young Scientist Award in Industrial Microbiology, Association of Microbiologists of India Young Scientist Award in Medical Microbiology, Association of Microbiologists of India Young Faculty-Malviya Award, Biotech Research Society of India Young Investigator Project Award, Department of Science and Technology, GOI, India DST-Inspire Mentor Award, Department of Science and Technology, GOI, India Visiting Researcher, Department of Chemical Engineering, IIT, Kanpur Reviewer of various peer reviewed journals of high repute

### Membership of academic/research bodies

Life Member, National Academy of Sciences of India

Life Member, Association of Microbiologists of India

Life Member, Biotech Research Society of India

Life Member, Indian Society of Cell Biology

Life Member, Society of Biological Chemist, Bangalore

Life Member, Indian Science Congress Association, Kolkata

Life Member, Mycological Society of India (MSI)

Life Member, Asian Federation of Biotechnology

Annual Member, American Society of Microbiology (2014)

### **Projects**

Ongoing: 2 Completed: 2

**Patents: Filed: 1** (TEMP/E1/43840/2016 DEL)

### **Publication details**

Research paper: 45 Book Chapters: 5

### 2. Rishi Gupta (M.Sc., Ph.D.)

Assistant Professor Department of Biotechnology, Central University of Haryana, Jant-Pali Mahendergarh, 123031, Haryana

### **Research Experience**

>3 years (Jan 2013-May 2016)

### **Teaching Experience**

>1 year (since July 2015)

Research area:

Lignocellulose Biotechnology, Biomass Bioconversion; Bioethanol Biotechnology

### **Important Posts held**

Teacher-In-charge, Department of Biotechnology, CUH, Mahendergarh, Haryana (2015-2016) Convener, B. Voc. Industrial Waste Management, DDU Kaushal Kendra, CUH, Haryana (Since 2015)



### Awards/Achievements

Young Scientist Award in Environmental Microbiology, Association of Microbiologists of India Young Investigator Project Award, Department of Science and Technology, GOI, India

Senior Research Fellowship Award, Council of Scientific and Industrial Research, India Reviewer of various peer reviewed journals of high repute

### Membership of academic/research bodies

Life Member, Association of Microbiologists of India Life Member, Biotech Research Society of India

### **Projects**

Ongoing: 1 Completed: 1

### **Patent**

Filed: 1 (Indian patent-IN1348DEL2011)

### **Publication details**

Research paper: 20 Review: 2 Book Chapters: 10

### 3. Meenu Goyal (M.Sc., Ph.D.)

Assistant Professor Department of Biotechnology, Central University of Haryana, Jant-Pali Mahendergarh,-123031



### **Teaching Experience**

>2 year (since May 2014)

### Research area

Plant Biotechnology, Molecular approach for abiotic stress tolerance, Gene expression analysis

### **Employment Record**

**Current:** Assistant Professor, Department of Biotechnology, Central University of Haryana, Jant-Pali, Mahendergarh, Haryana (since July 2015)

**Previous:** Assistant Professor, Abhilashi Institute of Life Sciences, Mandi, Himachal Pradesh.

### Awards/ Fellowships

Awarded CSIR Senior Research Fellowship (SRF) for doctoral research from Aug. 2012 to Jan. 2014.

Awarded Canadian Commonwealth Scholarship (CCSP) for research project at University of Saskatchewan, Canada from Feb., 2012 to July, 2012.

Awarded **CSIR Junior Research Fellowship (JRF)** for doctoral research from Jan. 2010 to Jan. 2012. Received **CCS HAU merit scholarship** for master's degree from Dec. 2007 to July 2009.

### **Trainings/Courses**

- Completed 45 days "General Course on Intellectual Property" from WIPO Worldwide Academy (Oct.1 to Nov.15, 2010).
- Completed training course on "Biosafety" at University of Saskatchewan, Canada.
- Completed training course on "Laboratory Safety" at University of Saskatchewan, Canada.

### **Publication details**

- Nucleotide sequences contributed to **GenBank** database: **4** (Accession numbers : KT149216, KT149217, KT149218 and KT149219)
- Research papers: 3

### 4. Rohit Kumar Singh (M.Sc., Ph.D.)

Assistant Professor Department of Biotechnology, Central University of Haryana, Jant-Pali Mahendergarh,-123031, Haryana

E-mail: rohithpu@cuh.ac.in Mobile: + 91-9810963953



### Research area: Structural biology

Dr. Rohit Kumar Singh is an Assistant Professor in the department of biotechnology at CUH. He holds his Doctorate in Biophysics from Jawaharlal Nehru University, New Delhi. After completing his Graduation in Science (B.Sc. in life Sciences), He did his Post-Graduation in Biotechnology from Himanchal Pradesh University, Shimla. During his Ph.D. tenure, he has successfully carved a niche in the field of structural biology and biophysics. He has performed and gained expertise in cloning, site directed mutagenesis, protein expression, purification, enzymatic characterization, drug inhibition assays, circular dichroism (CD), Isothermal titration calorimetry (ITC) and X-ray crystallography (XRD). He has been successful in crystallizing and obtained structure solution of a number of proteins and protein-ligand complexes. He has extensive hands-on experience with data collection at home source (Advanced instrumentation research facility, JNU and National Institute of Immunology in India) and at European Synchrotron Radiation Facility (ESRF), BM14, Grenoble, France.

### 5. Gulab Singh (M.Sc., Ph.D)

SERB Young Investigator
Department of Biotechnology,
Central University of Haryana, Jant-Pali
Mahndergarh,-123031, Haryana
E-mail: gulabsingh@cuh.ac.in

Mobile: + 91-9050227962



#### **Research Experience**

>1.5 Years

#### Research Area

Bio-nanotechnology, Plastic antibody designing, Microbial bio-molecules

#### Awards/ Achievements

Young Investigator Project Award, SERB, GOI, India

#### **Project**

Ongoing: 01

#### Patent

Filed: 02 (Indian patent no. 2458/DEL/2014 & 750/DEL/2015)

#### **Publication Details**

Research Papers: 15 Reviews: 01 Book Chapters: 04 Edited Book: 01

#### **Department Infrastructure**

- 1. Two ICT enabled Class rooms
- 2. One wi-fi enabled Faculty room with computer facilities
- 3. Well-equipped M.Sc. Laboratories

#### **Research Thrust Areas**

- 1. Bioprocess engineering
- 2. Bioenergy
- 3. Waste Management
- 4. Green Biotechnology
- 5. Structural Biology

#### **Events organized**

- 1. National Science Day (27th February 2015)
- 2. Conferences on "Biotechnology for Sustainable Development" (5th-6th August 2016).
- 3. Special lecture on "GNR-Born Day celebration" (8th October 2016)

## **Highlights and Achievements**

- 1. Department has European Union (INNO-INDIGO program; IPP1) project in collaboration with two European Universities.
- 2. Department has organised a GIAN course on "Microbial Biotechnology" from 19<sup>th</sup> to 30<sup>th</sup> Dec., 2016.
- 3. Department has started SIAL Lecture series of in-house faculty members on First Saturday of every Month from Jan 2017.

#### **Research Projects ongoing:**

- 1. Targeting the elimination of antineoplastic compounds in hospital wastewaters: Novel frontiers in sustainable treatment. Funding agency: DBT-European Union (IPP1)
- 2. Site directed mutagenesis of UbiA for enhancement of CoQ10 yield. Funding agency: DBT

## **Academic Project**

1. GIAN project on "Microbial Biotechnology" by MHRD, GOI

#### **Memorandum of Understanding**

1. The department has MoU with Centre for Industrial and Applied Biotechnology, Mohali

#### Collaboration

- 1. iBET, Portugal
- 2. University of Catholique de Louvain, Belgium
- 3. National Institute of Technology, Durgapur, West Bengal

#### **Future Roadmap of the Department**

Department of Biotechnology is planning to open 2 new M.Sc. program i.e. Plant Biotechnology and Industrial Biotechnology.

Department has already initiated the proposal to start a M.Sc. integrated program in Biotechnology.

Biotechnologies for applications across a wide spectrum of societal needs including innovations in diagnosis, therapy of human diseases, design of novel biomaterials, biomedical devices, and in solving environmental hazard.

The department has plans to start advanced Centre in Bioprocess Technology.

# **Department of Microbiology**

Microbiology is a scientific discipline that deals with the study of microorganisms. Microorganisms exist everywhere and have enormous impact on human health and environment. To meet the challenges and impart theoretical as well as research oriented training to the master's and doctoral students, department of microbiology was established under the umbrella of School of Interdisciplinary and Applied Life Sciences (SIAL) in 2015. The department of Microbiology was established with the vision of bridging the gap between classical microbiology and applied aspects of microbiology with research on infectious diseases, immunology, biofuels and bioenergy. The main objective of the department to impart quality education in the field of microbiology and to create trained microbiologist to contribute to the fields of food production, pharmaceuticals, agrochemicals, environment, agriculture and public health research. The Department of Microbiology aims at using Microbial research as a tool for the benefit of mankind. M.Sc. and Ph.D. program in microbiology encompasses a wide area of study, consisting of immunology, medical microbiology, microbial genetics, virology, Environmental Microbiology Soil & Agricultural Microbiology Industrial Microbiology, Microbial Physiology and Metabolism. Research in our department seeks to meet challenges and provide information to us to eliminate pathogens, prevent newly emerging infectious diseases, and vaccine development. In addition, another thrust area of department is to provide renewable biofuels and/or bioenergy to mitigate global warming and depleting conserved petroleum resources. Our faculties are trained and have research expertise in different field of microbiology and are engaged in several research projects funded by various organizations such as UGC and DST. Most of our faculties have postdoctoral experiences from abroad and doing cutting edge research in microbiology. The microbiology department also trains Ph.D. and support postdoctoral students. The doctoral program in the department began in July 2016. The vision of our department is to become an internationally renowned and ideal department through highest teaching standards and performing quality research. The department also wishes to contribute towards the development of the nation by providing quality training to the aspiring researchers and scientists.

#### Programmes and Number of seats offered

M.Sc. (Microbiology) Ph.D. (Microbiology)

#### **Scheme of the Course**

#### Ph.D. (Microbiology):

Semester	Semester Core/ Paper Code Title of the Paper Elective		Credit Hours	
T	CC	SIAL MB 02 01 01 C	Research Methodology	(6+0)
1	CC	SIAL MB 02 01 02	Tools & Techniques in Microbiology	(6+0)

#### M.Sc. (Microbiology):

Semester	Core/ Elective	Paper Code	Title of the Paper	Credit Hours
I	CC	SIAL MB 01 01 01 C	Principles of Microbiology	(5+0)
	CC	SIAL MB 01 01 02 C	Microbial Physiology and	(5+0)
			Metabolism	
	GEC	SIAL BC 1 1 02 GE 4004	Principles of Biochemistry	(4+0)
	CC	SIAL MB 01 01 03 C	Bacteriology	(5+0)
	СС	SIAL MB 01 01 04 C	Practical –I	(0+4)
	CC	SIAL MB 01 02 05 C	Virology	(5+0)
	DCEC**	SIAL MB 01 02 01 DCEC	Mycology & Phycology	(4+0)
II	DCEC**	SIAL MB 01 02 02 DCEC	Plant Pathology	(4+0)
	CC	SIAL MB 01 02 06 C	Food and Dairy Microbiology	(5+0)
	CC	SIAL MB 01 02 07 C	Microbial Genetics	(5+0)
	CC	SIAL MB 01 02 08 C	Practical-II	(0+4)
	GEC	SIAL BT 01 02 02 GE 4004	Biostatistics & Bioinformatics	(4+0)
	CC	SIAL MB 01 03 10 C	Medical Microbiology and	(5+0)
			Immunology	
III	DCEC**	SIAL MB 01 03 03 DCEC	Environmental Microbiology	(4+0)
	DCEC**	SIAL MB 01 03 04 DCEC	Soil & Agricultural Microbiology	(4+0)
	CC	SIAL MB 01 03 11 C	Industrial Microbiology	(5+0)
	GEC	SIAL BC 1 3 04 GE 4004	Molecular Biology	(4+0)
	CC	SIAL MB 01 03 12 C	Practical-III	(0+4)
	CC	SIAL MB 01 03 21 C	Seminar	(2+0)
IV	SEEC	SIAL MB 01 04 01 SEEC	Dissertation	(0+24)

CC- Core Course \*Paper code from other programme(s)

GEC- Generic Elective Course \*\*Choose any one in given semester

#### **Admission Criteria**

**M.Sc.:** Admission to M.Sc. program is through CUCET entrance examination that is based on the CUCET score. A candidate having a bachelor degree under 10+2+3 system, recognized by the university, or a degree recognized as its equivalent is admissible to master program.

