

# **ASSESSMENT INDICATORS**

**SHOOLINI UNIVERSITY, SOLAN, H.P.**

**50 POINTS INDICATORS**

**CORE**

**&**

**DESIRABLE**

**Submitted to:**

**National Assessment & Accreditation Council (NAAC) For Assessment and  
Accreditation**

**1. Percentage of courses where major syllabus restructuring was carried out during last 3 years**

In the last three years, all the Schools have undertaken exercise to significantly revamp the courses taught under various programs. In the current year all the undergraduate programs offered in the University have adopted CBCS (Choice Based Credit System) as per UGC recommendations. Approximately more than 50% of the courses were restructured during the last 3 years.

**2. Temporal Plan in more than 50% of programs (CBCS/Semester/Annual)**

All the programs presently offered in the University follow Semester system except MBA Program wherein based on the inputs from the stakeholders and international benchmarking with leading Global Business Schools, it was changed to quadmester in 2014. From the session 2015 –16 all UG programs have CBCS.

**3. Percentage of teachers with PhD qualification General Courses, Professional courses (For ex. MD/DM for medicine and ME/MS for engineering)**

General Courses: 79%

Professional Courses: 37%

**4. Student Computer Ratio**

The student computer ratio of the University is 1:3

Every student in the University is encouraged to have a laptop/smart device which is configured with the University Wi-Fi system. Presently almost 95% of the students own personal laptops. Shoolini University has obtained Microsoft license for campus. University has 8 - IT labs wherein desktops /laptops with internet facilities are provided to the students, computers for student's use are also available in the Yogananda Library.

**5. The number of departments with UGC/SAP/CAS/DST/FIST etc., in university**

Shoolini University comprises of five faculties and nine schools and is well recognized for its research activities by national agencies. Under the INSPIRE program sponsored by the DST, it has already given exposure to more than five thousand budding scientists.

School wise list of recognized projects is as under:

School	Sponsoring Body	Faculty Incharge	Project details
Biotechnology	DBT	Dr DR Sharma/Dr Kamal/ Dr Saurabh	Training cum seminar on Molecular Biology techniques for college lecturers (November 10-19, 2011) Rs. 50000
	MoA	Dr DR Sharma/Dr Kamal/ Prof GK Sharma	Awareness Program for farmers on Protection of Plant Varieties and Farmers Rights, sponsored by PPV&FRA, Ministry of Agriculture (February 19, 2013): Rs. 80000
	DST	Dr Kamal Dev	FIST grant for proteomics facility (approved for funding) Rs 3 crores
Bioengineering & Food Technology	Ministry of Food Processing Industry	Dr Dinesh Kumar, HoS	Infrastructure Creation under HRD scheme for B.Tech. Food Technology Grant Amount : Rs.73.71 Lakh
	Ministry of Food Processing Industry	Dr Dinesh Kumar, HoS	Food Testing Laboratory Final Presentation made likely to be funded (Rs 4 crore)
	DST	Dr Dinesh Kumar, HoS	Grant for organizing National Conference on Food Processing and Technology: Current Status and Future Prospects 25-26 Feb 2016.Grant Amount : Rs. 75,000
	NABARD	Dr Dinesh Kumar, HoS	Grant for organizing National Conference on Food Processing and Technology: Current Status and Future Prospects 25-26 Feb 2016Grant Amount: Rs 50,000
Biological & Environmental Sciences	DST	Prof. Sunil Puri	INSPIRE Science Internship Programme Since 2010. Annual Grant :Approx. Rs 94,00,000
Mechanical & Civil Engineering	MNRE	Dr. MuneeshSethi	Steam Cooking plant for 500 People Grant Amount :Rs 24,00,000
Electrical & Computer Science engineering	IIT – Bombay under MHRD	Mr. Pankaj Vaidya	Akaash Research andDevelopment Center Grant Amount :Rs 2,80,000 per annum
	NextGen Innovation Inc., USA	Dr. Varun Jaiswal	Innovation in Biometrics Grant Amount :Rs 9,00,000

\*DST- Department of Science and Technology, DBT- Department of Biotechnology, MoA- Ministry of Agriculture, NABARD- National Bank for Agriculture and Rural Development, MNRE-Ministry of Non-Conventional and Renewable Energy

## 6. Number of Post-Doctoral Fellows/ Research Associates working

### a) Locals b) outsiders

Total Post-Doctoral Fellows/ Research Associates in the University are 30 and their details are as under:

School	Post – Doctoral Fellows/Research Associates/Research Fellow			
	Name of the Scholar	Total No.	Locals	Outsiders
Biotechnology	Dr Abhishek Sharma	2	1	1
	Ms Avantika Sharma			
Bioengineering & Food Technology	Mr. Shampy Duggal (JRF)*	5	5	-
	Ms. Kajal Kumari (JRF)			
	Ms. Mamta Sharma (JRF)			
	Ms. Sukhveer Kaur (JRF)			
	Ms. Usha Devi (RF)			
Chemistry	Dr. Neeraj Gupta	2	-	2
	Dr. Pankaj Thakur			
Physics & Material Sciences	Dr. Radheshyam Rai	4	-	4
	Dr. Suneel Dutt			
	Dr. Atul Thakur			
	Dr. Preeti Thakur			
Pharmaceutical Sciences	Ms Megha Sharma	4	4	
	Ms. Kamna Sharma			
	Mr. Sunil Kumar			
	Ms. Aditi Sharma			
Electrical & Computer Science Engineering	Mr. Pankaj Vaidya	5	3	2
	Mr. Surinder Pal			
	Ms. Parul Sharma			
	Ms. Divya Sharma			
	Mr. Kapil Kumar			
Mechanical & Civil Engineering	Mr. Abhilash Pathania	8	5	3
	Mr. Robin Thakur			
	Mr. Raj Kumar			
	Mr. Amar Raj Singh Suri			
	Mr. Nitin Kumar			
	Mr. Kamal			
	Mr. Arvind			
	Mr. Ashok Bhardwaj			

## 7. Number of ongoing research projects/per teacher

The number of ongoing research projects per teacher is 0.022 (including Faculty of Engineering and Management wherein research component is yet to come to the level of science faculties).

The Details of ongoing projects are as under:

S. No.	Year	PIs	Name of the Project	Name of Funding Agency	Total grant Received (in lakhs)
1	2014-17	Dr. Saurabh Kulshrestha	Identification and characterization of hypovirulence factors from <i>Rosellinia nectarix</i> causing white root rot in apple.	DBT	28.7
2	2014-17	Dr. Astha Tripathi Dr.Saurabh Kulshrestha	Isolation and identification of bioactive compounds from wild mushrooms for new drug discovery	DBT	16.0
3	2015-18	Dr. Reena Saini (PI) & Dr.Neeraj Mahindroo	Evaluation of withanolide lactones as immunomodulators to induce granulysin expression in immune cells conferring cytotoxicity towards cancerous cells	DBT	25.0
4	2015-18	Dr Astha Tripathi	Cultivation of wild edible mushrooms with functional properties of performance enhance	LSRB	20.0
5	2015-18	Dr. Umar Farooq	Role of Th17 and Treg Cells in Pathogenicity and immunity of <i>P. falciparum</i> infection	ICMR	80.0
6	2011-16	Ms. Nazam Khan under the supervision of Dr. Umar Farooq	Identification and characterization of promiscuous peptides from vaccine candidate antigen of <i>P. falciparum</i> by using <i>In silico</i> approach.	UGC – MANF	17.0
7	2014-18	Ms. Tanvi Gupta under the supervision of Dr.Saurabh Kulshrestha	Identification and characterization of mycoviruses capable of inducing hypovirulence in isolates of <i>Sclerotinia sclerotiorum</i>	DST INSPIRE	17.0
8	2014-18	Ms. Neha under the supervision of Dr. Umar Farooq	Role of Th-17 and Tregulatory cells in pathogenesis and immunity in <i>Salmonella typhii</i> infection	DST INSPIRE	17.0

S. No.	Year	PIs	Name of the Project	Name of Funding Agency	Total grant Received (in lakhs)
9	2012-16	Ms. Poonam Kumari under the supervision of Dr. Savita Jandaik	Isolation characterization, immobilization and application of an alkaliphilic thermotolerant protease	UGC – RGNF	17.0
10	2013-17	Ms. Bharti under the supervision of Dr. P.C. Sharma	Phenotypic and genotypic characterizations of Extended spectrum beta lactamase (ESBL) producing MDR isolates of pseudomonas 18aeruginosa from clinical case in Himachal Pradesh	UGC – RGNF	17.0
11	2013-16	Dr. Dinesh Kumar & Dr. Somesh Sharma	Process optimization for recovery and purification of Zein and xanthophyll's (resp. valuable maize proteins and pigments) and its stability application in food products.	DBT	16.20
12	2013-16	Dr. Amit Seth (PI)	Isolation, Optimization and cloning of nitrilase of thermophilic isolate from hot springs of Himachal Pradesh and its application in mandelic acid synthesis.	DST	18.00
13	2014-17	Dr. Somesh Sharma (PI) & Dr. Pankaj Kumar Chauhan (Co-PI)	Utilization of Wild Himalayan Fig for the sustainable livelihood of weaker sections of the society in mid hill region of Himachal Pradesh.	DST	18.55
14	2013-16	Dr. Adesh K Saini (PI)	Identification of genes conferring beneficial bio fertilizer and biocontrol activities in plantgrowth-promoting rhizobacteria (PGPR) for crop improvement	DST	
15	2013-15	Dr. Adesh Saini, Prof. Christine Winterbourn, University of Otago, Christ Church, New Zealand ; Dr. Vikas	Testing for the Efficacy of Functional Foods: Collaborative Development of an Assay to Determine impacts of Foods on Antioxidant Activity	Indo New Zealand project by DSTMBIE	64.80

