

35. Student progression

Student progression	Percentage against enrolled
UG to PG	100%
PG to Ph.D.	100%
Ph.D. to Post-Doctoral	
Employed <ul style="list-style-type: none"> • Campus selection • Other than campus recruitment 	N/A
Entrepreneurs	

36. Diversity of staff

Percentage of Faculty who are graduates	
of the same university	91%
from other universities within the state	-
from universities from other states	9%
from universities outside the country	-

37. Number of faculty who were awarded Ph.D. during the assessment period: 03

38. Present details of departmental infrastructural faculties with regard to

- a) Library: The Library of the Department of Law has approximately 26,700 Text/Reference Books and large number of Periodicals and Law Reports for catering to the need of students and teachers.

Total Number of Books: - 26,700

Total number of books added during 2014-15:- 201

Total Number of Newspapers in the Library:- 08

- b) Total number of Journals Currently under Subscription:-7

- All India Reporter
- Criminal Law Journal
- Supreme Court Journal
- Supreme Court Cases
- Cornell Law Review
- Modern Law Review
- Journal of Indian Law Institute

List of Back Volume Journals

- Law Quarterly Review
- Yale Law Journal
- Harvard Law Review
- Halsbury Statutes of England
- United State Court Reports
- The All England Law Reports
- Nyayadeep

c) Internet facilities for staff and students: Yes: The Department is connected through Local Area Network (LAN)

d) Total number of class rooms 10

e) Class rooms with ICT facility One Moot Court Room

f) Students' laboratories Nil

g) Research laboratories Nil

39. List of doctoral, post-doctoral students and research associates"

a) From the host institution/university 20

b) From other institutions/universities

40. Number of post graduate students getting financial assistance from the University: 05

41. Was any need assessment exercise undertaken before the development of new programme(s)?
If so, highlight the methodology N/A

42. Does the department obtain feedback from YES

a) Faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize the feedback?

b) Students on staff, curriculum and teaching-learning-evaluation and how does the department utilize the feedback?

c) Alumni and employers on the programmes offered and how does the department utilize the feedback?

43. List the Distinguished Alumni of the Department (Maximum 10)

1. Hon'ble Mr. Justice T.S. Thakur, Chief Justice of India

2. Hon'ble Mr. Justice Parmodh Kohli

3. Hon'ble Mr. Justice V.K Gupta
4. Hon'ble Mr. Justice R.C. Gandhi
5. Hon'ble Mr. Justice J.P. Singh
6. Hon'ble Mr. Justice D.S. Thakur
7. Hon'ble Mr. Justice Tashi Rabstan
8. Hon'ble Mr. Justice J.R. Kotwal
9. Sh. B.R. Sharma (Indian Administrative Service)
10. Dr. Kamal Saini (IPS)

Besides, number of District & Session Judges, KAS, IPS officers are alumni of the Department of Law

44. Give details of student enrichment programmes (special lectures/workshops/seminar) involving external experts:

Extension Lectures by Advocates, Retired Judges of High Court and District & Session Judges and Academicians are regularly organized in the Department.

45. List the teaching methods adopted by the faculty for different programmes: Class rooms instructions, Field Visits, Court Visits.
46. How does the department ensure that programme objectives are constantly met and learning outcomes are monitored? By Departmentally Constituted Committees
47. Highlight the participation of students and faculty in extension activities:

Students and Faculty members are regularly engaged in extension and outreach activities like Legal Literacy Camps to Rural Areas, Court visits, Lok Adalat visits, Chamber visits, Police Station/Jail visits etc.

48. Give details of "beyond syllabus scholarly activities" of the department:

Field Work, Court Visit, Outreach Activities

49. State whether the programme/department is accredited/graded by other agencies? If yes, give details:

Recognized by Bar Council of India

50. Briefly highlight the contributions of the department in generating new knowledge, basic or applied. NA
51. Detail five major strengths, weakness, opportunities and challenges (SWOC) of the department.

Strengths

- i) Highly Qualified Faculty
- ii) Involvement of Judges, Advocates and Civil servants in Departmental events
- iii) Plan to strengthen the existing Computer Lab in the department
- iv) To increase Academia-Industrial interface.