Ph.D. Presently, department is offering admission to Ph.D. program via two modes

**Direct Admission:** Through CUCET examination.

The candidates who have qualified UGC/CSIR-JRF/NET/SLET/GATE, or are Teacher Fellowship holders, or have passed the M. Phil. programme with course work recognized by the U.G.C., as per the UGC Regulations (Minimum Standards and Procedure for award of M.Phil./Ph.D. Degree, 2009), shall be exempted from the written test.

#### **Brief Faculty Profile**

#### 1. Dr. Avijit Pramanik

**Qualification:** Ph.D., NET-JRF

#### Research Areas/ Interests

- 1. "Trojan Horse" Drug delivery system based on sideromycin
- 2. Outer membrane energy transduction system
- 3. Bacterial protein secretion system

#### **Experience**

- 1. Postdoctoral Associate in University of Pittsburgh, Pittsburgh, USA (2006-2007)
- 2. Postdoctoral Fellow in Max Planck Institute for Developmental Biology, Tuebingen, Germany (2007-2013)
- 3. Assistant Professor in the department of Microbiology at DAV University (2013-2016)

#### Awards

- 1. Qualified and awarded Junior Research Fellowship in National Eligibility Test conducted by Council of Scientific and Industrial Research, India in the field of Life Science in 2000.
- 2. Awarded Junior Research Fellowship by Indian Council of Agricultural Research, India for pursuing M.Sc. in the field of Agricultural Science in 1999.

**Membership of academic & research bodies:** Life member of Association of Microbiologists of India (AMI)

#### **Publication details**

Total Publication : 10 H-index : 6 i10-index : 6

#### 2. Dr. Puja Yadav

**Qualification:** Ph.D., CSIR-NET-JRF

#### **Research Areas/Interests:**

- 1. "Host-Pathogen Interaction
- 2. Vaccine Development
- 3. DNA secondary structure mediated genome instability

#### **Experience**

- 1. Postdoctoral Fellow in Children's Hospital, Harvard Medical School, USA (2009-2011)
- 2. Postdoctoral Fellow in University of Texas, Health Science Center at Houston, USA (February 2012- June 2012; 2013-2015)
- 3. Assistant Professor in Microbiology at Amity Institute of Microbial Technology (2015-2016)





#### **Awards**

- 1. Young Women Scientist award in Association of Microbiologist of India (AMI), 2015.
- 2. Awarded Travel grant for ISPPD, Tel Aviv, Israel. (International Conference on Pneumococci and Pneumococcal Diseases)
- 3. CSIR-JRF and SRF
- 4. Awarded the Certificate of Merit from Ministry of Human Resources and Development, Government of India.

**Membership of academic & research bodies:** Life member of Association of Microbiologists of India (AMI)

#### **Publication details**

Total Publication : 14 H-index : 8 i10-index : 7

#### 3. Dr. Jitendra Kumar Saini

Qualification: Ph.D., NET

#### **Experience**

- 1. Scientific Officer (Consultant), DBT-IOC Centre for Advanced Bioenergy Research, Indian Oil Corporation Ltd., Faridabad, Haryana (2013-2014)
- 2. Scientific Officer (Consultant), DBT-IOC Centre for Advanced Bioenergy Research, Indian Oil Corporation Ltd., Faridabad, Haryana (2014-2016)
- 3. Postdoctoral Research Associate at Animal Nutrition Department, GADVASU, Ludhiana, Punjab (2011-2013)

**Research Areas/ Interests:** Biofuels and Bioenergy, Fermentation and Bioprocess Development, Microbial Strain Improvement, Enzyme and Microbial Technology

#### **Awards**

- 1. Awarded National Eligibility Test (ICAR-NET) in Microbiology (2014).
- 2. Awarded Uttarakhand State Eligibility Test for Lecturership (U-SET-2012) Life Sciences (2012)
- 3. Qualified Graduate Aptitude Test in Engineering (GATE-2005) in Life Sciences in (2005)
- 4. University merit fellowship for Doctoral studies at GBPUA&T, Pantnagar (2006-2008)

**Important Posts held:** Team Leader for two projects on Bioethanol Production and Fungal Cellulase Scale-up (Mutagenesis Team) at DBT-IOC Centre for Advanced Bioenergy Research (2014-15)

**Membership of academic & research bodies:** (1) Life member of Association of Microbiologists of India (AMI) (2) Life member of Asian Federation of Biotechnologists (AFOB)

#### **Publication details**

Total Publication: 16 (10 Research papers, 3 Review papers, 3 Book Chapters)

H-index : 6 i10-index : 5

#### 4. Dr. Vinod Yadav

**Qualification**: Ph.D., CSIR-NET-JRF

#### **Research Areas/Interests:**

- 1. Mechanisms of Gene Regulation
- 2. Cell biology and Immunology
- 3. Host-Pathogen Interaction

#### **Experience**

- DBT project Postdoc Research Fellow at Special Center for Molecular Medicine Jawaharlal Nehru University, New Delhi, India from September 2015 till Feb 2016
- ➤ Postdoctoral Associate in Nelson R Mandela School of Medicine, UKZN, Durban, South Africa from 2013-2015

#### **Awards**

- 1. Qualified for SPM Fellowship examination in December 2006
- 2. Qualified all India National Eligibility Test (CSIR-NET) for Junior Research Fellowship in December 2006 and also
- 3. Won 1st Prize in Science Quiz organized on National Science day by DBTES on 28th Feb 2007

**Membership of academic & research bodies:** Life member of Association of Microbiologists of India (AMI)

#### **Publication details**

Total Publication : 8 H-index : 3 i10-index : 3

#### **Department Infrastructure**

Department of microbiology have well-established laboratory set up to conduct M.Sc. practical. Departmental laboratory is equipped with instruments such as, crude balance, weighing balance, light microscope, refrigerator, microwave oven, autoclave, pH meter, autoclave, -20°C deep freezer, magnetic stirrer, analytical balance, micro centrifuge, hot air oven, bacteriological incubator, Gradient PCR, CO<sub>2</sub> incubator, Ice flaking machine, 4°C centrifuge, laminar air flow cabinets, Incubator shaker 4 chambers, horizontal gel electrophoretic unit, vertical gel electrophoretic unit and gel rocker.

In addition, department is in process to procure high end instruments such as Inverted Phase Contrast Microscope, BSL2 facility, Gel documentation system, digital autoclave, UV-Vis spectrophotometer with peltier system. Department is also under process of establishing BSL2 facility to carry research on pathogens.

#### **Research Thrust Area**

- 1. Host-Microbe Interaction
- 2. DNA secondary structures (G quadruplex)
- 3. Bioenergy and Biofuels, Fermentation technology
- 4. Mechanism of gene regulation
- 5. Applied Microbiology



#### **Details of the Postdoctoral Fellow**

#### 1. Dr. Rishikesh Shukla

UGC Dr. D.S. Kothari Post doctoral Fellow

Project Title: Cost effective strategy for the production of Erythritol using crops byproducts.

#### **Details of Research Scholars and Areas of Interest**

- a. Hemansi : M.Sc. Medical Biotechnology from Maharishi Dayanand University (MDU, Rohtak). Email id: hemansi.sharma@gmail.com
  Research interest: Fermentation, Biofuel Production, Strain improvement.
- b. Simranjit Kaur: M.Sc. in Microbiology from Punjab Agricultural University, Ludhiana. Email id: simran24sidhu@gmail.com
  Research interest: Characterization and purification of microbial siderophores, Molecular biology, plant-microbe interaction.
- c. Shalini Verma: M.Sc. Microbiology from Lucknow University (Lucknow, UP). Email id: shaliniverma7993@gmail.com
  Research interest: Molecular mechanism of host-pathogen interaction.
- d. Raj Kamal Vibhuti: M.Sc. Bio-Technology from Jiwaji University, Gwalior, MP. Email id: rajkamalvibhuti@gmail.com
  Research Interest: Molecular Microbiology, iron transport system in bacteria.

#### **Events Organized & Planned (last three years)**

- 1. National Science Day (27th February 2015)
- 2. National symposia on "Microbiology for Humans Health and Environment" on 8<sup>th</sup>-9<sup>th</sup> September 2016.













#### **Highlights and Achievements**

Our M.Sc students got training during their summer break in different institute/university of India

- 1. Ms. Pooja Yadav: Summer training program at Jawaharlal Nehru University, 2016
- 2. Ms. Jyoti: Summer training at Indian Institute of Technology, Indore, 2016
- 3. Ms. Sakshi: Summer training at Indian Institute of Technology, Indore, 2016

One Ph.D. student Ms. Shalini Verma qualified CSIR-UGC NET in July, 2016.

#### Research Projects, MOU, Consultancy, Awards, Collaborations, Academic Projects.

#### **Details of the research projects:**

- 1. Principle Investigator: Dr. Puja Yadav, Assistant Professor
  - a. Funding Agency: Department of Science and Technology
  - b. Project title: "Identification and functional characterization of G4 DNA in *Helicobacter pylori:* a novel therapeutic target"
  - c. Project amount: 45.00 Lacs
  - d. Duration: 2017-2020
- 2. Principle Investigator: Dr. Jitendra Kumar Saini, Assistant Professor
  - a. Funding Agency: Department of Science and Technology
  - b. Project title: Improving thermal and inhibitor stress tolerance in yeast for cost-effective second generation bioethanol production: An adaptive evolution based approach.
  - c. Project amount: 50.00 Lacs
  - d. Duration: 2017-2020
- 3. Principle Investigator: Dr. Avijit Pramanik, Assistant Professor
  - a. Funding Agency: Department of Science and Technology
  - b. Project title: Identification and cloning of siderophore biosynthetic gene cluster from *Vibrio alginolyticus* and heterologous expression of siderophore in *e. coli* for further characterization and utilization
  - c. Project amount: 49.00 Lacs
  - d. Duration: 2017-2020

Principle Investigator: Dr. Avijit Pramanik, Assistant Professor

- e. Funding Agency: University Grants Commission
- f. Project title: Isolation and characterization of bacterial strains inhibiting phytopathogenic fungi *Bipolaris oryzae* and *Bipolaris sorokiniana* for development as biocontrol agent.
- g. Project amount: 10.00 Lacs

h. Duration: 2017-2020

4. Principle Investigator: Dr. Rishikesh Shukla, Postdoctoral Fellow

a. Funding Agency: University Grant Commission

b. Project title: Cost effective strategy for the production of Erythritol using crops byproducts

c. Project amount: 20.00 Lacs

d. Duration: 2016-2019

#### **Collaborations**

Department of microbiology have set up collaborations nationally (Jawaharlal Nehru University; DBT-IOC center for advance bioenergy research, Indian Oil Corporation R & D center, Faridabad; Sardarkrushinagar Dantiwada Agricultural University, Gujrat, Department of Biotechnology, G. B. Pant Engineering College, Pauri, Uttarakhand). The department has published several of papers in international repute scientific journals in recent years and written books/book chapters. The department has invited eminent scientists from India to deliver talks.