S. No.	Year	PIs	Name of the Project	Name of Funding Agency	Total grant Received (in lakhs)
		Kumar, Center for Cellular and Molecular Platforms (CCMP), Bangalore			
16	2014-15	Dr. Muneesh Sethi	Steam Cooking	MNRE	24.0
17	2010 onwards	Prof. Sunil Puri	INSPIRE Science Internship Program	DST	94.0
18	2012-17	Ms. Navdeep Kaur under the supervision of Prof. Sunil Puri	Quality assessment of surface and ground water along Buddha Nala	Maulana Azad National Fellowship For Minority Students, UGC	10.80
19	2015-20	Ms. Menaka under the supervision of Dr. Sujata Bhattacharya	Abiotic stress alleviation using Plant Growth Promoting Rhizobacteria (PGPR) in medicinal plants of North-Western Himalaya	INSPIRE Fellowship DST	17.0
20	2014-17	Dr. Kalpana Chauhan	Chitosan-thiomer, sulphide and sulphonium salt particulates in arsenic Detoxification	BRNS	23.21
21	2014-17	Dr. Pardeep Singh	Photocatalytic activity of ternary metal for water purification	DST	25.0
22	2013-16	Dr. Neeraj Gupta	Developing sustainable process for converting cellulose to 5-Hydroxymethyl furfural (5-HMF) by synthesizing Indium based catalyst; and its conversion into value added chemicals	DST	17.0
23	2014-17	Dr. Preeti Thakur	Synthesis and characterization of nano-ferrites for the development of radar absorbing materials	DST	22.72
24	2015-18	Dr. SuneelDutt	Search for Physics Beyond Standard Model using DZERO and CMS Energies.	DST	16.50

S. No.	Year	PIs	Name of the Project	Name of Funding Agency	Total grant Received (in lakhs)
25	2015-18	Dr.Radheshyam Rai (PI) and Prof. N.K. Singh (Co.PI)	Development of Lead free piezoelectric nanofibers via Electrospinning for piezoelectric energy harvesting	DRDO	26.89
26	2011-14	Dr.Deepak Pathania & Prof. A.S. Singha Department of Chemistry NIT, Hamirpur (H.P)	Modification of lignocellulosics fiber and their application in the synthesis of reinforced polymer matrix based composites	Shoolini University & NIT Hamirpur	0.5
27	2011-15	Dr.Deepak Pathania & Prof. N.C. Kothiyal, Department of Chemistry NIT, Jalandhar (Punjab)	Nano-composites ion exchanger: synthesis, characterization and applications	Shoolini University & NIT Jalandhar	0.5
28	2010-13	Dr.Kalpana Chauhan & Dr. J.C. Kuniyal Scientist-E,G.B. Pant Institute of Himalayan, Environment & Development, HP Unit, Mohal-Kullu, India	Atmospheric Chemistry in the Kullu Valley, Northwestern India Himalaya	Shoolini University & GB Pant Institute	1.0

S. No.	Year	PIs	Name of the Project	Name of Funding Agency	Total grant Received (in lakhs)
29	2015-17	Dr. Deepak Pathania & Prof. Ajay Kumar Mishra, Nanotechnology and Water Sustainability Research Unit, College of Engineering, Science and Technology, University of South Africa, Florida Science Campus, Johannesburg	Studies on spectroscopic techniques and analytical applications of nano hybrid ion exchange materials	Shoolini University & Johannesburg	1.0
30	2015-17	Dr. Deepak Pathania & Prof. Z.M. Siddiqi Department of Basic Sciences, Jubail University College, Jubail University, Saudi Arabia	Bioremediation of environmental pollutants using agromaterials and their nanocomposite	Shoolini University & Jubail, University, Saudi Arabia	1.0
31	2013-16	Dr. Rohit Goyal	Isolation & characterization of bioactive leads from Pinus for prevention of osteoporotic	DST	21.3
32	2015-18	Dr. Rohit Goyal (PI) & Mr. Vikas Sharma (CO-PI)	Bioactivity guided Isolation and structural modification of herbal principles from Himachal Pradesh.	ICMR	10.3

S. No.	Year	PIs	Name of the Project	Name of Funding Agency	Total grant Received (in lakhs)
33	2013-18	Ms. Megha Sharma under the supervision of Prof. Neeraj Mahindroo	Development of validated stability Indicating assay method for TAZQ, a novel bronchodilator and comparative accelerated degradation of digoxin and its acetate	DST-INSPIRE	17
34	2013-18	Mr. Sunil Tomar under the supervision of Prof. Neeraj Mahindroo	Isolation, characterization and biological evaluation of novel phytoconstituents for anti-cancer activity.	DST-INSPIRE	17
35	2013-18	Ms. Kamna Sharma under the supervision of Dr. Sameer Sapra	Synthesis and pharmacological evaluation of nitrogen heterocycles with special emphasis on quinoline analogues	DST-INSPIRE	17
36	2014-15	Dr. Deepak Nandkishore Kapoor	Development of antidiabetic herbal formulation containing protein supplement	Tirupati Medicare Ltd., Paonta Sahib, H.P.	0.50
37	2015-16	Prof. Neeraj Mahindroo, Dr. Deepak N Kapoor & Dr. Poonam Negi	Development of multivitamin gummies & chewable tablets.	Meridian Medicare Pvt. Ltd, Solan, H.P	0.50
38	2015-16	Dr. Narinder Verma Prof. Atul Khosla Dr. Kuldeep Rojhe	Role of Gold in Economic Sustainability of Himalayan Region with a Focus on Himachal Pradesh	World Gold Council	0.50
39	2012 onward	Mr. Pankaj Vaidya	Akaash Research and Development Center	IIT – Bombay under MHRD	2.5
40	2014 - 17	Dr. Varun Jaiswal	Innovation in Biometrics	NextGen Innovation Inc., USA	9.0

**8. Number of completed research projects/per teacher (Funded by National /International Agencies)**

Projects successfully completed are 0.067 per teacher as the University is very young this figure is likely to increase in the near future.

Total completed projects are listed below:

S.No	Year	PIs	Name of the Project	Name of Funding Agency	Total Grant Received in lakhs
1	2009-12	Dr. Savita Jandaik	Studies on genetic variability in <i>Ganoderma lucidum</i> to study elite strain for commercial purposes	DST	14.0
2	2011-15	Dr. Anuradha Sourirajan	Identification of substrates for <i>S. cerevisiae</i> Polo- like kinase (PLK), Cdc5 during meiotic cell division.	DBT	45.47
3	2012-15	Dr. Umar Farooq	Prevalence and Characterization of <i>Echinococcus granulosus</i> strains isolated in HP	ICMR	35.0
4	2012-15	Dr. Anuradha Sourirajan Co-PI: Dr. Kamal Dev	Identification and Characterization of Medicinal Plants of North-West Himalayas with Synergistic Effects on Traditional Antibiotics to Control Clinical Bacterial Infections.	SERB/DST	22.7
5	2012-15	Dr. Saurabh Kulshrestha	Identification of genes involved in pathogenesis of <i>Rosellinia necatrix</i> causing white root rot in apple	DST	23.0
6	2010-15	Ms. Varsha Rani under the supervision of Dr Kamal Dev	Characterization of betagalactosidase from thermophilic bacteria.	DST(INSPIRE)	17.0
7	2010-15	Mr. Jitender Kumar under the supervision of Dr D. R. Sharma	In vitro culture standardization of <i>Podophyllum hexandrum</i> for production of Podophyllotoxin.	UGC – RGNF	17.0
8	2010-14	Ms. Sujata under the supervision of Prof. Sunil Puri	Abiotic stress mediated consequences on antioxidant defense system and secondary metabolites in <i>Andrographis paniculata</i> Wall. Ex Nees	INSPIRE Fellowship, DST	12

S.No	Year	PIs	Name of the Project	Name of Funding Agency	Total Grant Received in lakhs
9	2012-15	Dr. Atul Thakur	Nano magneto-dielectric materials for high frequency applications	DAE	19
10	2012-14	Dr. Atul Thakur (PI) Dr. Preeti Thakur (Co. PI)	Fabrication and characterization of substrate for patch antenna by using nano magneto-dielectric materials for the missile applications	DRDO	10
11	2014-15	Prof. Neeraj Mahindroo & Dr. Poonam Negi	Development of nano formulations of Vitamin D <sub>3</sub>	Tirupati Medicare Ltd., Paonta Sahib, H.P.	0.30
12	2014	Dr Atul Thakur & Prof. Neeraj Mahindroo	Size reduction of vitamin D <sub>3</sub> to nano scale.	Tirupati Medicare Ltd., Paonta Sahib, H.P.	0.20

### 9. Coordinated/Collaborative projects (National and International)

S.No.	Year	PIs	Name of the Project	Name of Funding Agency	Total Grant Received (in lakhs)
1	2011-14	Dr. Deepak Pathania & Prof. A.S. Singha Department of Chemistry NIT, Hamirpur (H.P)	Modification of lignocellulosics fiber and their application in the synthesis of reinforced polymer matrix based composites	Shoolini University & NIT Hamirpur	0.5
2	2011-15	Dr. Deepak Pathania & Prof. N.C. Kothiyal, Department of Chemistry NIT, Jalandhar (Punjab)	Nano-composites ion exchanger: synthesis, characterization and applications	Shoolini University & NIT Jalandhar	0.5

S.No.	Year	PIs	Name of the Project	Name of Funding Agency	Total Grant Received (in lakhs)
3	2010-13	Dr. Kalpana Chauhan & Dr. J.C. Kuniyal Scientist-E, G.B. Pant Institute of Himalayan, Environment & Development, HP Unit, Mohal-Kullu, India	Atmospheric Chemistry in the Kullu Valley, Northwestern India Himalaya	Shoolini University & GB Pant Institute	1.0
4	2015-17	Dr. Deepak Pathania & Prof. Ajay Kumar Mishra, Nanotechnology and Water Sustainability Research Unit, College of Engineering, Science and Technology, University of South Africa, Florida Science Campus, Johannesburg	Studies on spectroscopic techniques and analytical applications of nano hybrid ion exchange materials	Shoolini University & Johannesburg	1.0
5	2015-17	Dr. Deepak Pathania & Prof. Z.M. Siddiqi Department of Basic Sciences, Jubail University, Saudi Arabia	Bioremediation of environmental pollutants using agromaterials and their nanocomposite	Shoolini University & Jubail, University, Saudi Arabia	1.0
6	2014-15	Dr. Deepak Nandkishore Kapoor	Development of antidiabetic herbal formulation containing protein supplement	Tirupati Medicare Ltd., Paonta Sahib, H.P.	0.50

S.No.	Year	PIs	Name of the Project	Name of Funding Agency	Total Grant Received (in lakhs)
7	2014-15	Prof. Neeraj Mahindroo & Dr. Poonam Negi	Development of nano formulations of Vitamin D3	Tirupati Medicare Ltd. Paonta Sahib, H.P.	0.30
8	2014	Dr Atul Thakur & Prof. Neeraj Mahindroo	Size reduction of vitamin D <sub>3</sub> to nano scale.	Tirupati Medicare Ltd., Paonta Sahib, H.P.	0.20
9	2015-16	Prof. Neeraj Mahindroo, Dr. Deepak N Kapoor & Dr. Poonam Negi	Development of multivitamin gummies & chewable tablets.	Meridian Medicare Pvt. Ltd, Solan, H.P	0.50
10	2012 onwards	Mr. Pankaj Vaidya	Akaash Research and Development Center	IIT – Bombay under MHRD	2.5
11	2014-17	Dr. Varun Jaiswal	Innovation in Biometrics	NextGen Innovation Inc., USA	9.0

**10. National recognition for faculty for Teaching  
Research/Consultancy/Extension (Reputed/recognized bodies)**

Prof. P K Khosla, Vice Chancellor, Shoolini University received Education Entrepreneur of The Year 2012 by Associate Chambers of Commerce ASSOCHAM) and Shiksha Ratan 2012 by All India Technical and Management Association (AITMA).