52. Future plans of the department:

- Getting Projects on different Socio-Legal themes from UGC
- To establish SAP under UGC
- To initiate Academia - Industry Interface and providing placement opportunities to students

EVALUATIVE REPORT OF THE DEPARTMENT

1. Name of the Department : The Law School
2. Year of establishment : 2003
3. Is the Department part of a School/Faculty of the university?
Faculty of Law
4. Names of programmes offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., D.Sc., D.Litt., etc.)
 - B.A, LLB 5 year programme
 - PG Diploma in Human Rights and Duties Education
5. Interdisciplinary programmes and departments involved :
B.A,LLB. 5 year course, with the involvement of faculty from Political Science, Law, Sociology, History and English
6. Courses in collaboration with other universities, industries, foreign institutions, etc. N.A.
7. Details of programmes discontinued, if any, with reasons N.A.
8. Examination System: Annual/Semester/Trimester/Choice Based Credit System :
Semester System
9. Participation of the department in the courses offered by other departments
Providing assistance with regard to teaching and evaluation in courses offered in Law, Political Science, Centre for Museology, Distance Education. Etc.
10. Number of teaching posts sanctioned, filled and actual (Professors/Associate Professors/Asst. Professors/others)

	Sanctioned	Filled	Actual (including CAS & MPS)
Professor	Nil	Nil	Nil
Associate Professors	Nil	Nil	Nil
Asst. Professors	6	3	-
Others (Contractual& Guest faculty)	11	11	-

11. Faculty profile with name, qualification, designation, area of specialization, experience and research under guidance

Name	Qualification	Designation	Specialization	No. of Years of Experience	No. Of Ph.D/M.Phil students guided for the last 4 years
Dr. Sanjay Gupta (Director)	Ph.D, LL.M, LL.B, NET	Associate Professor	Administrative Law & Intellectual Property Rights	18 years	PhD: 03 MPhil: 03
Dr.Seema Sharma	Ph.D, LL.M, LL.B, NET	Sr. Assistant Professor-Law	International Law	11 years	
Dr.Seema Rohmetra	Ph.D, M.A (Pol. Science), SLET	Sr. Assistant Professor-Political Science	Indian Political System and Gandhian Studies	13 years	Ph.D: 02
Dr. Monica Narang	Ph.D, LL.M, LLB	Sr. Assistant Professor-Law	Administrative Law and International Law	13 years	
Dr.Shubha Vats	Ph.D, MPhil, MA (English)	Assistant Professor-English	20 th century American Literature	13 years	Ph.D: 01 MPhil: 01
Dr.Mrinalini Atrey	Ph.D, M.A (History), NET	Assistant Professor (contractual)-History	Socio - cultural history and folklore	13 years	
Dr.Renu Jamwal	Ph.D, LL.M, LL.B	Assistant Professor (contractual)-Law	Business Law (Consumer Protection)	12 years	
Dr.Navdeep Kour	Ph.D, LL.M, LL.B, NET	Assistant Professor (contractual)-Law	Intellectual Property Rights	11 years	
Dr.Deepti Gupta	Ph.D, M.A (Sociology), NET-JRF	Assistant Professor (contractual)-Sociology	Women Development Studies	13 years	
Ms. Rajneesh Khajuria	LL.B, LL.M, NET	Assistant Professor (contractual)-Law	Human Rights	7 years	

Mr.Rana Ravinder Singh	MA (Economics), NET	Assistant Professor (contractual)- Economics	Macroeconomic, Microeconomics, Indian Economy	3 years	
Dr.Rinku Gupta	Ph.D, LL.M, LL.B	Assistant Professor (contractual)- Law	Environmental Law	10 years	
Dr. Sonia Aneja	Ph.D LL.B, LL.M, NET	Assistant Professor (contractual)- Law	Law of Torts	5.5 years	
Dr. Bindu sangra	Ph.D LL.B, LL.M, NET	Assistant Professor (contractual)- Law	Jurisprudence	10 years	