#### **Future Roadmap**

In future, the department is planning to organize training workshops, seminars and conferences towards development of our students. In the next five years department will devote its effort in developing high end instrumentation facility to carry out cutting edge research. In addition, faculties in the microbiology department would like to setup industrial collaborations.

# **Department of Nutrition Biology**

The department was established in July 2015, Under the School of Interdisciplinary and Applied Sciences.

#### **Programmes Offered**

M.Sc. and Ph.D. Nutrition Biology

#### **Number of Seats offered**

1. M.Sc. Nutrition Biology: 15

2. Ph.D. Nutrition Biology: 4 (present)

#### **Scheme of the Course**

#### M.Sc. Nutrition Biology

#### Semester I

S.No.	Course code	Course title	L	T	P	Credit
1.	SIAL NB_01_1_01_CC	Human Physiology	5	0	0	5
2.	SIAL NB_01_1_02_CC	Nutritional Biochemistry I	5	0	0	5
3.	SIAL NB_01_1_03_CC	Human Nutritional Requirements	5	0	0	5
4.	SIAL NB_01_1_04_CC	Practical I: Nutritional Biochemistry and Nutrient Requirements	0	0	10	5
5.	GE	To be taken from other department	4	0	0	4

#### Generic Elective Course (GEC) offered by the department to students of other departments

S. No.	Course code	Course title	L	T	P	Credit
	Offered in Semester I					
1.	SIAL NB_01_1_01_GEC	Human Nutritional Requirements	4	0	0	4
2.	SIAL NB_01_1_02_GEC	Nutrient Deficiencies and Assessment	4	0	0	4

#### **Semester II**

1.	SIAL NB_01_2_05_CC	Nutritional Biochemistry II	4	0	0	4
2.	SIAL NB_01_2_06_CC	Biostatistics and Research Methods	4	0	0	4
3.	SIAL NB_01_2_07_CC	Food Microbiology and Food Safety	4	0	0	4
4.	SIAL NB_01_2_08_CC	Practical II: Microbiology and Nutrient Analysis	0	0	10	5
5.	SIAL NB_01_2_03_GEC	Bioinformatics (compulsory)	0	3	0	3

6.	NB DCEC	Any one of the following three courses	5	0	0	5	ı
	SIAL NB_01_2_01_DCEC	Nutrition & Immunity					ì
	SIAL NB_01_2_02_DCEC	Nutraceuticals & Functional Foods					ì
	SIAL NB_01_2_03_DCEC	Nutritional Toxicology					ı

#### Semester III

#### Generic Elective Course (GEC) offered by the department to students of other departments

	Offered in Semester III						
3.	SIAL NB_01_3_04_GEC	Nutrition in Chronic Degenerative Diseases	4	0	0	4	
4.	SIAL NB_01_3_05_GEC	Work Physiology, Physical Fitness & Health	4	0	0	4	
5.	SIAL NB_01_3_06_GEC	Food Microbiology and Food Safety	4	0	0	4	

#### Semester IV

#### Skill Enhancement Elective Course (Compulsory and exclusively for Nutrition Biology students)

S. No.	Course code	Course title	L	T	D	Credit
1.	SIAL NB_01_4_01_ SEEC	Dissertation	0	0	24	24

#### **Admission Criteria and Procedure**

**M.Sc.:** Admission to M.Sc. program is through CUCET entrance examination that is based on the CUCET score. A candidate having a bachelor degree under 10+2+3 system, recognized by the university, or a degree recognized as its equivalent is admissible to master program.

**Ph.D.** Presently, department is offering admission to Ph.D. program via two modes

**Direct Admission:** Through CUCET examination.

The candidates who have qualified UGC/CSIR-JRF/NET/SLET/GATE, or are Teacher Fellowship holders, or have passed the M. Phil. programme with course work recognized by the U.G.C., as per the UGC Regulations (Minimum Standards and Procedure for award of M.Phil./Ph.D. Degree, 2009), shall be exempted from the written test.

#### **Faculty profile**

#### 1. Prof. (Dr.) G. K. Kochar

**Qualification:** Ph.D. **Experience:** 33 years

Research Area/ Interest: Food Science & Nutrition

Email: kocharcup@gmail.com Mobile: +91-9896294429

**Publication details:** Research/review/popular Papers: >100

#### Membership of academic & research bodies:

- 1. Research & Development Committees (Academic Council); Selection Committees
- 2. Member of various Scientific Societies & also Convener / member for Paper setter & Evaluator of committees for national and state level examinations including competitive.

#### **Awards**

1. Awarded Merit fellowship and later research fellowship in M.Sc. and CSIR JRF/SRF in Ph.D.

- 2. Himachal Kesri Award (Agricultural Services) 2003
- 3. Shiksha Rattan by India International Friends Society in 2008
- 4. Nominated a member of state Nutrition level committee in HP by the then Governor of HP
- 5. Nominated woman of the year by American Bibliographic Institute-1998

#### **Membership of Imp Committees**

- 1. Board of Studies
- 2. Member of Court
- 3. Board of Management of College
- 4. Food Quality In-Charge
- 5. Chief Superintendent of Examination
- 6. Convener of flying squad for the Examination

**Important Posts held:** Principal, Visiting Professor, Professor, Foods & Nutrition cum Chairperson of the Dept., H.Sc. Faculty of Life Sciences, Kurukshetra Univ., Kurukshetra. Professor Cum Chief Warden, Central University of Punjab. Currently, Consultant (Acad.) cum Head, Dept. Nutrition Biology, Central University of Haryana

**Achievement:** Successfully completed 07 research projects

#### **Professional Activities/other contribution**

- 1. Guided 60 students at PG level
- 2. Delivered various radio and TV talks, as well as delivered lectures in the workshops, refresher and orientation courses
- 3. Chaired various sessions at scientific conventions
- 4. Editorial/advisory Board member of three well reputed journals

#### 2. Dr. Ashwani Kumar

**Qualification:** Ph.D.

**Experience:** 09 years 06 Months (Teaching)

Research Area/ Interest: Nutrition and Health: Functional food, Probiotics and Prebiotics. Food

Biotechnology

Email: ashwanindri@cuh.ac.in Mobile: +91-9813968380

#### **Publication details**

1. Research Papers: International Journals (23); National Journals (01)

2. Book Chapters: 13

3. Citations: 524

4. H-index: 9

5. Books (ISBN no): Nagpal R, Ashwani Kumar, Singh R. Microbes in the Service of Mankind: Tiny Bugs with Huge Impact. J.B.C. Press, New Delhi, 2014, ISBN No.: 978-93-81558-85-0

#### Membership of academic & research bodies

- 1. Life member of Association of Microbiologist of India (AMI)
- 2. Life member Alliance of Integrated Micro-Biotechnologist (AIM)

#### **Awards**

- 1. International Travel Support from Science and Engineering Research Board/ Department of Science and Technology, Govt. of India, New Delhi. 2013
- 2. Young Scientist Fellowship Project by SERB/DST, (Govt. of India), New Delhi under SERC Fast Track Scheme for Young Scientist. 2012-2015

#### **Membership of Important Committees**

- 1. Member PGBOS, Nutrition Biology Department, Central University of Haryana, Mahendergarh
- 2. Member Institutional Bio safety Committee, Central University of Haryana, Mahendergarh

**Important Posts held:** Assistant Professor, Associate Professor, Head of the Department, Dean Academic, Teacher Hostel Warden

#### **Achievement**

Successfully completed DST (Govt. of India) New Delhi sponsored project (2012-2015)

#### **Professional Activities/other contribution:**

- 1. Presented papers in conferences and workshop
- 2. Reviewer of the research proposal of SERB/DST (Govt. of India) New Delhi
- 3. Reviewer of various International and National journals
- 4. Editorial Board member of International Journal of Plant Physiology and Biochemistry

#### 3. Dr. Savita Budhwar

Qualification: Ph.D

**Experience:** 7 years (Teaching)

Area of Research: Foods and Nutrition, Nutrition and Public Health.

Email: savitadahiya@cuh.ac.in

Mobile No. 9996363764.

#### **Publications**

- 1. Research Papers: International Journals (12); National Journals (03)
- 2. Book Chapters: Nil
- 3. Citations: 2
- 4. H-index: 1

#### **Books: Text book (2)**

- 1. Budhwar S. Foods and Nutrition for Nurses. KPH, New Delhi, 2015, ISBN: 978-93-82428-77-0
- 2. Budhwar S. Community Health Nursing. KPH, New Delhi, 2015, ISBN: 978-93-82428-76-3

#### Membership of academic & research bodies

1. Life time member of Indian Journal of Social Concern.

#### **Awards**

1. Awarded Merit scholarship during Ph.D programme.

#### **Membership of Imp Committees**

Member, CUH Purchase sub-committee **Important Posts held:** Assistant Professor.

#### 4. Dr Tejpal Dhewa

**Qualification:** Ph.D. **Experience:** 8 years

Research Area/ Interest: Food Microbiology and Food Safety, Food Fortification, Nutrition and

Public Health

Email: tejpaldhewa@cuh.ac.in Mobile: +91-8826325454

#### **Publication details**

1. Research Papers: International Journals (12); National Journals (9)

2. Book Chapters: 6

3. Citations: 274; H-index: 7

- 4. Books (2): Textbook: Introductory Microbiology), Publisher: ICAR press, New Delhi (in press); Book Edited: Methods in Probiotics Research, Publisher: CRC Press (Taylor & Francis Group), USA. (Accepted, ISBN 978-1-138-62635-5).
- 5. No. of Patents 2 (Filed)

#### Membership of academic & research bodies

- 1. Life Member, Probiotic Association of India (PAi), NDRI, Karnal.
- 2. Life Member, Scientific Planet Society, Dehradun, India.

#### Awards

- 1. Young Scientist Award, 2015 by SPS, Dehradun (September 1, 2015).
- 2. Best Project Display Award, at Anterdhawni-2015, University of Delhi, Delhi. (February 20-22, 2016).
- 3. Travel grant from CSIR, New Delhi for presenting research work at SGM 163<sup>rd</sup> Meeting (September 8-11, 2008), Trinity College, Dublin, Ireland.

#### **Membership of Imp Committees**

1. Member, CUH Purchase sub-committee

Important Posts held: Assistant Professor, PG course coordinator, Microbiologist (Q.C.)

#### **Achievements**

- Received Early Career Research Project of SERB/DST, New Delhi (2016)
- Successfully completed DU Innovation Project (2013-2015).