Prof. Atul Khosla, Pro Vice Chancellor received Visionary Leader Award 2014 by CAREER OPTIONS for excellence in education at the 3rd Higher Education Summit, New Delhi.

Detailed list of various awards received by the faculty school wise is given below:

School	Name of the faculty	Recognition/ Award	Organisation Hosting Award
Biotechnology	Prof. DR Sharma	UNESCO & FAO fellow in USA & Morocco	UNESCO & FAO
	Dr Anuradha Sourirajan	DBT-BIOCARE research funding for women scientists, 2011	DBT
	Dr Astha Tripathi	DBT-BIOCARE research funding for women scientists, 2013	DBT
	Dr Saurabh Kulshrestha	DBT-CREST award, 2012	DBT
Bioengineering & Food Technology	Dr Dinesh Kumar and Dr Somesh Sharma	Consultancy project for new product Development in fruits and vegetables	HPMC, Shimla, Himachal Pradesh
	Dr Somesh Sharma	Consultancy MOU with Gangyul Valley Wines and Fruit Beverages	M/S Gangyul Valley Wines and Fruit Beverages, Near Chail, Distt Solan, Himachal Pradesh
	Dr Adesh Saini	DST Travel Grant for participating in EMBO Conference. Sep 9-13. 2015	Protein Synthesis and Translational Control, EMBO CONFERENCE, at Meyerhofstr. 1, D-69117 Heidelberg, Germany
Biological & Environmental Sciences	Dr. P.K. Khosla	Panels member/chairperson on Agriculture and Home Science Education and Agro-forestry	ICAR
		Research Advisory Committee member	Govind Ballabh Pant Institute of Himalayan Environment and Development, Almora, Uttarakhand
		Member	International Society of Tropical Foresters, USA ; Rubber Institute, Agartala; National Centre on Agroforestry, Jhansi ; National Mushroom Research Centre, Solan

Biological & Environmental Sciences	Dr. Sunil Puri	Coordinator	Tropical Agroforestry of IUFRO Division 1; Silviculture and Management in Arid and Semiarid Regions of IUFRO Division 1 (Silviculture)
		Member	Research Board of Advisors of the American Biographical Institute, USA; Quinquennial Review Team (QRT) AICRP on Agroforestry; Indian Society of Agroforestry, IGFR, Jhansi; Chhattisgarh State of Medicinal and Aromatic Plants Board, Raipur
		Academic Councilmember	Dr. Panjabrao Deshmukh Krishi Vidyapeeth, Akola
		Steering Committee member	North East Hill University (NEHU), Shillong
		Advisory Committee member	Indraprastha Vishwavidyalaya, Delhi
		Governing Body Member	Indian Society of Tree Scientists, Solan
		Expert in editorial boards	Agroforestry Systems published by Kluwer Academic Publishers, The Netherlands; Range Management & Agroforestry Journal published by Range Management Society of India, IGFR, Jhansi; Agricultural Issues
	Dr. Jagdeep Verma	Member	The Orchid Society of India (TOSI), Chandigarh; Life Member, Him Science Congress Association
		Expert in editorial board	The Orchid Society of India (Journal of Orchid Society India, Orchid News)

Biological & Environmental Sciences	Dr. Sujata Bhattacharya	Member	International Society of Environmental Botanists, National Botanical Research Institute, Lucknow (India); Indian society for plant physiology, Division of Plant Physiology, Indian Agricultural Research Institute, New Delhi (India); Him Science Congress Association, Himachal Pradesh (India); Wildlife Crime Control Bureau (WCCB) Volunteer (HP00131), Ministry of Environment and Forests, Government of India.
Chemistry	Dr. Neeraj Gupta	Fulbright Nehru Postdoctoral Research Fellowship (2011-12)	United State India Educational Foundation (USIEF)
	Dr. Kalpana Chauhan	Summer Research Fellowship-2014	Science Academies at ICT Mumbai.
	Dr. Pardeep Singh	Best Reviewer Awarded	ELSEVIER Desalination, 2012
Pharmaceutical Sciences	Dr. Neeraj Mohindroo	Resource Person 5th -10th August 2013,	UGC Networking Resource Centre, UIPS, Panjab University, Chandigarh
		Reviewer	J Med Chem., Bioorg. Med Chem., Bioorg. Med. Chem. Letter, Med Chem Res, Biorg. Chem.
		Resource Person in, 14th - 19th September 2015, UIPS, Panjab University, Chandigarh	UGC Networking Resource Centre
		Poster Evaluator,	10 <sup>th</sup> National Thermodynamic Conference, Panjab University, Chandigarh

Pharmaceutical Sciences	Dr. Shoumyo Bhattacharya	1 <sup>st</sup> prize in poster presentation (AICTE sponsored National seminar on Future trends in Upcoming Pharma Sector at Himalayan Institute of Pharmacy, Kala Amb, HP, 2012)	AICTE, New Delhi
	Mr. Vikas Sharma	3 <sup>rd</sup> prize in poster presentation (AICTE sponsored National seminar on Future trends in Upcoming Pharma Sector at Himalayan Institute of Pharmacy, Kala Amb, HP, 2012)	AICTE, New Delhi
	Mr. Gaurav Sharma	International Travel Award (14 <sup>th</sup> Tetrahedron Symposium, Vienna, Austria, 2013)	CSIR, New Delhi
		International Travel Award (Dubai International Pharmaceutical Technologies, Conference & Exhibition DUPHAT-2014, Dubai, UAE)	ICMR, New Delhi
	Ms. Shaila Khah	Best Paper Award (IPGA sponsored National Seminar on, "Role of community pharmacist in handling of antibiotics", Kurukshetra, 2014)	IPGA

Pharmaceutical Sciences	Dr. Rohit Goyal	Main Nominee	CPCSEA, New Delhi
	Dr. Deepak Nankishore	Reviewer,	International Journal of Nanomedicine, Dove Press
Business Management & Liberal Arts	Prof. Atul Khosla	Invited to present to the Finance Minister of India his perspectives on regulatory transformation (SEBI)	Ministry of Finance, Government of India
		'Visionary Leader Award' for Excellence in Education	3rd Higher Education Summit, 2014 CAREER OPTIONS at New Delhi
		Appointed to the Board as Independent Director	Gabriel India Ltd.
		Elected Global Partner	Oliver Wyman PLC
		Advisor to Security Exchange Board of India (SEBI) Chairman	SEBI
		Appointed Advisor	Ankur, Social Sector Private Equity Funds
	Gaytri Kanwar	Letter of Appreciation for delivering a talk on 'Oral and Written Communication' in a short Term Program on Communication Skills for Effective Curriculum Implementation"	National Institute of Technical Teachers Training & Research, Chandigarh, from 9-11 <sup>th</sup> June, 2015

Business Management & Liberal Arts	Prachi Kapil	Letter of Appreciation for delivering a talk on 'Resume Writing' in a short Term Program on "Communication Skills for Effective Curriculum Implementation"	National Institute of Technical Teachers Training & Research, Chandigarh, from 9-11 <sup>th</sup> June, 2015
Mechanical & Civil Engineering	Dr Anil Kumar	Post-Doctoral fellowship from Kyungpook	National University Daegu South Korea.

### 11. Number of Patents (last 5 years)

University has taken special initiative to promote and encourage faculty members to file patents. Shoolini Intellectual Property Cell (SIPRC) was created in 2014 and since then total 17 patents have been filed and 3 are under process which will be filed by December 10, 2016. Details of the filed patents and under process is given below:

S.No.	Title of the patent	Inventors	Patent filing no
1	Compound for enhancing activity of antibiotic compositions and overcoming drug resistance.	Dr. Umar Farooq <i>et al.</i>	1229/DE L/2015
2	Novel peptide sequence for developing diagnostic agents for malaria detection.	Dr. Umar Farooq <i>et al.</i>	1228/DE L/2015
3	Terpenoids from <i>Colebrookea oppositifolia</i> as activity enhancers of antibiotic compositions and extraction method thereof.	Dr. Kamal Dev <i>et al.</i>	1326/DE L/2015
4	Compounds for enhancing activity of antibiotic compositions against drug sensitive and drug resistant bacteria.	Dr. Kamal Dev <i>et al.</i>	1429/DE L/2015

S.No.	Title of the patent	Inventors	Patent filing no
5	Phytocompounds from <i>Vitex nigundo</i> for enhancing antibiotic activity and overcoming drug resistance	Dr. Kamal Dev <i>et al.</i>	1464/201 5-DEL
6	Novel peptide sequences for developing anti-malaria vaccines and therapeutic compounds	Dr. Umar Farooq <i>et al.</i>	1465/DE L/2015
7	Nanocomposite for removal of dye based water pollutants	Dr. Deepak Pathania <i>et al.</i>	1537/DE L/2015
8	Novel nano graphene based composite for water treatment application and method of synthesis thereof	Dr. Pardeep Singh <i>et al.</i>	1819/DE L/2015
9	Chitosan G polyacrylamide/copper nanocomposites for controlled drug delivery	Dr. Deepak Pathania <i>et al.</i>	1875/DE L/2015
10	Nanocomposites for antimicrobial treatment of drinking water	Dr. Deepak Pathania <i>et al.</i>	1897/DE L/2015
11	A novel microbe producing extracellular beta-galactosidase and method of enzymes production thereof	Dr. Kamal Dev <i>et al.</i>	1895/DE L/2015
12	Novel microorganisms for producing xylanase and method of enzyme production thereof	Dr. Amit Seth <i>et al.</i>	1846/DE L/2015
13	Novel herbal anticancer compound and method of production thereof	Dr. Afroze Alam and Dr. KLDhar	1913/DEL/2015

S.No.	Title of the patent	Inventors	Patent filing no
14	Novel benzothiazole derivatives with enhanced biological activity	Dr.Kalpana Chauhan and Bhawana Kumari	2484/DEL/2015
15	Improved Persimon Wine with Enhanced Antioxidant Activity and Standardised Method of Production thereof.	Dr Sharma Somesh and Mahant Kiran	TEMP/E-1/37348/2015-DEL
16	Microbial by Produced Method of Antifreeze Protein(s) and Production thereof.	DR. Kamal Dev, Dr. Anuradha Sourirajan, Ms. Ranjana Suman	TEMP/E-1/37361/2015-DEL
17	Novel Anti – malarial Peptide from Plasmodium Falciparum	Umar Farooq, Chauhan Shakti Pal, Nazam Khan	TEMP/E-1/37368/2015-DEL
18	Microwave induced preparation of chitosan-g-poly (acrylamide)/cu nano composite for photolytic application	Dr Deepak Pathania Divya Gupta	To be filed by December 15, 2015
19	Microwave induced preparation of chitosan-g-poly (acrylamide)/cu nano composite in antibacterial activity	Dr Deepak Pathania	To be filed by December 15, 2015
20	Analysis of immunomodulatory and anti-cancerous activity of biopolymer-metaloxide nanocomposite	Dr Reena V. Saini	To be filed by December 15, 2015

## 12. Output of M Phil & PhD Per faculty

In spite of being only six years old Shoolini University has made its mark in the field of research which is also validated by highest 'h' index of 16 in comparison to other Universities of the region. During the last four years University has proudly conferred Ph.D's to fifty one students and there is an additional two hundred plus students who are at the various stages of progress in pursuit of their PhD degree.

Faculty wise outputs of M.Phil and PhD for the last five years are given below:

Sr. No.	Faculty	M Phil	PhD
1	Faculty of Applied Sciences and Biotechnology	65	28
2	Faculty of Basic Sciences	74	13
3	Faculty of Pharmaceutical Sciences	-	6
4	Faculty of Management Sciences and Liberal Arts	-	4
5	Total	139	51
<b>Output per faculty</b>		<b>34.75</b>	<b>12.75</b>

\* In Faculty of Engineering Ph.D degree has started from 2013.

## 13. Revenue generated from consultancy per year

The Consultancy offered by the University typically entails providing innovative solutions to the industry for improving their products and processes, availing professional expertise of the faculty and utilization of the infrastructural facilities available within the University. Revenue generated from consultancy per year is Rs. 7.15 lakh as the consultancy projects were taken 2011 onwards. This amount represents average of past four years only.

List of consultancy projects undertaken is given below:

School	Name of the Faculty	Project Details	Revenue Generated
Biotechnology	Dr Saurabh Kulshrestha	Polymerase Chain Reaction and its application at State Council of Educational Research and Training, Solan.	Nil
	Dr Saurabh Kulshrestha	Human Genome Project and applications at State Council of Educational Research and Training, Solan.	Nil

School	Name of the Faculty	Project Details	Revenue Generated
Bioengineering & Food Technology	Dr Dinesh Chatanta	Consultancy project for new product Development in Fruits and Vegetables for HPMC, Shimla	2.0 lakh
Physics & Materials Science	Dr. Atul Thakur and Dr. Neeraj Mahindroo	Size reduction of vitamin D <sub>3</sub> to nano scale sponsored by Tirupati Medicare Ltd., Paonta Sahib, H.P	30,000/-
Pharmaceutical Sciences	Prof. Neeraj Mahindroo & Dr. Poonam	Troubleshooting and problem solving for marketed formulations (Meridian Medicare Pvt. Ltd., Solan	30,000/-
	Prof. Neeraj Mahindroo & Dr. Poonam	Formulation development for vitamin preparations	50,000/-
Business Management & Liberal Arts	Prof. Atul Khosla	Financial Literacy in Himachal Pradesh	2,70,000/-
	Prof. Atul Khosla	Social Entrepreneurship Opportunities in the Himalayan Region	20,000/-
	Prof. Atul Khosla	Study of Automotive Industry in Himachal Pradesh	10,000/-
	Dr. Kuldeep Rojhe	Buying Potential of Solan Town	40,000/-
	Prof. Atul Khosla	SEBI Transformation	3.5 Lakh
	Prof. Atul Khosla	Westpac Bank Budget Strategies Australia	18.6 Lakh
Mechanical and CivilEng.	Prof. P.L Goel	M/s Evron Projects Panchkula, Chandigarh	Under Process

#### 14. Number of MoUs with International recognized bodies

MoUs with Foreign Universities have not only enhanced awareness and knowledge levels of our students but have given them an exposure to global standards. Thirty one students from Shoolini University have been benefitted under the exchange programs and 4 foreign students have come under the exchange program in the University.

Mentioned under is the list of the National/International alliances:

**MoU's with International Universities/Institutes:**

S.no	University/Institution	Country
1	Gachon University	South Korea
2	University of Suwon	South Korea
3	Lanzhou University	China
4	Seoul National University	South Korea
5	Chung Yuan Christian University	Taiwan
6	Dr. Jih-Hwa Guh, National Taiwan University ,Taipei	Taiwan
7	Gwangju Institute of Science & Technology (GSIT)	South Korea
8	Bukovinian State Medical University	Ukraine
9	University of Ulster	Northern Ireland
10	Sierra Bio Life	Australia
11	Plant and Poisons Board of Kenya	Kenya
12	National Taiwan University	Taiwan
13	Magna Carta College	United Kingdom

**With National Universities/Institutes:**

S.no	University/Institution
1	National Institute of Pharmaceutical Education and Research, Mohali
2	Jaypee University of Information Technology , Wagnaghat, Solan, H.P.
3	Department of Parasitology, PGIMER, Chandigarh.
4	National Institute of Pharmaceutical Education and Research, Mohali (Pharmacology and Toxicology).
5	North Eastern Regional Institute of Sci. & Technology, (Department of Forestry)Nirjuli, Arunachal Pradesh.
6	Sant Longowal Institute of Engineering and Technology
7	Eternal University,Baru Sahib, HP India

**With recognized bodies:**

S.no	Institution/Agency	Country
1	GENPACT	India
2	Tirupati Medicare Ltd.	India
3	Meridian Medicare Pvt.Ltd..	India
4	Anand Automotive Ltd.	India
5	Ferrites India Ltd.	India
6	Dron Defence Sez Pvt. Ltd	India
7	Nutra Helix Biotech Pvt Ltd	India

**15(a)-Publications per faculty****-Total number of publications of the university...**

As per Google Scholar University has 579 publications out of which publication in SCOPUS are 274 till date. These numbers are very dynamic and keep changing every day.

**15(b)Percentage of papers published in journals listed in well-known internationaldatabases**

In Google Scholar 100%

In SCOPUS 47.5% (from 2013 onwards University has made a policy that all the papers should be published in SCOPUS/ Thomson Reuter listed journals)

**16. Average impact factor of publications**

1.87 (For SCOPUS listed papers)

**17. Number of papers with more than 10 citations**

i10 index = 36 papers (having more than 10 citations as per Scopus).

**18. Number of book titles per student (in the central library) excluding book bank**

Number of book titles in the Yogananda library excluding book bank:

Hard copies =20,032

e-books = 2, 00,000

Number of book titles per student (including e-books)=1:77

**19. Percentage of annual allocation for library spent on purchase of journals (national & international) and other library resources (CDs, Cassettes, etc.)**

20% of the Library Budget is spent on purchase of Journals - National and International and 24% additional allocation on e-resources.

**20. Number of national/international conferences/workshops organized per department per year and names of experts participated**

The university has organized total 231 events from 2009-15. All schools are proactively involved in promoting learning from leaders across various fields and walks of society. The University has a plethora of outreach programs that include seminars, guest lectures, workshops, panel discussions, alumni talk, etc. which aims to provide a wholesome learning

environment to the students. The University has initiated Guru Series of talk wherein an eminent person holds a talk on regular basis for the staff and students. So far total 15 Guru Talks have been held. School wise details of the events are given below:

Year	BT		BE		BioEnv	Chem			Phy			Pharm			Mgmt		ECE&CSE		Mech&Cvl	
	W*	O	W	O	O	C	W	O	C	W	O	C	W	O	W	O	W	O	W	O
2010		17			39			20			10	1			1	63		8		6
2011	1		1				1			1				1						
2012				1			1						1	1	1				1	
2013	1		1	1		1			1			1		1	9		2			
2014									1				1	3	9		3		1	
2015				1		1			1				2	6	10		1			
Total	2	17	2	3	39	2	2		3	1		2	4	12	30	63	6		2	6

\* C=Conference, W= Workshops,O (Guest Lectures, Student Enrichment program, Inspire and Special Lectures) = Any Other,BT=Biotech,BE=Bio Engineering, BioEnv=Biological and Environmental Sciences,Chem=Chemistry, Phy=Physics and Materials Science,Pharm=Pharmaceutical Sciences, Mgmt=Business Management and Liberal Arts, ECE&CSE=ElectricalandComputerScienceEngineering, Mech&Cvl=Mechanical and Civil Engineering

#### School wise illustrative list of participating experts is as under:

Sr. No.	School	Distinguished Participant
1	Biotechnology	Prof. S.K. Sharma, Vice Chancellor, HPKV, Palampur.
		Prof. H.S. Dhaliwal, Department of Biotechnology , IIT Roorkee
		Prof. K.R. Dhiman, Vice Chancellor, UHF, Nauni
		Prof. K. Kumar, UHF, Nauni
2	Bioengineering and Food Technology	Dr . S.K. Srivastva, Deputy Director, Botanical Survey of India, Dehradun
		Dr. H.V.Batra Director, DFRL, Mysore
		Dr. P.S. Ahuja, Retd. DG CSIR, New Delhi
3	Biological and Environmental Sciences	Prof. D.V.S. Jain, Department of Chemistry, Punjab University, Chandigarh
		Prof. R.K. Kohli, Chairperson, Department of Botany, Punjab University, Chandigarh
		Prof. I.S. Dua, Professor Plant Molecular Biology, Former Chairman, Department of Botany, Punjab University, Chandigarh
		Prof. P.K. Ahluwalia, Department of Physics, H.P. University, Shimla