#### **Other Contributions**

- E-content contribution under national education mission: Contributed more than 20 e-learning modules to e-PG Pathshala (UGC), CEC-UGC Edusat) and VLE University of Delhi.
- Resource person in DST (Govt. of India) Inspire program, 2011, 2012

- Reviewer of various International and National journals
- Editorial Board member of various scientific journals.

#### 5. Dr. Anita Kumari

**Qualification:** Ph.D **Experience:** 5 years

Area of Interest: Human Nutrition, value addition of food products, nutritional and public

health nutrition

Email: anikum@cuh.ac.in Mobile No: +91-7065505440

#### **Publication Details**

1. Research Papers: International Journals (4); National Journals (10)

Popular articles: 8
 Book Chapters: 2

4. Citations: 4; H-index: 2

5. Books: Nil6. No. of Patents: Nil

#### Membership of academic and Research Bodies

- 1. Academic member or valued reviewer of various journals
- 2. Life time member of Indian Journal of Agriculture Biochemistry.
- 3. Member Society of Food Scientists and Nutritionists.

#### **Awards**

- 1. Awarded scholarship at school level.
- 2. Merit certificate holder during M.Sc and Ph.D programme
- 3. Awarded Merit scholarship during Ph.D programme.

#### Membership of important committees

Member, CUH Purchase committee

#### Important posts held:

Research Associate, Research Officer, Assistant Professor

#### **Department Infrastructure**

1. Laboratory: 1 (Equipped with latest instruments)

2. Class room: 23. Faculty room: 2

#### **Research Thrust Area of Department**

- 1. Assessment of nutritional and dietary status of vulnerable population. Development of effective methods to combat malnutrition status of vulnerable population.
- 2. Nutritional intervention during nutrient deficiencies and chronic degenerative diseases.
- 3. Development of nutraceutical / bioactive components based food products and their efficacy in normal and disease conditions.

4. Food fortification and value addition to traditional foods and their impact on health and acceptance.

#### **Events Organised**

- 1. Participation in Poster competitions
- 2. National Nutrition Week Celebration (01-07, Sep., 2015)
- 3. World Food Day (16, Oct, 2015)
- 4. National Science Day, 2016
- 5. Parents Teachers Meet
- 6. National Nutrition Week Celebration (01-07, Sep., 2016)
- 7. One Day workshop on" *Prevalent health problems related to nutrition and their remedies*" (06 Sep., 2016).
- 8. Two day workshop on "Application of Analytical Instruments in Nutritional Biology Research" from 14<sup>th</sup> to 15<sup>th</sup>, September, 2016

#### **Highlights and & Achievements**

- 1. Received Early Career Research Project of SERB/DST, (Govt. of India), New Delhi (2016)
- 2. Four regular Assistant Professor join the department in February, 2016.
- 3. Organized National Nutrition week, workshop, world food day, Parent-Teacher Meet etc.
- 4. Published various paper in national and international journals
- 5. Submitted research projects to various external funding agency
- 6. Faculty delivered lectures during extension activities
- 7. Students received prize in poster presentation during National Science Day, 2015.

#### Research Projects, MOU, Consultancy, Awards, Collaborations, Academic Projects.

- 1. Received Early Career Research Project of SERB/DST, (Govt. of India), New Delhi (2016)
- 2. Submitted research projects to various external funding agency
- 3. MoU with CSIR-CFTRI, Mysore is under process.

#### **Future Roadmap**

- 1. Induction of new programmes: MOOC on nutrition, sport and Yoga
- 2. Department- industry interaction
- 3. Getting funding from outside agencies
- 4. Organising seminars and workshops

#### NATIONAL NUTRITION WEEK CELEBRATION



#### POSTER PRESENTATION ON NATIONAL SCIENCE DAY



# राष्ट्रीय पोषण सप्ताह मनाया गया





महेंद्रगढ़। जाट मिडल स्कूल में विद्यार्थियों को जागरूक करते प्रो. जीके कोचर तथा हकेविवि जाट-पाली से जागरूकता रैली रवाना होते।

# हरिभूमि न्यूज. महेंद्रगढ

हरियाणा केंद्रीय विश्वविद्यालय जाट-पाली के पोषण जीवनविज्ञान विभाग ने शुक्रवार को राजकीय मिडिल स्कूल जाट में राष्ट्रीय पोषण सप्ताह मनाया। इस अवसर पर विश्विद्यालय के विद्यार्थियों ने नुकड़ नाटक के माध्यम से स्कल के विद्यार्थियों एवं

# जीवनविज्ञान विभागाध्यक्ष जीके कोचर ने दी जानकारी

उनके परिजनों को सब्जियों के लाभ एवं जंक फूड के दुष्प्रभावों के बारें में विस्तार से बताया। विभागाध्यक्ष प्रो. जीके कोचर ने बताया कि स्वस्थ मानव जनसंख्या परिवार, गांव, राज्य की प्रगति की है। सहायक आचार्य डॉ. अश्विनी ने से पोषण तत्वों में सुधार के लिए व्य स्तर पर आंदोलन करने का किया। डॉ. तेजपाल ढ़ेवा, अनीता थे। स्वच्छ भारत मिशन और स्वस्थ अभियान के तहत जागरूकता निकालकर लोगों को जागरूक कि

पहल

हकेविवि जाट-पाली में दो दिवसीय कार्यशाला का शुभारंभ

# ने उन्नत तकनीक को ज

हरिभूमि न्यूज . महेंद्रगढ़

हरियाणा केंद्रीय विश्वविद्यालय जाट-पाली के पोषण जीवविज्ञान विभाग द्वारा पोषाहार जीव विज्ञान अनुसंधान में विश्लेषणात्मक उपकरणों के अनुप्रयोग विषय पर आयोजित दो दिवसीय कार्यशाला का शुभारंभ बुधवार को कुलसचिव रामदत द्वारा किया गया। कार्यशाला का आयोजन एसवी एनालिटिका इंस्ट्रहमेंटस प्रा लि गृहगावं के सहयोग से किया जा रहा है। कार्यशाला के माध्यम से प्रतिभागियों को पोषण जीवविज्ञान के अनुसंधान के क्षेत्र में नवीनतम तकनीक, एप्लीकेशन्स के व्यावहारिक रूप को देखने का मीका मिलेगा। कार्यशाला में एसवी एनालिटिका इंस्ट्ररूमेंट्स प्रा. लि. गुडगार्व व क्योश्वरन टेकनोलॉजी



महेंद्रगढ़। हकेविवि जाट-पाली में कार्यक्रम के दौरान मंवाशीन।

कोटो हरिभूमि

कोरपोरेशन कनाड़ा के विशेषज्ञ अपने विचारों को सांझा करेंगे। कार्यक्रम की अध्यक्ष प्रो. जीके कोचर ने कार्यशाला में इस अवसर पर एसवी एनालिटिका विश्लेषणात्मक उपकरणों के अनुप्रवोगों

इंस्ट्ररूमेंटस प्रा. लि. के प्रबंध निदेशक शिव कौशिक ने कार्यशाला को संबोधित करते हुए कहा कि पोषण जीवन विज्ञान आए हुए अतिथियों का स्वागत किया। के क्षेत्र में जीवन विज्ञान में

# 200 विद्यार्थियों ने इस कार्यशाला में लिया भाग

पर प्रकाश डाला। क्यो धरन टेक्नोलॉजी कोरपोरेशन कनाड़ा के प्रबंध निदेशक मनजिंदर फुल ने नमुना तैयार करने और पोषण जीवन विज्ञान में प्रयोग होने वाली तकनीक एवं अनुप्रयोगों पर अपना विशेषज्ञ वक्तव्य दिया। इनके अतिरिक्त डॉ. राकेश माथुर, विपिन चौधरी एवं वरूण माझी ने भी उन्नत तकनीक पर अपने व्याख्यान दिए। कार्यशाला के तकनीकी सत्र में उपकरणों, सिद्धांत, तकनीकों के अनुप्रयोगों एवं भविष्य के अनुसंधान की कार्यप्रणाली पर चर्चा हुई। कार्यशाला में बताया कि कार्यशाला में विभिन्न विभागों में अध्ययनरत लगभग 200 विद्यार्थियों ने हिस्सा लिया।

# DEEN DAYAL UPADHYAY KAUSHAL KENDRA

# DEEN DAYAL UPADHYAY KAUSHAL KENDRA

Government of India, taking note of the requirement for skill development among students initiated National Vocational Education Qualification Framework (NVEQF) which was later on assimilated into National Skills Qualifications Framework (NSQF). Various Sector Skill Councils (SSCs) are developing Qualification Packs (QPs), National Occupational Standards (NOSs) and assessment mechanisms in their respective domains, in alignment with the needs of the industry. Keeping the above in mind, after due approval by the UGC, DDU Kaushal Kendra was started at Central University of Haryana in February 2016.

#### Programs offered and seats

The Department offers following courses

- 1. Biomedical Sciences- 50 seats
- 2. Retail and Logistics Management- 50 seats
- 3. Industrial Waste Management 50 seats

These programme provide an opportunity for multiple exit points at the end of first, second and third years:

Award	Duration
Diploma	After first year
Advance diploma	After second year
Degree	After third year

#### **Program Outcome**

The main goal of this Centre is to create skilled manpower for the betterment of academia and industry alike by 2025 in a great number.

- 1. The focus of skill development components should be to equip students with appropriate knowledge, practice and attitude, so as to make them work ready.
- 2. The skill development components should be relevant to the industries as per their requirements;

#### **Scheme of the Programme**

While formulating the curriculum under the scheme, the centres may:

- 1. Follow credit based semester system;
- 2. Provide provision for credit transfer across courses;
- 3. Ensure alignment of skill component with the QPs/NOSs of the relevant job roles based on the exit profiles of the students.
- 4. Provide credits for practical work, apprenticeship, on the job training, and project work;
- 5. Provide multiple exit and entry points with provision for vertical and horizontal mobility;

- 6. Assess and certify the skill competence for the selected job roles through the respective SSCs / DGET;
- 7. Provide credits for general education component and skill component broadly in the ratio of 40:60. The general education will also include credits in communication skills, ICT skills, soft skills, critical thinking, problem solving, environmental studies and value education.
- 8. Review the courses periodically in accordance with the changing requirements of the industry and regional/national economic properties.
- 9. Follow UGC guidelines for skill development courses at different levels specified under Community Colleges, B.Voc. degree programme and as maybe prescribed from time to time.

#### **B.Voc. Biomedical Sciences Course Details Semester I**

S. No.	Paper Name	Credits
1	Introductory Biology	3
2	Concepts in Chemistry	2
3	English Communication	2
4	Clinical Biochemistry	3
5	Practical	2

#### B.Voc. Industrial Waste Management Course Details Semester I

S .No.	Paper Name	Credits
1	Introductory Biology	3
2	Concepts in Chemistry	2
3	English Communication	2
4	Industrial Waste Management	3
5	Practical	2

#### **B.Voc. Biomedical Sciences Course Details Semester II**

S. No.	Paper Name	Credits
1	Instrumentation techniques-I	4
2	Environmental Science	4
3	Human Physiology	2
4	Practical	2

#### **B.Voc. Industrial Waste Management Course Details Semester II**

S. No.	Paper Name	Credits
1	Instrumentation techniques-I	4
2	Environmental Science	4
3	Human Physiology	2
4	Practical	2

#### B.Voc. Retail & Logistics Management Course Details Semester I

S. No.	Paper Name	Credits
1	Principles of Management	3
2	Fundamentals of Retailing	3
3	Business Statistics	3
4	Business Communication-I	3

#### B.Voc. Retail & Logistics Management Course Details Semester II

S. No.	Paper Name	Credits
1	Supply Chain and Logistics Management	3
2	Business Economics	3
3	Organisational Behaviour	3
4	Business Communication-II	3

#### **Admission Criteria and Procedure**

According to the guidelines of UGC, the admission criteria for DDU Kaushal Kendra are on the basis of merit at AISSCE level examination.

Advertisement was advertised on Central University of Haryana website (www.cuh.ac.in) and online applications were invited from candidates. Applications were screened by the admission committee members and counselling was conducted followed by admission into the three courses (Biomedical Sciences, Industrial Waste Management, Retail & Logistics Management) on the basis of merit at AISSCE results.

#### **Faculty Profile**

#### 1. Dr. Navrinder Kaur

Designation : Assistant Professor & Convenor, Biomedical Science, DDU Kaushal

Kendra, Central University of Haryana, Mahendergarh, Haryana.

Qualification : Post-Doctorate (Biomedical Sciences with experience in Zebrafish

Toxicogenomics, Cellular Disease Therapeutics, Cytogenetics, Stem

Cells & Development), Ph.D. (Biomedical Sciences).

CSIR-JRF 2005, CSIR- SRF- 2007

Experience : 11 Years

Research Area/ Interest : Cancer Biology, Radiation Oncology, Drug Development, Biomedical

**Therapeutics** 

Dr. Navrinder Kaur did her Post-Doctorate in interdisciplinary areas of Biomedical Sciences over a period of few years from Biomedical Sciences Institutes, Agency for Science Technology & Research, Biopolis, Singapore. She did her Ph.D. in Biomedical Sciences from University of Delhi by a collaborative research project between DRDO, INMAS, Dr. B.R. Ambedkar Center for Biomedical Research & Department of Chemistry. She did her B.Sc. (H) Zoology with Academic Excellence Award 2004 (by Dr. Navtej Sarna, current ambassador from India to the UK) from SGTB Khalsa College, University of Delhi. She is a recipient of Indo-German DST-DAAD Fellowship during her doctoral studies for which she worked at the Institute for Medical Radiation Biology, Essen, Germany. She joined the Central University of Haryana as an Assistant Professor in 2015 in the Department of Biochemistry (School of Interdisciplinary

& Allied Sciences). She then moved to Biomedical Sciences as an Assistant Professor, DDU Kaushal Kendra, where she was subsequently appointed as Convenor, Biomedical Sciences (February 2016- till date). She has been a recipient of a special academic excellence award from Delhi Government 1991 (from ex-President Giani Zail Singh Ji). She is the recipient of UGC-JRF and CSIR-SRF fellowships. She has won First Prize in Chemistry at State Level (awarded by the Delhi Government) 1999. She has a Young Scientist Project awarded by the Science and Engineering Research Board, Department of Science and Technology, New Delhi- 2016-2019 entitled 'Effect of piperine and capsaicin on hypoxia induced neuroinflammation in rat pheochromocytoma cells' worth 43.8 lakh INR. She has published review articles/research articles/conference proceedings in journals of international repute and high impact factor. She continues to serve as a peer reviewer for several international journals. She has also served on the editorial board of annual newsletter of Department of Zoology, SGTB Khalsa College, University of Delhi, Delhi.

#### **Publications**

- 1. Ingham P, Wang X, Wang H, Kaur N, Mathavan S, Fowler S, Weiser T, Cohen S, McGinnis C. A novel zebrafish model to predict organ toxicities in mammals. Toxicology Letters, 2013, 221:S233.
- 2. Kaur N, Ranjan A, Tiwar V, Aneja R, Tandon V. DMA, a Bisbenzimidazole Offers Radioprotection by Promoting NFκB Transactivation through NIK/IKK in Human Glioma Cells. PLoS ONE, 2012, 7(6): e39426.
- 3. Kaur N, Ranjan A, Tiwari V, Singh Y, Chaturvedi MM, Tandon V. 3,4-Dimethoxyphenyl bisbenzimidazole derivative, mitigates radiation-induced DNA damage. Radiation Research, 2013, Jun; 179(6): 647-62.
- 4. Parkash B, Ranjan A, Tiwari V, Gupta SK, Kaur N, Tandon V. Inhibition of 5'-UTR RNA conformational switching in HIV-1 using antisense PNAs. PLoS One, 2012, 7(11): e49310.

#### Memberships of Cocieties/Boards/Journals

- 1. Member, Indian Society for Radiation Biology
- 2. Member, Indian Society for Cell Biology
- 3. Editorial Board Member, e Biology Journal (ISSR)

#### 2. Dr. Anoop Yadav

Designation : Assistant Professor

Qualification : M.Sc., Ph.D. (Environmental Sciences), JRF

Experience : 5 Years

Research Area/ Interest : Management of solid wastes; Water and air pollution monitoring and

management.

Dr. Anoop Yadav did his PhD in Environmental Science with specialization in Solid Waste Management at Guru Jambheshwar University of Science & Technology, Hisar (Haryana) in 2013. He has worked as a Teaching Associate in the department of Environmental Science at GJUS&T, Hisar from 2012 to 2014. He then moved to Post Graduate Institute of Medical Education and Research (PGIMER), Chandigarh as Senior Research Officer in ICMR funded project on indoor air pollution in 2014. He joined the Central University of Haryana as an Assistant Professor in 2015. He is the recipient of UGC-JRF and CSIR-SRF fellowships. His current research focuses on solid waste management of industries using vermicomposting technology and water pollution monitoring. He has published more than 20 research papers in national and international journals, 04 chapters in the books/proceedings, 15 research

communications at conferences/symposia. He serves as a reviewer for several national and international journals.

#### **Publications**

- 1. Yadav A. and Garg, V. K. (2016) Vermiconversion of biogas plant slurry and parthenium weed mixture to manure, International Journal of Recycling of Organic Waste in Agriculture, DOI 10.1007/s40093-016-0140-8, [Springer].
- 2. Yadav A. and Garg, V. K. (2016) Influence of stocking density on the vermicomposting of an effluent treatment plant sludge amended with cow dung, Environmental Science and Pollution Research, 23: 13317-13326 [Springer].
- 3. Yadav A. and Garg, V. K. (2015) "Influence of vermi-fortification on chickpea (Cicerarietinum L.)growth and photosynthetic pigments" International Journal of Recycling of Organic Waste in Agriculture, 4:299-305 [Springer].
- 4. Yadav A. Suthar S. and Garg, V. K. (2015) "Dynamics of microbiological parameters, enzymatic activities and worm biomass production during vermicomposting of effluent treatment plant sludge of bakery industry", Environmental Science and Pollution Research, 22:14702-14709 [Springer].
- 5. Garg V. K., Yadav A, Singh K, Singh M, Bishnoi M and Pulhani V.(2014) "Uranium distribution in ground water in Hisar city, India and health risk assessment", The International Journal of Occupational and Environmental medicine. 5(2), 112-114.

#### **Membership of Academic Bodies**

- 1. Life Membership of 'Biotech Research Society of India', India
- 2. Life Membership of 'The Indian Science Congress Association', Kolkata (India)
- 3. The current Citation indices are (Citations 356; h-index 9; i10-index 8).

#### 3. Dr. Suyash Mishra

Designation : Assistant Professor, B.Voc.-Retail and Logistics

Management, D. D. U. Kaushal Kendra, Central

University of Haryana.

Qualification : M.B.A., Ph.D. (Management)

Teaching Experience : 3 Years

Research Area/ Interest : E-Banking, Mall Management, Financial Services.

#### Awards/Achievements

- 1. UGC JRF and UGC-SRF in Management.
- 2. Life Time Membership of Indian Journal of Commerce, Indira Gandhi National Open University, New Delhi.

#### **Publication Detail**

1. Research papers: 14

2. Paper Presentation & Workshop Detail:

National Seminars: 18

International Conferences: 06 Workshops Attended: 04

#### 4. Sushma Yadav

Designation : Assistant Professor

Qualification : M.Sc., M. Tech, Ph.D. JRF

Experience : 6 months

Research Area/ Interest : Catalytic Wet Air Oxidation, Biodegradability Enhancement of Industrial

Effluent

#### **Awards**

1. UGC Junior Research Fellowship (2012-13), Senior Research Fellowship (2014-2016) in PhD (Env. Eng.) at IIT Delhi (Qualified UGC NET-JRF).

2. Best Paper Award in CHEMCON-2016 (International conference) on "Catalytic Wet Air Oxidation of Industrial Organic Effluent: Treatment and biodegradability enhancement" on Dec., 2016 at Anna University, Chennai

#### **Recent Publications**

- 1. Sushma and A.K. Saroha, "Performance of UASB Reactor at Different Flow Rate Treating Sewage Wastewater" published in International Journal of ChemTech Research, 5(2), 2013, ISSN (0974-4290), pp. 676-681.
- 2. Sushma and A.K. Saroha, "Catalytic Wet Air Oxidation as a Pretreatment Option for Biodegradability Enhancement of Industrial Effluent" published in International scholarly and scientific research & innovation, 2015, ISSN (1307-6892), pp. 227-235 (Book chapter).
- 3. Sushma and A.K. Saroha, "Catalytic Wet Air Oxidation of Industrial Organic Raffinate over Pt/Al2O3 Catalyst" published in Journal of Basic and Applied Engineering Research, 2, 2015, ISSN (2350-0255) pp. 64-66
- 4. Sushma and A.K. Saroha, Treatment of industrial organic raffinate containing pyridine and its derivatives by coupling of catalytic wet air oxidation and biological processes, Chemical Engineering Journal (under review).
- 5. Sushma and A.K. Saroha, Biodegradability enhancement of industrial organic raffinate containing pyridine and its derivatives by CWAO using ceria promoted Mn/Al<sub>2</sub>O<sub>3</sub> catalyst at atmospheric pressure, RSC Journal (under review).

#### **Departmental Infrastructure**

DDU Kaushal Kendra has a start-up assistance of 1.0 Crore INR which will be utilized for setting up of laboratories/seminar rooms as well as special lectures by academia/industry in order to give an exposure to the students at various levels for adherence to Ordinance of the Kendra (approved by UGC).

#### **Research Thrust Areas**

- 1. Dr. Navrinder Kaur has currently Science and Engineering Research Board- Department of Science & Technology Young Scientist Project entitled 'Effect of piperine and capsaicin on hypoxia induced neuroinflammation in rat pheochromocytoma cells' worth 43.8 lakh INR.
- 2. Dr. Anoop Yadav has a current research focus on solid waste management of industries using vermicomposting technology and water pollution monitoring.
- 3. Dr. Suyash Mishra is specialized in electronic banking services and currently working for the Mall Management Services and Modelling the Customer opinion in this context.

#### **Events Organized**

- 1. Training of students of B.Voc. Retail and Logistics Management for duration of four days at HAIC, Murthal on Mushroom Cultivation Techniques.
- 2. Academic visit to Ambience Mall, Central Mall and Sahara Mall, Gurgaon was planned for the students of Retail & Logistics Management which assisted the students in understanding the working environment of the retail sector.
- 3. Two day training in the subject of Instrumentation and Techniques was given to students of B.Voc. Biomedical Sciences and B.Voc. Industrial Waste Management (organized in collaboration with SVI Analytica).
- 4. Special Lecture by Dr. Neeta Kumar, MD, Senior Scientist, ICMR, Delhi on 'Indian Scenario on Women Cancers- risk, prevention, diagnosis and treatment'.
- 5. Orientation Day Programme for Skill Component Training of DDU Kaushal Kendra students graced by Prof. R. C. Kuhad, Vice- Chancellor, CUH.