Biological and Environmental Sciences	Prof. Mahavir Singh, Department of Physics, H.P. University, Shimla
	Prof. A.D. Ahluwalia, Centre of Advanced Study in Geology, Punjab University, Chandigarh
	Prof. V.K. Grover, Department of Mathematics, Punjab University, Chandigarh
	Prof. M.P. Singh , Solar Energy Adviser, Baru Sahib
	Prof. V.K. Kapoor, Dean Pharmacy,G.H.G. Khalsa, Gurusar Sadhar
	Prof. S.S. Chandel, Professor and Head, Deptt of Energy and Environment, NIT, Hamirpur
	Dr. Amod Kumar, Head, Department of Electronics and Instrumentation, CSIO, Chandigarh
	Prof. S.P. Vij, Department of Botany, Punjab University, Chandigarh
	Prof. S.K. Mehta, Department of Chemistry and Centre of Advanced study in chemistry, Punjab university, Chandigarh
	Dr. (Mrs.) Avinash Kaur Nagpal, Department of Botanical and Environmental Sciences, Guru Nanak Dev University, Amritsar, Punjab
	Prof. Pallab Ray, Department of Medical Microbiology, PGIMER, Chandigarh
	Prof. Rajendra Prasad, Shanti Swarup Bhatnagar Award Winner, Jawaharlal Nehru University, Delhi
	Prof. Javed Naim Agrewala, Shanti Swarup Bhatnagar Award Winner (2005), Institute of Microbial Technology (IMTECH), Chandigarh
	Prof. Lalit Kumar Awasthi, Professor, Department of Computer Science & Engineering, National Institute of Technology, Hamirpur (Himachal Pradesh)
	Prof. G.S. Chauhan, Department of Chemistry, H.P. University, Shimla
	Prof. P.B. Barman, JUIT, Wagnaghat
	Prof. Uma Batra, PEC, Chandigarh
Prof SP Khullar, Department of Botany, Punjab University, Chandigarh	
Prof AS Singha, NIT, Hamirpur	

Biological and Environmental Sciences	Prof Manu Sood, HP University, Shimla
	Prof NC Kotiyal, NIT, Jalandhar
	Prof. Gopal Krishan, Department of Geography, Panjab University, Chandigarh
	Prof. K. K. Bhasin, Department of Chemistry, Panjab University, Chandigarh
	Prof. Suman Bala Beri, Department of Physics, Panjab University, Chandigarh
	Prof. RC Sethi, Former Director, Vehicle Research and Development Establishment (VRDE), Vahannagar, Ahmednagar , Maharashtra
	Prof. Ramesh Vats, Department of Mathematics, NIT, Hamirpur
	Dr. Anil Bhardwaj, Vikram Sarabhai Space Centre; Trivandrum
	Prof A.K Sharma, DRDO Chandigarh
	Dr. Mrs. Rajwant Sharma, Department of Geology University of Jammu, Jammu
	Dr. Harpreet Kaur, Department of Chemistry, Punjabi University, Patiala
	Prof. Munish Sharma , Centre for Applied Research & Electronics , IIT, Delhi
	Prof. Rohit Sharma, Indian Institute of Technology, Roopnagar
	Prof. Avinash Khare, School of Physics, IISER, Pune
	Prof. Sandeep Sahijpal, Department of Physics, Panjab University, Chandigarh
	Dr. Raju Narayan Swamy, IAS, Commissioner, Civil Supplies Department, Government of Kerala
	Prof. Kamal K Kapoor, Department of Chemistry, University of Jammu, Jammu
	Prof. Kartar Singh Verma, Department of Chemistry, Panjab University, Chandigarh
Prof. Parthasarathi Das, Principal Scientist, Medicinal Chemistry Division, Indian Institute of Integrative Medicine (CSIR), Jammu	
Prof. RK Sharma, Department of Mathematics, Indian Institute of Technology Hauz Khas, New Delhi	

		Prof. KP Singh, Former Chairman, CAS in Geology, Panjab University, Chandigarh
		Prof. G. Rama Mohan, Regulatory Policy & Scientific Affairs Lead, Monsanto, New Delhi
		Dr. Ranju Bansal, Professor, University Institute of Pharmaceutical Sciences, Punjab University, Chandigarh
		Dr. Aniruddha Chakraoborty, Assistant Professor, School of Basic Sciences, IIT Mandi (HP)
		Prof. Subrata Gosh, Assistant Professor, School of Basic Sciences, IIT Mandi
		Prof. CK Shirkot, Dr. YS Parmar University, Nauni Solan
		Prof. VK Mattu, Chairman, Department of Biosciences, HP University, Shimla
		Prof. BS Kaith, Department of Chemistry, NIT, Jalandhar
4	Chemistry	Prof. V.K. Gupta, IIT Roorkee, Roorkee
		Prof. B.S. Kaith, NIT Jalandhar
		Prof. A. S. Singha, NIT Hamirpur
		Mr. M.L. Sharma, Consultant ICON Ltd., Mumbai
		Prof. Mahavir Singh, Himachal Pradesh University, Shimla
		Prof. V.K. Mattu, Himachal Pradesh University, Shimla
		Prof. Deepak Sharma, IMTECH, Chandigarh
		Prof. Ravi Kumar, Beant College of Engineering & Technology, Gurdaspur, Punjab
5	Physics and Materials Science	Prof. M.L Sharma, SAIF, PU Chandigarh
		Prof. Mahavir Singh, HPU Shimla
		Prof. KK Raina, Thapar University, Patiala
		Prof. AK Jain, Institute of Pathology, New Delhi
		Dr. R. Ratheesh, C-MET, Thrissur
		Dr.Sankar Raman, NTU, Taiwan
		Prof. S.I. Patil, University of Pune, Pune
		Prof. Vinay Gupta, University of Delhi, Delhi
		Prof. S.S. Bhatti, Panjabi University, Patiala
		Prof. N.S. Negi, HPU, Shimla
		Prof. P.B. Barman, JUIT, Wagnaghat, Solan

		Dr.Manjeet Singh, Director, TBRL, DRDO, Chandigarh
		Prof. Vinay Gupta, University of Delhi, Delhi
		Dr. Monika Tomar, University of Delhi, Delhi
		Prof. Ravi Kumar, NIT, Hamirpur
		Dr. J.C. Kuniyal, GB Pant Institute, Mohal
		Prof.LalitAwasthi, Director, JLN Govt. Engineering College, Sunder Nagar, H.P.
6	Pharmaceutical Sciences	Dr. C.K. Katiyar, Dr. V.K. Kapoor, Mr. Sumit Gupta (2012)
		Dr. C.S. Gautam, Dr. P.L. Sharma, Dr. Neeraj Mahindroo, Dr. A.K. Saxena, Dr. R. Raina (2013)
		Dr. A.K. Sahai (2014)
		Dr. Neeraj Tandon, Prof. Saranjit Singh, Prof. V.K. Kapoor, Prof. S.S. Handa, Prof. S.K. Sharma, Prof. N.S. Chauhan, Dr. R. Raina, Dr. Roopak Kumar, Dr. K.A. Suri, Dr. Anil Kanaujia, Dr. Sharad Medhe, Dr. G.B. Jena, Dr. Vishal Khatavkar (2015)
7	Business Management and Liberal Arts	Mr. Makarand Tilak, IDBI Intech Ltd.
		Mr Parijat Banerjee, Engagement Manager, Oliver Wyman, Mumbai
		Mr. Gaurav Mehta, Strategy Consultant at Rroland & Berger, Hong Kong
		Prof. S.S. Narta, H.P. University, Shimla.
		Dr. Arunesh Garg, Gyan Jyoti Institute of Management, Mohali.
		Prof. Kulvinder Singh, Punjabi University, Patiala.
		Dr. Arunesh Garg, Gyan Jyoti Institute of Management, Mohali.
		Ms Andrea Wright, Brown University, USA
		Mr. Sheetal Behl, MD GrowX
		Mr. Bobby D'Souza, Motivational Trainer
		Mr. Ashish Khosla, Vice-President, UNB Abu Dhabi
		Ms. Vandana Vadehra, Singer, Composer and Performer, Mumbai.
		Prof. S.S. Narta, H.P. University, Shimla.
		Mr. Munish Sapra, ISH Mohali
		Mr. Prashant Saran, Whole Time Member (WTM), SEBI.

		Mr. Amit Pradhan, SEBI.
		Mrs. Renu Bhandar, NSE.
		Mr. Mirodul Rastogi, Assistant General Manager, SEBI
		Mr. Raman Kalra, Assistant Manager, NSE
		Prof. B. L. Dubey, University of Alaska, and Director SIS, Anchorage, USA.
		Mr. Jadhajit Das, Executive Director, HR Head, ICICI Prudential
		Lieutenant Surbhi, Indian Navy
8	Electrical and Computer Science Engineering	Faculty of IIT Bombay
		Faculty of IIT Kharagpur
9	Mechanical and Civil Engineering	Dr. GN Tiwari (IIT, Delhi)
		Dr. NS Thakur (NIT, Hamirpur)
		Dr. SS Chandel (NIT, Hamirpur)
		Dr. Varun Goel (NIT, Hamirpur)
		U.N.Gaitonde
		U.V.Bhandarkar

**Details of talks held under ‘GURU SERIES’:**

Sr. No.	Date	Guest Speaker	Designation/Industry	Topic
1	5 Dec, 2014	Lt. Gen. B S Jamwal	Former Army Commander	Pro-active Leadership
2	20 Aug, 2015	Dr K S Bawa	Scientist, FRCS	Scientific Temperament & Innovation in Science
3	18 Dec, 2015	Mr Ramesh K Mehan	Hon’ble Chancellor	Journey of my Life
4	23 Jan, 2015	Maj. Gen. Ajay Chaturvedi	Former Chief Engineer & Strategic Analyst, Author	Ecological Challenges of the Himalayan Region
5	6 Feb, 2015	Mr Vivek Atray	DC, Panchkula, Author	Bouncing Back in Life

Sr. No.	Date	Guest Speaker	Designation/Industry	Topic
6	20 Feb, 2015	Mr Parvesh Chandel	Novelist	Stir my Heart-Stir my Soul
7	13 Mar, 2015	Mr Judhajit Das	HR Head, ICICI Prudential	Building a Successful Career in the Corporate World
8	20 Mar, 2015	Mr Niranjan Bilgi	Scientist-Entrepreneur	Scientific Innovation
9	6 Apr, 2015	Mr P S Ahuja	Former DG CISR-IHBT	Innovation, Innovative Minds Impacting Change
10	16 Apr, 2015	Herr Klauss von Gadow	Professor, Germany	Scientific Writing & Publishing
11	1 May, 2015	Mr Devinder Sharma	Journalist-Activist	Agricultural Crisis in India
12	6 May, 2015	Mr.Ketan Bhagat	Novelist	Child-God
13	28 Aug, 2015	Maj. Gen. Ajay Chaturvedi	Former Chief engineer-StrategicAnalyst - Author	Disaster Risk Mitigation in the Himalayas
14	20 Nov, 2015	Prof AD Ahluwalia	Geologist	Global Climate Change & Effect on the Himalayan Eco-system
15	20Nov,2015	Prof RC Sobti	Vice Chancellor- Micro-Biologist	Stem Cell Culture & Its Applications

## 21. Student performance in national/international level examinations (e.g.: ET/SLET/GATE/CAT, GRE/TOFEL,Civil Services)

University has incorporated many courses in regular curriculum like courses on Personality Enhancement, Aptitude and analytical skills, NET/ GPAT/ GATE, AMFI (Association of Mutual Funds in India) Certification, IRDA (Insurance Regulatory and Development Authority) Certification etc. which has helped many students to clear competitive exams. Though the number of students presently qualified is nearly 80, this is likely to increase significantly in near future.

The details of student passing competitive exams are given below:

School	Name of the examination	No. of students qualified	Name of the student
Biotechnology	CSIR-UGC NET	4	Kirti, Pradeep Kumar, Manoj Kumar, Rupjyoti Kalita
	ARS-NET	2	Manoj, Vikas
	GATE	6	Amit Kumar, Kirti, Varun Chauhan, Divyanshi Sharma, Pooja Prabhnoor
	DST-INSPIRE	3	Varsha Rani, Neha Chauhan, Tanvi Gupta
	UGC-Rajiv Gandhi Fellowship	3	Jitender Kumar, Poonam Kumari, Bharti
	UGC-Maulana Azad Fellowship	1	Nazam Khan
	ICMR, NCBS	1	Mr. Rupjyoti Kalia
	DRDO-JRF	1	Mr. Ashwani
Bioengineering & Food Technology	ARS- NET	2	Dinesh Kumar, Anshul Kumar
	GATE	4	Dinesh Kumar, Mamta Kumar, Rashmi Kumar, Mehendi Goyal, Aroshi Sharma
	GRE	1	Yogender Verma
	TOEFL	1	Yogender Verma
Biological & Environmental Science	HP-Teacher Eligibility Test	1	Menaka Sharma
	HP-Teacher Eligibility Test	1	Luxmi Devi
	Central-Teacher Eligibility Test	1	Amita Kumari
Chemistry	NET	01	Sumiti
	PGT	01	Rajeev Dogra
	Banking	02	Ajay Tainta Munish Thakur
Physics & Materials Sciences	Staff Selection Commission	1	Ms. Shivani Thakur
	Bank PO	1	Ms. Jyoti

School	Name of the examination	No. of students qualified	Name of the students
Pharmaceutical Sciences	GPAT	16	Md. Afroze Alam, Vasudha Abhi, Varun Gupta, Arun Sharma, Deepika, Diksha Sharma, Sunil Kumar, Varun Gupta, Poonam Negi, Abhishek Naag, Gaurav Paudwal, Vikas Sharma, Sajid Ali, Abhishek Sharma, Sitanshu Chauhan Poonam Negi.
	Pharmacist Exam	2	Shikha Kalia, Hemraj
Business Management Liberal Arts	UG-NET	4	Payal Thakur, Shivali Rathor, Kamal Kant Vashist, Sahil Nanda
	Probationary Officer	7	Himanshu Vashisht, Dinesh Verma, Dharmender Singh, Gagan Singh, Anuj Sharma, Dilawar Singh, Anil Sharma
	Banking	11	Neha Thakur, Vishal Chamyal, Lalit Gautam, Surjeet Singh, Gajendra Vardhan, Vinod Kumar, Ashish Katna Pravesh Kumar Thakur, Ashwani Kumar Swati Gupta, Amit Bhatt

## 22. Student Teacher Ratio (average across all disciplines)

The student teacher ratio of the University average across all disciplines as on November 2015 is 1:14.8.

## 23. University has the following.

**i) IQAC ii) Accreditation by national body**

**iii) International accreditation/ISO certification iv) AAA**

(i) IQAC was established on 26th Dec, 2014

(ii) Recognized and approved by UGC -2f

(iii) Shoolini University is a member of:

1. PCI (Pharmacy of Council of India) consideration of approval of B.Pharma course and Examination Approved on April 5, 2011.
2. Association of Indian Universities from 2014-15.
3. Association of Common Wealth Universities, UK 2011 onwards.

(iv) ISO certification has been assessed and approved in accordance with guidelines of ISO 9001:2008 on June 16, 2015 certificate no. is Q-3077/15.

## 24. Outstanding Achievements/Recognition by faculty/alumni both at national and international level

For Faculty award/recognition kindly refer Indicator no. 10 as detailed list is provided there.

The University is young to have outstanding alumni, mentioned below is the list of some of the successful alumni that has distinguished themselves from others:

School	Name of the Alumni	Award/Recognition
Biotechnology	Ms. Kirti	Qualified CSIR-UGC JRF
	Mr. Manoj Kumar	Qualified CSIR-UGC JRF
	Mr. Rupjyoti Kalita	Qualified CSIR-UGC JRF
	Mr. Manoj	Qualified ARS NET
	Mr. Rupjyoti Kalia	Qualified ICMR JRF and NCBS test
	Mr. Ashwani	Qualified DRDO JRF
Bioengineering & Food Technology	Babita Kumari	Fellowship from Gachon University for pursuing M.Tech Degree
	Jasmin Kaur	Fellowship from Gachon University for pursuing M.Tech Degree
Biological & Environmental Sciences	Ms. Sujata	INSPIRE Fellowship (DST)
	Ms Rishika Bhardwaj	Fellowship of \$2000 per month, FERMI Lab USA
Pharmaceutical Sciences	Mr. Varun Gupta	1st prize in oral presentation (45th Annual Conference of Indian Pharmacological Society on Navigating Pharmacology towards Safe and effective Therapy organized by KBCollege of Pharmacy, Nagpur, 2013)
	Mr. Varun Gupta	Best oral presenter award (North Zone Conference of Indian Pharmacological Society on New Horizons in Pharmacy & Pharmacology organized at GLA University, Mathura, 2014)
	Ms. Geetanjali Jain	1st prize for poster presentation (International Conference on Drug Resistance, Development, Pharmaceutical Technology And Outcomes at Chitkara University, Punjab, 2014)

## 25. Outstanding performance of student in sports/cultural activities at national level

Participation and Achievement in Sports, extracurricular and cultural activities by students is tabulated:

Sr. No	Event	Place	Achievement	Year
1	Table Tennis	Chitkara University	2 <sup>nd</sup> Runner Up	2011-12
2	Open State level Indoor Cricket Championship	Chitkara University	Winner	2012-13
3	Basket Ball	Chitkara University	2 <sup>nd</sup> Runner up	2012-13
4	Badminton	Chitkara University	2 <sup>nd</sup> Runner up (Girl)	2012-13
5	Table Tennis	Jay Pee University	Winner	2013-14
6	Volley Ball	Jay Pee University	1 <sup>st</sup> Runner Up	2013-14
7	Badminton	Jay Pee University	Winner	2013-14
8	Table Tennis	Baddi University	1 <sup>st</sup> Position	2013-14
9	Badminton (Girls)	Baddi University	3 <sup>rd</sup> Position	2013-14
10	GD + Press	Baddi University	3 <sup>rd</sup> Position	2013-14
11	Group Dance	Baddi University	1 <sup>st</sup> Position	2013-14
12	Table Tennis	Jay Pee University	Winner	2014-15
13	Volley Ball	Jay Pee University	Winner	2014-15
14	Badminton	Jay Pee University	Runner Up	2014-15
15	Classic Solo	Chandigarh University	1 <sup>st</sup> Position	2014-15
16	Modelling	Chandigarh University	3 <sup>rd</sup> Position	2014-15
17	Photography	Chandigarh University	1 <sup>st</sup> Position	2014-15
18	Dance	Dance Himachal Dance	1st Position	2015

## 26. Feedback received from different stakeholders on syllabi etc. (i) Student (ii) Alumni (iii) Parents (iv) Employers (v) peers

Striving for excellence is a continuous effort at Shoolini University and is visible in how the University and its students have shaped up so far.

Academic excellence is ensured through feedback from faculty, peers, students, recruiters, alumni and the same is incorporated for progressive improvement of the facilities provided.

Students' feedback is collected through a well-structured questionnaire for improvement of the University's performance and is taken in each semester.

The questionnaire covers the following aspects:

- i. Feedback on teachers on teaching pedagogy, punctuality, timely completion of syllabus, evaluation etc.
- ii. Curriculum improvement and skill development
- iii. Infrastructure and hostel facilities
- iv. Library and Knowledge Center
- v. Food and transportation
- vi. ICT facilities, eUniv and KMS
- vii. Sports facilities
- viii. Campus life and extra-curricular activities
- ix. Examinations & evaluation

Student feedback ensures that each faculty member is assessed for effectiveness of teaching and this is a key parameter in the appraisal.

Regular meetings are also held by the Deans with the class representatives.

The University also gets feedback from national/ international faculty, potential employers, scientists, alumni and other eminent personalities who visit the campus during placement week, workshops, conferences, SPRINT program and Guru Series talks.