#### **Research Projects & MOUs**

- 1. One research project on Biomedical Sciences is currently being undertaken by Dr. Navrinder Kaur (Young Scientist Project by Science and Engineering Research Board, Department of Science and Technology).
- 2. MoU- MoU has been signed with Bridge Point Skills and Network, Gurgaon for imparting Skill Based Training to the students of DDU Kaushal Kendra.

# **Future Roadmap**

Association with the concerned Sector Skill Councils for training and placement of B.Voc. students. In addition, after observing a successful run of these B.Voc. programmes, M.Voc. and Ph.D. programmes may also be initiated under the DDU Kaushal Kendra.



# SCHOOL OF ENGINEERING & TECHNOLOGY

Electrical Engineering
Civil Engineering
Printing and Packaging Technology
Computer Science and Engineering

# > SCHOOL OF ENGINEERING & TECHNOLOGY

- Electrical Engineering
- Civil Engineering
- Printing and Packaging Technology
- Computer Science and Engineering

The school of Engineering and Technology is a premier technical school under the aegis of Central University of Haryana which has recently been established in the academic session 2016-17. The school endeavors to develop adequately trained technical and professional manpower which constitutes the most important component of the human resource to spearhead the socio-economic development of nation and to fulfil objectives of *Make in India*.

#### **Programmes and Number of Seats**

#### B. Tech. Course

- 1. Electrical Engineering 60
- 2. Civil Engineering 60
- 3. Printing and Packaging Technology 60
- 4. Computer Science and Engineering 60

#### **Scheme of the course:**

The school follows CBCS norms. The scheme of the B.Tech. course for I & II semester is as below:

#### **SEMESTER-I**

Code	Subject	L	T	P	Total Contact Hours	Credits
BT HUM 101	Communication Skills-I	3	0		3	3
BT EMA 102	Engineering Mathematics-I	3	1		4	4
BT EPH 103	Engineering Physics-I	3	1		4	4
BT ECH 104	Engineering Chemistry-I	3	1		4	4
BT EGD 105	Engineering Drawing	2	0	4	6	4
BT EIT 106	Essentials of Information Technology and Computer Programming	3	1		4	4
BT PHL 107	Physics Laboratory-I	0	0	2	2	1

Code	Subject	L	T	P	Total Contact Hours	Credits
BT CHL 108	Chemistry Laboratory-I	0	0	2	2	1
BT CPL 109	Computer Programming Laboratory	0	0	2	2	1
BT VEY 110	Value Education and Yoga #	0	0	2	2	0

#### **SEMESTER-II**

Code	Subject	L	Т	P	Total Contact Hours	Credits
BT HUM 201	Communication Skills-II	3	0	0	3	3
BT EMA 202	Engineering Mathematics-II	3	1	ı	4	4
BT EPH 203	Engineering Physics-II	3	1	-	4	4
BT ECH 204	Engineering Chemistry-II	3	1	-	4	4
BT MP 205	Manufacturing Processes	2	1	-	3	3
BT PEE 206	Principles of Electrical and Electronics	3	1	-	4	4
BT PHL 207	Physics Laboratory-II	-	-	2	2	1
BT CHL 208	Chemistry Laboratory-II	-	-	2	2	1
BT EEL 209	Electrical and Electronics Laboratory	-	-	2	2	1
BT CTL 210	Computational Technology Laboratory	-	-	2	2	1
BT WTL 211	Workshop Technology Laboratory	0	0	4	4	1
Total		17	5	12	34	28

# Scheme –B. Tech. (Electrical Engineering 2<sup>nd</sup> Year)

# THIRD SEMESTER

Code	Subject	L	Т	P	Total Contact Hours	Credits
EE- 301	Electrical Machine-I	3	1	2	6	5
BT EE 302	Network Analysis & Synthesis	3	0	2	5	4
BT EE 303	Electrical Measurements & Measuring Instruments	3	0	2	5	4
BT EE 304	Transmission And Distribution	3	0	2	5	4
BT EE 305	EE 305 Generic Elective Course (GEC 1) 3 0 2		2	5	4	
TOTAL	TOTAL 25.0				25.0	
* GEC	* GEC to be taken from other department.					

# List of GEC for other department

CODE	GEC-1 SUBJECTS
BT EE 301:	Electrical Machine-I
BT EE 302:	Network Analysis & Synthesis

#### FOURTH SEMESTER

Code	Subject	L	Т	P	Total Contact Hours	Credits
BT MS 401	Numerical Methods in Engineering	3	0	2	5	4
BT EE 402	Electrical Machines-II	3	1	2	6	5
BT EE 403	Power Generation	3	0	0	3	3
BT EE 404	Power Electronics	3	1	2	6	5
BT EE 405	Analog and Digital Electronic	3	1	2	6	5
BT EE 406	Generic Elective Course (GEC)	3	0	2	5	4
BT EV 407	Environmental Science	Environmental Science 3 1 -		4	-	
TOTAL 26.0			26.0			
	** Environmental Studies will be of qualifying nature.  ** *GEC to be taken from other department.					

# List of GEC for other department

CODE	GEC-SUBJECTS
BT EE 408	Smart Grid
BT EE 403	Power Generation

# Scheme –B. Tech. (Electrical Engineering3<sup>rd</sup> Year)

#### FIFTH SEMESTER

CODE	SUBJECT	L	T	P	CREDIT
BT EE 501	Power Systems Analysis	3	1	0	4
BT EE 502	Control System Engineering	3	1	2	5
	DCEC	3	0	2	4
BT EE 503	Signal and Systems	3	1	0	4
BT EE 504	Electromagnetic Field Theory	3	1	0	4
BT EE 505	Microprocessors and Interfacing	3	1	2	5
TOTAL					26.0

## **List of DCEC**

CODE	DCEC SUBJECTS
BT EE 506	Advance Power Electronics & Drives
BT EE 507	HVDC & FACTS

#### **SIXTH SEMESTER**

CODE	SUBJECT	L	T	P	CREDIT	
BT EE 601	Switchgear And Protection	3	1	2	5	
BT EE 602	Power system Operation & Control	3	1	0	4	
BT EE 603	Advanced Instrumentation	3	1	0	4	
BT EE 604	Advanced control System Engineering	3	1	0	4	
	DCEC 2		1	0	4	
	DCEC 3 3 1 2		5			
TOTAL	TOTAL 28.0					
Note: Th	Note: The students shall devote 4 weeks to Survey Camp after 6th Semester Examination.					

# **List of DCEC**

CODE	DCEC-II SUBJECTS
BT EE 605	Advanced Microprocessor & Microcontroller
BT EE 606	Electrical Machine Design
BT EE 607	Optimization Techniques in Power System

Scheme –B. Tech. (Electrical Engineering 4th Year)

## SEVENTH SEMESTER

CODE	SUBJECT	L	Т	P	CREDIT
BT EE 701	Computer aided Power System analysis	3	1	2	5
BT EE 702	High Voltage Engineering	3	1	0	4
	DCEC 4	3	1	0	4
	DCEC 5		3	1	0
BT EE 703	Industrial Summer Training #	ı	-	ı	2
BT EE 704	Design Project	0	0	6	6
TOTAL					25.0

# **List of DCEC**

CODE	DCEC- 4 and 5 SUBJECTS
BT EE 705	Nonconventional Energy sources
BT EE 706	Fuzzy Logic and Neural Networks
BT EE 707	Power Quality & Management

#### **EIGHTH SEMESTER**

CODE	SUBJECT	L	T	P	CREDIT
BTEE 404	Internship/ Project	-	-	-	20.0
TOTAL					20.0

# Scheme –B. Tech. (Civil Engineering 2<sup>nd</sup> Year)

#### THIRD SEMESTER

CODE	SUBJECT	L	T	P	CREDIT
BTCE 301	Fundamentals of Management	3	1	-	4.0
BTCE-302	BTCE-302				
Structural Analy	ysis-I				
3					
1					
-		1	,		
BTCE-303	Fluid Mechanics-I	3	1	-	4.0
BTCE-304	Surveying-I	3	1	-	4.0
BTCE-305	Building Construction, Materials & Drawing	3	1	-	4.0
	GEC*	3	1	-	4.0
BTCE-306	Structural Mechanics-I(P)	-	-	2	1.0
BTCE-307	Fluid Mechanics-I(P)	-	-	2	1.0
BTCE-308	Surveying-I(P)	-	-	2	1.0

CODE	SUBJECT	L	T	P	CREDIT
BTCE-309 Building Construction, Materials & Drawing(P)		-	-	2	1.0
TOTAL	TOTAL				28.0
* GEC to be tal	* GEC to be taken from other department.				

# List of GEC for other department

CODE	GEC SUBJECTS	Credits
BTCE-310	Basic of civil engineering	4
BTCE-311	Building Materials	4

#### FOURTH SEMESTER

CODE	SUBJECT	L	Т	P	CREDIT
BT CE-401	Environmental Studies**	3	1	-	-
BTCE-402	Structural Analysis-II	3	1	-	4.0
BTCE-403	Fluid Mechanics-II	3	1	-	4.0
BTCE-404	Surveying-II	3	1	-	4.0
BTCE-405	Design of Concrete Structures-I	3	1	-	4.0
	GEC***	3	1	-	4.0
BTCE-406	Fluid Mechanics-II (P)	-	-	2	1.0
BTCE-407	Surveying-II(P)	-	-	2	1.0
BTCE-408	Concrete Lab (P)	-	-	2	1.0
TOTAL					23.0
** Environment	** Environmental Studies will be of qualifying nature				

<sup>\*\*</sup> Environmental Studies will be of qualifying nature.

## List of GEC for other department

CODE	GEC SUBJECTS	Credits
BTCE-409	Soil Engineering	4
BTCE-410	Building Construction	4

# Scheme –B. Tech. (Civil Engineering3<sup>rd</sup> Year) FIFTH SEMESTER

CODE	SUBJECT	L	T	P	CREDIT
BTCE-501	Soil Mechanics	3	1	-	4.0
BTCE-502	Design of Steel Structures-I	3	1	-	4.0
BTCE-503	Hydrology	3	-	-	3.0
BTCE-504	Design of Concrete Structures-II	3	1	-	4.0
BTCE-505	Transportation Engineering-I	3	1	-	4.0
	DCEC	3	1	-	4.0
BTCE-506	Soil Mechanics (P)	-	-	2	1.0
BTCE-507	Concrete Structures-II (Drawing)	-	ı	2	1.0
BTCE-508	Transportation Engineering I(P)	-	-	2	1.0
TOTAL					26.0

<sup>\*\* \*</sup>GEC to be taken from other department.

# **List of DCEC**

CODE	DCEC-ISUBJECTS	Credits
BTCE-509	Structural Analysis-III	4
BTCE-510	Engineering Geology	4
BTCE-511	Concrete Technology	4
BTCE-512	Rock Mechanics	4

#### SIXTH SEMESTER

CODE	CORE SUBJECTS	L	T	P	CREDIT
BTCE-601	Design of Steel Structures-II	3	1	-	4.0
BTCE-602	Irrigation Engineering-I	3	1	-	4.0
BTCE-603	Water Supply & Treatment	3	-	-	3.0
BTCE-604	Geotechnology-1	3	1	-	4.0
	DCEC	3	1	-	4.0
	DCEC	3	1	-	4.0
BTCE-605	Geotechnology (P)	-	-	2	1.0
BTCE-606	Environmental Engineering-I(P)	-	-	2	1.0
BTCE-607	Computer Applications	-	-	2	1.0
TOTAL					
Note: The students shall devote 4 weeks to Survey Camp after 6 <sup>th</sup> Semester Examination.					

# List of DCEC

CODE	DCEC SUBJECTS	Credits
BTCE-608	Transport Planning	4
BTCE-609	Bridge Engineering	4
BTCE-610	Railway & Airport Engineering	4
BTCE-611	Geo-synthetics Engineering	4
BTCE-612	Environmental Impact Assessment	4
BTCE-613	Project Planning & Management	4
BTCE-614	Hydro Electric Power Development	4
BTCE-615	River Mechanics & Flood Control	4
BTCE-616	IT & CAD Applications in Civil Engineering	4
BTCE-617	Advanced Traffic Engineering	4

# Scheme –B. Tech. (Civil Engineering4<sup>th</sup> Year) SEVENTH SEMESTER

CODE	CORE SUBJECTS	L	T	P	CREDIT
BTCE-701	Irrigation Engineering-II	3	1	-	4.0
BTCE-702	Transportation Engineering-II	3	1	-	4.0
BTCE-703	Sewerage & Sewage Treatment	3	-	-	3.0
BTCE-704	Estimation & Accounts	3	1	-	4.0
	DCEC	3	1	-	4.0
	DCEC	3	1	1	4.0
BTCE-705	Irrigation Engineering Design & Drawing(P)	-	-	2	1.0
BTCE-706	Transportation Engineering-II(P)	-	-	2	1.0
BTCE-707	Environmental Engineering-II(P)	-	-	2	1.0
BTCE-708	Survey Camp	-	-	-	2.0
TOTAL					28.0

# **List of DCEC**

CODE	DCEC SUBJECTS	Credits
BTCE-709	Design of Hydraulic Structures	4
BTCE-710	Water Resources & Systems Engineering	4
BTCE-711	Industrial Waste Water Treatment	4
BTCE-712	Ground Water Hydrology	4
BTCE-713	Geotechnology-II	4
BTCE-714	Elements of Earthquake Engineering	4
BTCE-715	Machine Foundations	4
BTCE-716	Structural Optimization	4

#### **EIGHTH SEMESTER**

CODE	SUBJECT	L	T	P	CREDIT
BTCE-801	Internship/ Project	-	-	-	20.0
TOTAL					20.0

# B. Tech. (Printing & Packaging Technology)

# 2<sup>nd</sup> YEAR (3<sup>rd</sup> Semester)

Course No.	Course Title	T	eachi	Credit		
Course No.	Course Title		T	P	Total	
BT PPT 301	Trends and Development in Printing Processes	3	1	-	4	4
BT PPT 302	Computers in Printing and Packaging	3	1	-	4	4
BT PPT 303	Printing and Packaging Science	3	1	-	4	4
BT PPT 304	Package Design and Development	3	1	-	4	4
BT PPT 305	Elements of Packaging	3	1	-	4	4
BT PPT 306	Printing Process Lab	-	-	2	2	1
BT PPT 307	Computers in Printing & Packaging Lab	-	-	2	2	1
BT PPT 308	Package Design & Development Lab	-	-	2	2	1
BT PPT 309	Environmental Science	3	1	-	4	No Credits
GEC (General E	lective Course) To be taken from other Departments					

# List of GEC (General Elective Course) "For Students of other Departments"

Code	Course Name	Credit
BT PPT 310	Packaging Legislations	4

#### **Fourth Semester**

Commo No	C T'41.	Teaching Plan			an	
Course No. Course Title		L	Т	P	Total	Credit
BT PPT401	Planning for Packaging Production	3	1	-	4	4
BT PPT402	Fundamentals of Gravure Technology	3	1	-	4	4
BT PPT403	Printing & Packaging Materials	3	1	-	4	4

Common No.	Common T'41		<b>Feachi</b>			
Course No.	Course Title	L	T	P	Total	Credit
BT PPT404	Electronic Composition	3	1	1	4	4
BT PPT405	Introduction to Graphic Imaging	3	1	-	4	4
BT PPT406	Gravure Technology Lab	-	-	2	2	1
BT PPT407	Electronic Composition Lab	-	-	2	2	1
BT PPT408	Graphic Imaging Lab	-	-	2	2	1
GEC (General Elective Course) To be taken from other Departments						

# List of GEC (General Elective Course) "For Students of other Departments"

Code	Course Name	Credit
BT PPT409	Brand Management	4

# B. Tech. (Printing & Packaging Technology)

# 3<sup>rd</sup> YEAR (5<sup>th</sup> Semester)

Canna Na	Co T:41	T	Credit			
Course No.	Course Title	L	L T		Total	
BT PPT501	Technology of Flexography	3	1	-	4	4
BT PPT502	Sheet Fed Offset Technology	3	1	-	4	4
BT PPT503	Packaging Substrates –I	3	1	-	4	4
BT PPT504	Paperboard and Corrugated Packaging	3	1	-	4	4
BT PPT505	Flexography Technology Lab	-	-	2	2	1
BT PPT506	Sheet Fed Offset Lab	-	-	2	2	1
BT PPT507	Package Substrates Testing Lab	-	-	2	2	1
DCEC (Discipline Centric Elective Courses)						
DCEC (Discipline	DCEC (Discipline Centric Elective Courses)					

# **List of DCEC (Discipline Centric Elective Courses)**

Code	Course Name	Credits
BT PPT508	Wood, Glass and Metal Based Packaging	4
BT PPT509	Packaging Management	4
BT PPT510	Lean Six Sigma	4

#### **Sixth Semester**

Course No.	Course Title	Т	Teachi	Teaching Plan		
Course No.	Course Title	L	T	P	Total	
BT PPT601	Color Perception and Calibration	3	1	-	4	4
BT PPT602	Image Carrier for Printing Processes	3	1	-	4	4
BT PPT603	Digital Pre-Press	3	1	-	4	4
BT PPT604	Plastic & Polymer Based Packaging	3	1	-	4	4
BT PPT605	Packaging and Printing Inks	3	1		4	4
BT PPT606	Image Carrier for Printing Processes Lab	-	-	2	2	1
BT PPT607	Digital Pre-Press Lab	-	-	2	2	1
BT PPT608	Color Perception and Calibration Lab	-	-	2	2	1
DCEC (Discipline	Centric Elective Courses)					

# **DCEC (Discipline Centric Elective Courses)**

BT PPT 609	Packaging Attributes – Shelf Life	4
BT PPT 610	Packaging Substrates –II	4
BT PPT 611	Sustainability and Environment Printing& Packaging	4

# B. Tech. (Printing & Packaging Technology) 4th YEAR (7th Semester)

Course No.	Course Title	Teaching Plan C				
		L	T	P	Total	
BT PPT701	Quality Control & Distribution and Transportation	3	1	-	4	4
BT PPT702	Packaging Machineries	3	1	-	4	4
BT PPT703	Finishing and Decorating Technology	3	1	-	4	4
BT PPT704	Quality Control Lab	-	-	2	2	1
BT PPT705	Finishing and Decorating Lab	-	-	2	2	1
BT PPT706	Package Testing Lab	-	-	2	2	1
BT PPT707	Industrial Training (4 weeks)	-	-	-	-	1
DCEC (Discipline Centric Elective Courses)						
DCEC (Discipline	e Centric Elective Courses)					

# **List of DCEC (Discipline Centric Elective Courses)**

BT PPT 708	Food & Agro Based Packaging	4
BT PPT 709	Digital & Advance Printing Processes	4
BT PPT 710	Sustainability and Environment Printing & Packaging	4
BT PPT711	Costing & Estimating	4

## B. Tech. (Printing & Packaging Technology)

# 4th YEAR (8th Semester)

Course No.	Course Title	Te	<b>Feaching Schedule</b>			Credit
	Course ride	L	T	P	Total	
BT PPT801	Project	-	-	-	-	20

# Scheme –B. Tech. (CSE 2<sup>nd</sup> Year) THIRD SEMESTER

CODE	SUBJECT	L	T	P	CREDIT
BT CSE 301	Data Structures using C	3	1	-	4.0
BT CSE-302	Discrete Structures	3	1	-	4.0
BT CSE-303	Digital & Analog Communication	3	1	-	4.0
BT CSE-304	Digital Electronics & Computer Organization	3	1	-	4.0
	GEC-I*	3	1	-	4.0
BT CSE-305	Mathematics-III	3	1	-	4.0
BT CSE-306	Environmental Studies	3	1	-	-
BT CSE-307	Data Structures using C Lab	-	-	2	1.0
BT CSE-308	Digital Electronics Lab	-	-	2	1.0
BT CSE-309	PC Lab	-	-	2	1.0

# List of GEC for other department

CODE	GEC SUBJECTS	Credits
BT CSE-310	Data Structure	4
BT CSE-311	Computer Organization And Architecture	4
BT CSE-312	Internet Fundamentals	4

#### FOURTH SEMESTER

CODE	SUBJECT	L	T	P	CREDIT
BT CSE-401	Database Management System (DBMS)	3	1	-	4.0
BT CSE-402	Object Oriented Programming using C++ (OOPS)	3	1	-	4.0
BT CSE-403	Operations Research	3	1	-	4.0
BT CSE-404	Microprocessor and Interfacing	3	1	-	4.0
BT CSE-405	Fundamentals of Management	3	1	-	4.0
	GEC-II*	3	1	-	4.0
BTCSE-406	DBMS Lab	-	-	2	1.0
BTCSE-407	C++ Programming LAB	-	-	2	1.0
BTCSE-408	Microprocessor & Interfacing Lab	-	-	2	1.0

# List of GEC for other department

CODE	GEC SUBJECTS	Credits
BTCSE-409	Basics of Software Development	4
BTCSE-410	Data Communication And Networking	4
BTCSE-411	Basics of Database Management Systems	4

# Scheme –B. Tech. (Computer Engineering 3<sup>rd</sup> Year) FIFTH SEMESTER

CODE	SUBJECT	L	T	P	CREDIT
BT CSE-501	Principles of Operating System	3	1	-	4.0
BT CSE-502	Internet Fundamentals & Web Technology	3	1	-	4.0
BT CSE-503	Computer Graphics and Multimedia Technology	3	1	-	4.0
BT CSE-504	Principles of Software Engineering	3	1	-	4.0
BT CSE-505	Theory of Computation	3	1	-	4.0
	DCEC	3	1	-	4.0
BT CSE-510	Computer Graphics and Multimedia Lab	-	-	2	1.0
BT CSE-511	Operating System Lab	-	-	2	1.0
BT CSE-512	Internet Fundamentals & Web Technology Lab	-	-	2	1.0
TOTAL					27.0

# **List of DCEC**

CODE	DCEC SUBJECTS	Credits
BT CSE-506	Wireless Communication	4
BT CSE-507	System Software Design	4
BT CSE-508	Embedded System	4
BT CSE-509	Object Oriented System Development	4