<b>Stake-holders</b>	<b>Purpose of Interaction</b>
Students and Parents	<ul style="list-style-type: none"> <li>• Students feedback on the University's functioning and academics is taken in each semester.</li> <li>• Feedback given consideration in performance appraisals.</li> <li>• Suggestions and feedback from parents is also sought during their visits to the campus and given due weightage.</li> </ul>
Alumni	<ul style="list-style-type: none"> <li>• Alumni support the University through feedback on curriculum and industrial visits/trainings</li> <li>• Formal and informal interactive sessions on various forums like SPRINT, Guru Series and Alumni Meets are organized to encourage and motivate students.</li> </ul>
Society	<ul style="list-style-type: none"> <li>• The University is highly cognizant of its civic responsibilities and encourages formal and informal interaction for community development through various extension activities.</li> </ul>
Recruiters	<ul style="list-style-type: none"> <li>• Recruiters' feedback incorporated for development of the outcome driven and skill based curriculum to ensure better employability.</li> </ul>
Industry	<ul style="list-style-type: none"> <li>• University encourages interactions and industry tie ups.</li> <li>• Industry experts have been included in Board of Studies.</li> <li>• Frequent visits of the industry experts to the campus for guest lectures are organized to update students with the dynamics of corporate world.</li> <li>• Industrial visits for students and faculty are encouraged to expose them to the practical work environment.</li> <li>• Impact of strong industry links can be witnessed through the University excellent placement record.</li> </ul>

## 27. Percentage of recommendations of the stakeholders implemented

Nearly 90%

Almost all the recommendations from the stakeholders are placed before the top decision making bodies of the University and implemented after due deliberations, to mention a few:

- i. Based on the feedback library timings have been enhanced and subscriptions of magazines have been changed/added.
- ii. Recruiters' feedback was incorporated for development of the outcome driven and skill based curriculum to ensure better employability of students.
- iii. Lecture schedules are prepared for all courses and are made available at the beginning of every semester to the students.
- iv. Various clubs like 'Raagrang' for music and dance, 'Saamarthya' for entrepreneur development, 'Baawle Bawarchi' for cooking, 'Shutterbugs' for photography, 'Dramebaaz' for drama, the Tracking and Hiking club, etc. were formed under the umbrella of 'Abhiruchi' where students get an opportunity to showcase their talent in different fields.
- v. Recently university has started Defense Coaching Cell to encourage students to join army.
- vi. 25 elective courses were introduced under various UG programs.

## 28. Number of interdisciplinary course combinations introduced during last five years as percentage of total programmes

During the last five years 41.5 % interdisciplinary course combinations were introduced under various programs offered in the University.

From the academic session 2015 -2016 for all UG programs are 100% interdisciplinary with introduction of CBCS. Students now have the option of choosing any elective course being offered by various schools.

## 29. Percentage of Departments conducting tutorial classes

Six out of nine schools have integrated tutorial classes in their curriculum and the percentage is 66.67%.

The list of schools is given below:

1	School of Electrical and Computer Science Engineering
2	School of Mechanical and Civil Engineering
3	School of Business Management and Liberal Arts
4	School of Pharmaceutical Sciences
5	School of Biotechnology
6	School of Bioengineering and Food Technology

In addition there is a provision of cover-up classes.

**30. Number of courses, where continuous assessment of student performances is structured into the system**

The continuous assessment of student performance is structured in each course and continuous evaluation consists of surprise tests, assignments, quizzes, mid-term examinations and end-term examination. In addition, research projects at UG and PG levels also form a part of the curriculum. Field/ Industrial visits are taken up regularly in all degree programs.

**31. Percentage of faculty availing international fellowship for advance studies**

Assistant Professors and Associate Professors from the University are availing fellowship for advance studies. Their details are mentioned below:

<b>S.no</b>	<b>Faculty details</b>	<b>Duration</b>	<b>Institute for Advance Studies</b>
1	Dr Pankaj Thakur, Assistant Professor (Chemistry)	01.10.2012 to 30.11.2015	Post-Doctoral Research at IIT@CRIB, Naples (Italy)
2	Dr Neeraj Gupta, Assistant Professor (Organic Chemistry)	14.05.2014 to 26.05.2016	Post Doctoral award at Chinese Academy of Sciences
3	Dr Sanjay Kumar Upadhyay, Assistant Professor (Bioinformatics)	16.02.2014 to 31.03.2016	Post doctoral Fellowship at KIT, Germany and INS Shanghai
4	Mr Akshay Gupta, Assistant Professor (ECE)	01.08.2015 to 31.07.2018	Ph.D programme from the IIIT-Delhi and Queensland University of Technology, Australia
5	Dr Anil Kumar, Assistant Professor (Mechanical Engineering)	01.12.2013 to 15.11.2015	Post Doc Fellowship at Kyungpook National University, South Korea
6	Dr Kamal Dev	01.11.2004 to 30.10.2009	National Institute of Child Health and Development, National Institutes of Health Bethesda, Maryland USA

<b>S.no</b>	<b>Faculty details</b>	<b>Duration</b>	<b>Institute for Advance Studies</b>
7	Dr Anuradha	01.11.2004 to 31.10.2009	Postdoctoral Research Fellow at National Cancer Institute
8	Dr Atul Thakur	1.07.2007 to 31.12.2008	Postdoctoral Research Fellow at Brest, Brest France
9	Dr Adesh Saini	1.07.2006 to 30.06.2011	NICHHD/NIH, Beathesda, USA
10	Dr Umar Farooq	August 2015 to January 2016	Taif University, Al Taif Saudi Arabia

**32. Percentage of courses/programmes that formally integrate e-learning resources from National Programmed Teaching Enhanced Learning (NPTEL) Digital library retrieval**

The University makes 100% use of e-learning and online resources through eUniv initiative and LMS (Learning Management System).

Every faculty member uses laptop with Wi-Fi connection for appropriate execution of the academic as well as research activities, online lectures and study material is prepared and uploaded on eUniv regularly.

Video lectures such as from NPTEL, MIT Open courseware and from other sources are also downloaded by the faculty.

**33. Percentage of annual budget allocated for augmentation of infrastructure facilities (average of last 3 years)**

Average annual budget allocated for augmentation of infrastructure facilities is 32.88%

**34. Total number of classes rooms, seminar halls with LCD/OHP etc.**

Total number of Classrooms: 44 (all equipped with ICT Facility)

Number of Auditoriums: 5 (all equipped with multimedia facilities including video conferencing)

Conference rooms for Seminars and Meetings: 10 (including the above 5)

There is also a provision of portable projectors for classrooms where fixed ICT facility is not available.

**35. Declaration of results within**

Average time taken for declaration of result is seven to ten days. Results are displayed on the University website and notice boards; spot evaluation ensuring timely declaration of results is followed.

### 36. Average pass percentage of students

Program-wise completion rate of UG and PG programs faculty wise is as under:

Completed Program	Percentage of students completed within the time frame				
	Faculty				
	Applied Sciences & Biotechnology	Basic Science	Management Sciences & Liberal Arts	Pharmaceutical Sciences	Engineering & Technology
U.G	NA	100%	92%	93%	88%
P.G	95%	99%	94%	96%	100%

### 37. Student placement percentage average per year

University has a dedicated Placement and Career Development Cell, with the dedicated efforts of the team most of the students are well placed. Faculty wise percentages are given below:

Placement Record					
Years	Management	Engineering	B.Tech Biotech	Food Tech	Pharmacy
2013	88	75	60	-	62
2014	91	80	85	80	82
2015	93	81	85	77	83
Overall Avg	91	79	77	79	76

### 38. Percentage of student progression to higher education

Student progression rate within the University is 15.7%, many of our students have joined National/International Universities/Institutions for higher education and this percentage does not include them.

### 39. Average drop-out percentage of students

Average drop-out percentage of students is less than 1%

Most of the students studying in the University complete their studies within the time frame as illustrated under indicator 36 above, however few students due to various personal reasons leave the program before completion, but the percentage does not exceed 1% under any circumstance.

**40. Unit cost of Education (excluding salary)**

Unit cost of education excluding salary is Rs.50284/- per annum

**41. Aggregate percentage of seats filled against seats reserved for various categories as per applicable reservation policy**

As a conscious decision Shoolini University endeavors to contribute to national development by providing equal education opportunities to all, especially for the upliftment of the rural youth of Himachal Pradesh, 25 % of the seats are reserved for Himachal students in all programs. For other categories, University adheres to the norms/rules made by the UGC and GOI for the varied sections of the society; the reservation policies followed by Shoolini University for the various categories are as under:

S. No.	Category	Policy for student enrolment
1	SC/ST	<ul style="list-style-type: none"> <li>• Relaxation in admission eligibility as per State and GOI norms</li> <li>• Reservations are ensured as per the policy of the Government of Himachal Pradesh</li> </ul>
2	OBC	<ul style="list-style-type: none"> <li>• Relaxation in percentage</li> <li>• Reservations are ensured as per State and GOI norms</li> </ul>
3	Women	<ul style="list-style-type: none"> <li>• Scholarships are provided to single girl child</li> <li>• 5 percent relaxation for women candidates</li> </ul>
4	Economically weaker sections	<ul style="list-style-type: none"> <li>• Scholarships are provided as per State and GOI norms</li> </ul>
5	Persons with varied disabilities	<ul style="list-style-type: none"> <li>• Reservations are ensured as per State and GOI norms</li> </ul>
6	Outstanding achievers in sports and other extracurricular activities	<ul style="list-style-type: none"> <li>• Relaxation in percentage as per University norms</li> </ul>

Aggregate percentage of seats filled against seats reserved for various categories is 73 %.

**42. Number of differently abled persons on roll: Teaching/Non-Teaching/ Students**

Despite the fact that there is only one hearing impaired girl student named Vasudha Rawat, studying in B.Tech Food Technology (5th Semester) University understands its responsibility to provide equal opportunities to the differentially abled individuals and a policy is framed for the same. Presently there is no differently abled person in staff.

**43. Percentage representation of staff (teaching/nonteaching) in decision making bodies**

Shoolini University upholds the philosophy of participative management and ensures that every stakeholder works in a culture of achieving team goals and a sense of self responsibility. The leadership is participative at all levels; staff (teaching and non –teaching) are deeply involved in different activities of the University. The composition of all decision making bodies are as per Shoolini act and statues.

Presently almost all the decision making bodies like Academic council, Placement and Career Development Cell, Board of Management , Joint Research and Development Advisory Committee, Library Advisory Committee, Admission Committee, Sexual Harassment Prevention Committee IQAC etc. have staff as members.

**44. \*Percentage of autonomous colleges to the total number of colleges**

NIL

**45. Percentage of teachers from other states**

Percentage of teachers from other states as on November, 2015 is 52%.

**46. Donations received for institution of Chairs, endowments, seminars, and lecture series in crores of INR in last 5 years.**

0.42 Crores was received as total fund over the past five years.

**47. Contribution of alumni/parents (average of last 5 years) for development of university in lakhs**

Shoolini University is very young and most of our alumni are on their way to build success stories in the years to come. Financial/tangible contributions of parents/alumni may not be very significant at this stage but the University is thankful for their intangible contributions by way of spreading awareness and goodwill of the University and holding good moral values and ethics in the society.

**48. Percentage of Female Students**

Percentage of female students in the University is 42.41%.