# SIXTH SEMESTER

CODE	CORE SUBJECTS	L	T	P	CREDIT
BT CSE-601	Analysis and Design of Algorithms	3	1	-	4.0
BT CSE-602	Intelligent Systems	3	1	-	4.0
BT CSE-603	Computer Networks	3	1	-	4.0
BT CSE-604	Advanced Java	3	1	-	4.0
	DCEC	3	1	-	4.0
	DCEC	3	1	-	4.0
BT CSE-613	Unix & Shell Programming Lab	-	-	2	1.0
BT CSE-614	Intelligent Systems Lab	-	-	2	1.0
BT CSE-615	Advanced Java	-	-	2	1.0

# **List of DCEC**

CODE	DCEC SUBJECTS	Credits
BT CSE 605	Neural Networks	4
BT CSE 606	Introduction to E-Commerce and ERP	4
BT CSE 607	Digital Signal Processing	4
BT CSE 608	Data Warehousing & Data Mining	4
BT CSE 609	Real Time System	4
BT CSE 610	Programming Languages	4
BT CSE 611	Distributed Operating System	4
BT CSE 612	UNIX & Shell Programming	4

#### SEVENTH SEMESTER

CODE	CORE SUBJECTS	L	T	P	CREDIT
BT CSE-701	Advanced Computer Architecture	3	1	ı	4.0
BT CSE-702	Security of Information Systems	3	1	-	4.0
BT CSE-703	Compiler Design	3	1	-	4.0
	DCEC	3	1	-	4.0
	DCEC	3	1	-	4.0
BT CSE-708	Minor Project	-	-	4	2.0
BT CSE-709	Seminar	-	-	2	1.0
BT CSE-710	Compiler Design Lab	-	-	2	1.0

# **List of DCEC**

CODE	DCEC SUBJECTS	Credits
BT CSE 704	Advance Client/Server Technology	4
BT CSE 705	Natural Language Processing	4
BT CSE 706	Cloud Computing	4
BT CSE 707	Software Testing	4
BT CSE 708	Software Project Management	4
BT CSE 709	Logic and Functional Programming	4
BT CSE 710	Introduction to VLSI Design	4
BT CSE 711	Networking Programming & Administration	4

#### EIGHTH SEMESTER

CODE	SUBJECT	L	T	P	CREDIT
BTCE-801	Internship/ Project	ı	1	-	20.0

#### **Admission Criteria and Procedure**

Admissions to all B. Tech. Programmes have been made through on the basis of JEE (Mains) Scores.

#### **Brief Faculty Profile**

#### 1. Dr. Virendra Kumar (M.Sc., Ph.D.)

Experience: 3 YEARS

Research Area/ Interest: Mathematics (Complex Analysis)

Dr. Virendra Kumar is an assistant professor in School of Engineering and Technology. He holds Ph.D degree along with PG degree in Mathematics with specialization in Complex Analysis. He has also qualified UGC-NET JRF in Mathematics. He has more than ten research papers in reputed International journals. He is an active professional individual member of various committees at central university of Haryana. He has organized, participated and contributed a number of research papers in various national and international conferences, workshops and seminars.

# Editor/Reviewer to the Following Journals

- 1. Member of "Asian Council of Science Editors".
- 2. Bulletin of Malayasian Mathematical Society (BMMS).
- 3. Kornoup Journal of Mathematics (KJM).
- 4. Member of Editorial Board of Central University of Haryana Journal, An International Journal.

#### **Collaboration**

- 1. Prof. V. Ravichandran, Department of Mathematics, University of Delhi, Delhi—110007. India. B vravi@maths.du.ac.in
- 2. Prof. N. E. Cho, Department of Applied Mathematics, Pukyong National University, Busan608-737, South Korea. B necho@pknu.ac.kr
- 3. Dato' Prof. R. M. Ali, School of Mathematical Sciences, University Sains Malaysia (USM), 11800 Penang, Malaysia. B rosihan@cs.usm.my

#### 2. Dr. Munish Manas (Ph.D.)

Experience: 4 Years

Research Area/ Interest: Design and Optimization of a Smart micro grid towards sustainability

Department: Electrical Engineering Email: munishmanas@cuh.ac.in

Dr. Munish Manas is an assistant professor in School of Engineering and Technology. He has six papers published in peer reviewed journals (national / international) and his eight papers are published in peer reviewed IEEE Conf. Proceedings. He has one monograph as well. He has been awarded U.G.C. B.S.R. meritorious fellowship from 2012 to 2015. He is also nominated member of Arunachal Pradesh's Public Service Commission Examination Committee for Electrical Engineering. He has been Faculty Coordinator and Trainer for MNRE sponsored Photo Voltaic Skill Development Program-

Suryamitra in Tezpur Central University. He has Research Collaborations with IIT Guwahati and Faculty cum trainer with NPTI Faridabad. He is a Reviewer at Cogent Engineering Journal of Taylor and Francis/ CRC press.

## 3. Dr. Bajrang (Ph.D.)

Experience: 1 YEAR

Research Area/ Interest: Financial Inclusion and Stock Market

Email: bajrangloharu@gmail.com

Dr. Bajrang is an assistant professor in School of Engineering and Technology. He has qualified UGC NET JRF. He has six papers published in peer reviewed journals (national/international).

#### 4. Dr. Sumit Kumar (Ph.D.)

Experience: 6 Months

Research Area/ Interest: These are enlisted as below

- 1. Heterocycles synthesis: Synthesis of functionalized heterocyclic compounds of medicinal relevance
- 2. Multicomponent reaction: Design of new MCRs chemistry
- 3. Green Chemistry: Development of new and greener protocols for organic synthesis

Dr. Sumit Kumar is an assistant professor in the School of Engineering and Technology. He has qualified GATE-2013 conducted by IIT Bombay. He is awarded CSIR-JRF from 2013-14 and CSIR-SRF from 2015-2016. He has Research Collaboration with IIT Roorkee. He has eleven papers published in peer reviewed journals (international) and one manuscript accepted.

#### 5. Rekha Kumari (M. A., M. Phil., NET)

Experience: 05 Months Research Area/ Interest:

- 1. Indian Writing in English
- 2. Fourth World Literature
- 3. Literary Theory
- 4. Disability Studies

Miss Rekha Kumari is an assistant professor in School of Engineering and Technology. She has been awarded with RGNF Fellowship with Disabilities for pursuing Ph.D. She has one paper in International Journal and two chapters in edited books. She participated and contributed a number of research papers in various national conferences, workshops and seminars. She has been member of ICCPPRSH Cell at Central University Haryana since 2015.

#### 6. Sangeeta Yadav (M.Tech.)

Research Area/ Interest: These includes: -

- 1. Recommender Systems Using Collaborative Filtering and Content Based Filtering
- 2. Cloud Computing
- 3. Data Mining and Big Data Analysis

Mrs. Sangeeta Yadav is an assistant professor in School of Engineering and Technology. She has qualified UGC NET JRF and GATE. She has three papers published in peer reviewed journals (national / international).

#### 7. Eakta Kumari (M.Tech.)

Experience: 1 year

Research Area/ Interest: Cloud Computing, Sensor Network

Department: Computer Science and Engineering

Mrs. Eakta Kumari is an assistant professor in School of Engineering and Technology. She has qualified UGC NET and GATE. She has two research papers published in peer reviewed journals (national / international). She is a Reviewer of IEEE TRANSACTIONS ON CLOUD COMPUTING

#### 8. Rajesh Saini (M. Tech.)

Experience: 1 year

Research Area/ Interest: Power System, Electrical Machine, Network Analysis, Control system

Mr. Rajesh Kumar is an assistant professor in School of Engineering and Technology. He has qualified GATE 2012, 2013, 2014 in a row. He has two research papers published in peer reviewed journals (national / international).

#### 9. Tarun Singh (M. Tech.)

Experience: 3 years

Research Area: Printing and Packaging

Mr. Tarun Singh is an assistant professor in the Department of Printing & Packaging Technology in School of Engineering and Technology. He did MBA as well.

# Infrastructure of School of Engineering & Techonology

- 1. Computer Labs with 45 Systems equipped with allied software like Turbo C/C++.
- 2. Engineering Drawing Lab equipped with 40 Laminated Drawing Boards and Multi-angled Stand.
- 3. Physics Laboratory
- 4. Three Classrooms equipped with white Boards and Facility for Portable Projector.
- 5. Two faculty rooms (119, 121).
- 6. Facility to avail multimedia equipped Auditorium for Spl. Lectures.

#### Research Thrust Area

The inception of the above mentioned course was made from this academic session i.e. 2016-2017.

- 1. Design and Optimization of Hybrid Renewable Energy based Smart Microgrids towards sustainability.
- 2. Heterocycles synthesis: Synthesis of functionalized heterocyclic compounds of medicinal relevance
- 3. Multicomponent reaction: Design of new MCRs chemistry
- 4. Green Chemistry: Development of new and greener protocols for organic synthesis
- 5. Recommender Systems Using Collaborative Filtering and Content Based Filtering
- 6. Cloud Computing
- 7. Power System, Electrical Machine, Network Analysis, Control system.
- 8. Data Mining and Big Data Analysis
- 9. Financial Inclusion and Stock Market
- 10. Complex Analysis

#### **Events Organised**

The inception of the above mentioned course was made from this academic session i.e. 2016-2017. The school organized an orientation programme for all B. Tech students.

#### **Highlights and Achievements**

#### a. Dr. Virendra Kumar is a Reviewer to the following journals

- 1. Member of "Asian Council of Science Editors".
- 2. Bulletin of Malayasian Mathematical Society (BMMS).
- 3. Kornoup Journal of Mathematics (KJM).
- 4. Member of Editorial Board of Central University of Haryana Journal, An International Journal

# b. Collaboration with the following institutes/universities

- 1. University of Delhi, Delhi
- 2. Pukyong National University, Busan608-737, South Korea.
- 3. University Sains Malaysia (USM), 11800 Penang, Malaysia.

#### c. Dr. Munish Manas has the following fellowship, collaborations and special nominations

- 1. Awarded U.G.C. B.S.R. meritorious FELLOWSHIP from 2012 to 2015.
- 2. Nominated Member of Arunachal Pradesh's Public Service Commission Examination Committee for Electrical Engineering.
- 3. Faculty Coordinator and Trainer for MNRE sponsored Photo Voltaic Skill Development Program- Suryamitra in Tezpur Central University.
- 4. Research Collaborations with IIT Guwahati and Faculty cum trainer with NPTI Faridabad.
- 5. Reviewer Cogent Engineering Journal of Taylor and Francis/ CRC press.
- 6. Best Paper Award Power & Energy Track in Computational Intelligence & Communication Technology (CICT), 2015 IEEE International Conference

#### **Future Roadmap**

- 1. Extensions Lectures will be organized by inviting the experts from reputed institutions
- 2. To engage students in live projects where they get hands-on experience of technical activities
- 3. To provide conducive environment to the students for learning opportunities both in theory and practice, thereby to groom future leaders in the domains of electronics engineering.
- 4. To bridge the gap between the existing placement scenario and the expectations of students by evolving effective strategies.
- 5. To set-up adequate laboratory facilities in all active areas of teaching and research in the department.
- 6. To evolve and implement strategies so that the programs offered by the department attains parity with the best in the country in the next 10 years.
- 7. To focus on interdisciplinary research for national and global needs.
- 8. To initiate need based customized solutions for the benefit of the rural populace in the nearby villages of Haryana.