#### 49. Programme for professional development of staff per year

The University is proactive in developing its faculty members in order to meet the requirements of a modern curriculum through various Faculty Development Programs, training sessions, workshops, conferences, visits to other institutes and frequent interactions with the experts from various fields of specialization.

As a policy Shoolini University provides sabbatical and study leave for higher studies within the country and abroad. Faculty members are encouraged to attend workshops/meetings and provided financial support. Following Faculty Development Programs were organized during last five years by the various schools:

Year	School	Participation of staff in Faculty Development Program
2010	Biological and Environmental Sciences	1. Two Weeks training programme on Capacity Building in Plant 2.Taxonomy, Forest Research Institute, Dehradun, Uttrakhand, 27th September-8th October.
2011	Biotechnology	1.Workshop on Advances in Electron Microscopy and Allied Fields (NWAEMA-2011) held in Shoolini University, September.
	Biological and Environmental Sciences	1. Workshop on teaching Pedagogy by Mr Arjun Singh, Ex MD Hewitt. 2. Training in Molecular Biology Techniques, 10-19 November, DBT, Shoolini University, Solan 3.Workshop on Excel by Mr Parijat Banerjee, Engagement Manager, Oliver Wyman, Mumbai
	Chemistry	1.Workshop on Advances in Electron Microscopy and Allied Fields
	Physics and Materials Science	1.One Day Workshop (ETIME-2011)On 4th February, At Davcet, Kanina, Mohindergarh, Haryana
	Business Management and Liberal Arts	1.Workshop on teaching Pedagogy 2.Workshop on Excel 3. Workshop on Business Communication Skills
	Pharmaceutical Sciences	1.DST sponsored National Seminar on “Importance of Cell Lines in Pharmaceutical Research in India

Year	School	Participation of staff in Faculty Development Program
2012	Biotechnology	1. Faculty Development Program conducted by Faculty of Management Sciences, Shoolini University
	Biological and Environmental Sciences	1. Workshop on Summer Research Project on Single Primer Amplification Reaction (SPAR) to Access Inter-Specific Variability and Phylogenetic Relationships of Six Paphiopedilum Pfitzer (Orchidaceae) species, North-Eastern Hill University, Shillong sponsored by IASc (Bangalore), INSA (New Delhi) and NASI (Allahabad), May-July. 29th Advanced Level Training in Soopediliuil Testing, Plant Analysis and Water Quality Assessment, Division of Soil Science and Agricultural Chemistry, IARI, PUSACampus, New Delhi, 04-24 September.
	Physics and Materials Science	1. Workshop On “Akash” Conducted By IIT Bombay On 10th – 11th November. (Held Under The National Mission On Education Through ICT (MHRD)). 2. Two Days Workshop on Antenna Materials At JUIT, Wagnaghat, Himachal Pradesh (On 14th-15th December). 3. International conference & workshop on Nanostructure ceramics and other nonmaterial’s, University of Delhi, March 13-16.
	Business Management and Liberal arts	1. Workshop on Case Teaching 2. Workshop on Business Plan 3. Workshop on Marketing & Branding
	Mechanical and Civil Engineering	1. Workshop on Engineering Thermodynamics on 11-21st Dec conducted by IIT Mumbai
	Electrical and Computer Science Engineering	1. Workshop on British Library English Course 2. Workshop on Aakash for Education
	2013	Biotechnology
Pharmaceutical Sciences		1. Workshop on An Interface program at Baddi, HP 2. Seminar on Advancing Separation and Detection by Agilent Tech.
Chemistry		1. Workshop oneUniv 2. Workshop on Research Writing

Year	School	Participation of staff in Faculty Development Program
2013	Physics and Material Sciences	1. Workshop on 'Optimization of Sampling Errors', 2-3rd December. 2. One week Workshop On nanotechnology fabrication and characterization, JUIT, Wagnaghat, H.P. December 11-18.
	Business Management and Liberal arts	1. Workshop on Sampling Error and Analysis Techniques 2. Workshop on Research Writing 3. Workshop on Case Study Methodology
	Pharmaceutical Sciences	1. Workshop on Lecture Series 2. Workshop on Optimization of Sampling Errors 3. National Conference sponsored by ICMR
	Mechanical and Civil Engineering	1. Workshop on Environment Sciences 2013 (8th and 9th June 2013), organized by department of mechanical engineering, Shoolini University
	Electrical and Computer Science Engineering	1. Workshop on eUniv 2. Workshop on Research Writing
	2014	Biotechnology
Bioengineering and Food Technology		1. Workshop on Thinking, metacognition and thinking about thinking by HR Power House Noida 2. Workshop on Inspiration leadership programme
Biological and Environmental Sciences		1. Workshop on Spiritual Leadership-I & II by Mr Rajendra Abhange, Senior Director Technology, Gabriel India. 2. Workshop on Curriculum Development, Ms Pooja Gupta, Consultant Higher Education. 3. Workshop on Sampling Error and Analysis Techniques by Prof. Kulvinder Singh, Punjabi University, Patiala and Prof. S.S. Narta, H.P. University, Shimla.
Chemistry		eUniv Workshops
Business Management and Liberal arts		1. Workshop on Metacognition 2. Workshop on Relevance of Human Resource in Organizational Image 3. Workshop on Online Education 4. Workshop on Spiritual Leadership-I & II 5. Workshop on Curriculum Development 6. Workshop on Motivational SPRINT for non-teaching staff

Year	School	Participation of staff in Faculty Development Program
2014	Pharmaceutical Sciences	<ol style="list-style-type: none"> <li>1. International Symposium at NIPER Mohali</li> <li>2. One day workshop on Emerging Trends in P'logical Education &amp; Research</li> <li>3. Workshop on Inspirational Leadership</li> <li>4. One day seminar at Govt. College of Pharmacy, Aurangabad</li> <li>5. Conference at Bahra University</li> </ol>
	Mechanical and Civil Engineering	<ol style="list-style-type: none"> <li>1. Workshop on Fluid Mechanics on 20-30th May , conducted by IIT Kharagpur</li> </ol>
	Electrical and Computer Science Engineering	<ol style="list-style-type: none"> <li>1. Faculty Development Program on Spiritual Leadership-I &amp; II</li> <li>2. Workshop on eUniv-LMS</li> <li>3. Workshop on Curriculum Development</li> </ol>
	Biotechnology	<ol style="list-style-type: none"> <li>1. Train the Trainer workshop on IPR organized in collaboration with Corporate IP consultants</li> <li>2. Faculty Development Program conducted by Faculty of Management Sciences, Shoolini University</li> <li>3. Workshop on "Latest Trends and Scientific Innovations", 20th March, by Dr. Niranjana Bilgi</li> <li>4. Workshop on "Innovation, Innovative Minds Impacting Change", 6th April, by Dr. P.S. Ahuja, former Director General, CSIR</li> <li>5. Workshop on Thesis &amp; Paper Writing, 16th April, by Prof. Klaus von Gadov, University of Germany</li> <li>6. CII Entrepreneurial Summit, Sep.</li> </ol>
2015	Bioengineering and Food Technology	<ol style="list-style-type: none"> <li>1. Workshop on Faculty development program on Business Training Ideas</li> </ol>
	Biological and Environmental Sciences	<ol style="list-style-type: none"> <li>1. Workshop on Thesis and Paper Writing Seminar by Dr. Klaus von Gadov, Germany.</li> <li>2. Workshop on Personality Development by Prof. B. L. Dubey, University of Alaska, and Director SIS, Anchorage, USA.</li> <li>3. Workshop on eUniv-LMS</li> </ol>
	Chemistry	<ol style="list-style-type: none"> <li>1. Workshop on Thesis &amp; Paper Writing</li> <li>2. Workshop on "Innovation, Innovative Minds Impacting Change"</li> <li>3. Workshop on "Latest Trends and Scientific Innovations"</li> </ol>

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2015	Physics and Material Sciences	1. Workshop on “Scientific Writing”, 16th April, by Dr. Klaus von Gadow, University of Germany. 2. Workshop on Innovation, Innovative Minds Impacting Change”, 6th April, by Dr. P.S. Ahuja, former Director General, CSIR. 3. Workshop on “Latest Trends and Scientific Innovations”, 20th March, by Dr. Niranjan Bilgi.
	Business Management and Liberal arts	1. Workshop on Transactional Analysis and Communication Skills 2. Workshop on Financial Literacy 3. Workshop on Thesis & Paper Writing 4. Workshop on Personality Development
	Pharmaceutical Sciences	1. FDP on Business Training Ideas 2. One Day Workshop from WATERS Indian Pvt Ltd. 3. ICMR sponsored Workshop
	Electrical and Computer Science Engineering	1. Workshop on Training on Digitization of Library – I 2. Workshop on Personality Development 3. Workshop on Thesis & Paper Writing 4. Workshop on Training on Digitization of Library – II

## 50. Projection of successful innovative practices

### **Academic Excellence by Blending Experience with Talent**

Aimed to provide a teaching faculty of global standards, the university has adapted a ‘four tier’ structure to blend ‘quality’ with ‘talent.’ The top tier has distinguished scientists and academicians who add value to teaching by their experience. Below them are well qualified Mid-career Professors, most of them being Post-docs from abroad, or Ph.D. At the next two levels are young Ph.D teachers from outside and toppers who qualify in-house.

### **Developing Inclusive Competencies through SPRINT**

A unique ‘Accelerated Learning’ programme is run all across all the faculties to promote personal and professional growth of each student with the aim to provide them global competencies. Not only are personal skills the focus of this programme, but an attempt is made to inculcate personal attributes like ‘professional ethics’ and ‘institutional values’ in our students.

### **Research Driven Model**

By adopting a Research Driven Model from the time the university was set up, focus has been on quality research, especially in the fields of Science.

It is a result of this that within a short span, the university has not only been declared 2nd in the country in the sphere of bio-sciences, but there the university has been able to attain an 'h-index of 16 and has 17 patents, with another three in the pipeline. 27 of the researchers have their own Government aided projects. In addition, the university has been awarded government grants for making two Centres of Excellence in the fields of Food Technology and Himalayan Sustainability.

### **Himalayan Sustainability**

Being located in the Himalayas and having a well-qualified faculty, the university has taken on the challenge of giving back to the system and all faculties are encouraged to undertake research in various facets of sustainability of the Himalayan region. Apart from undertaking research by itself, the university is striving to develop alliances and linkages with like-minded institutes to undertake joint research and is an active member of the Consortium of Himalayan Universities, headquartered in Kathmandu.