12. List of senior Visiting Fellows, adjunct faculty, emeritus professors

Prof. K. L. Bhatia

Prof. V. K. Kapoor

Prof. V. P. Magotra

Prof. Bharat Desai

Prof. S. K. Sharma

Prof. Afzal Wani

Dr. Sarada Sreedevi Amma

Distinguished Jurists

Senior Bar Members

13. Percentage of classes taken by temporary faculty – programme-wise information

B.A. LLb. (5yrs): 90 percent

PG Diploma In Human Rights and Duties Education: 50%

14. Programme-wise Student Teacher Ratio

B.A. LLb. (5yrs): 25:1

PG Diploma In Hunman Rights and Duties Education: 5:1

15. Number of academic support staff (technical) and administrative staff: sanctioned, filled and actual

Sanctioned	Filled	Actual
4	4	13

16. Research thrust areas as recognized by major funding agencies : NA
17. Number of faculty with ongoing projects from a) national b) international funding agencies and c) Total grants received. Give the names of the funding agencies, project title and grants received project-wise. (w.e.f. 1st June 2009 to 28th February 2015) NA
18. Inter-institutional collaborative projects and associated grants received
- a) National collaboration
- b) International collaboration : N.A.
19. Departmental projects funded by DST-FIST; UGC-SAP/CAS, DPE; DBT, ICSSR, AICTE, etc.; total grants received. : N.A
20. Research facility / centre with
- state recognition : Nil
 - national recognition : Nil
 - international recognition : Nil
21. Special research laboratories sponsored by / created by industry or corporate bodies : NA
22. Publications: (w.e.f. 1st June 2009 to 28th February 2015)
1. Research Papers published: 100
 2. Research papers presented in Seminars/Conferences: 100
 3. Abstracts accepted in International Conferences: 05
 4. Books:
 - Seema Rohmetra, Gandhi Revisited, (New Delhi : Ingraphix Publications,2008, ISBN: 978-81-907266-0-3).
 - Dr. Rinku Gupta, Book published on “Environmental Laws and Policy in India” - Commercial law Publishers, 2012, ISBN: 978-81-872-2873-8.
 - Dr. Shubha vats, books published on “chronological human struggle in Malamud’s novels.”
 - Dr. Mrinalini Atrey, Diety cult rituals and oral traditions in Jammu region 2003. NA

23. Details of patents and income generated : NA
24. Areas of consultancy and income generated : NA
25. Faculty selected nationally / internationally to visit other laboratories / institutions / industries in India and abroad : NA
26. Faculty serving in
- National committees
 - International committees
 - Editorial Boards
 - any other (please specify) Dr. Seema Rohmetra as member of ICICH.
27. Faculty recharging strategies (UGC, ASC, Refresher / orientation programs, workshops, training programs and similar programs).(w.e.f. 1st June 2009 to 28th February 2015)
- Workshops: 35
- Training Programs/Faculty Development Programs: 23.
28. Student projects (w.e.f. 1st June 2009 to 28th February 2015) : NA
29. Awards / recognitions received at the national and international level by
- Faculty
 - Doctoral / post doctoral fellows
 - Students
 - Rajdeep Singh and Parshant Kalgotra shall be representing The Law School at the final rounds of 19th International Environmental Moot-Court competition to be held at Florida (U.S.A) in the month of April, 2015.
 - The Law School students comprising a team of Muzaffar Ali, Ashish Manhas and Hamid Ali Shah participated in the First Parliamentary Debate organized by Aligarh Muslim University, Aligarh, March, 2015.
 - The Law School team consisting of Shubham Jain, Sudhanshu Pathania participated in the First Sir Syed Ahmad National Moot-court competition organized by AMU, Aligarh, March, 2015.
 - Aditya Gandotra, Gagan Oswal and Parkhi Parihar participated in the Fifth Rayat College of Law National Moot-court competition, March, 2015.

- The Law School Team comprising Suhaib Salman and Manvika Lifted Bodh Raj Sawhney Memorial Debating Trophy for 2014.
- The Law School team comprising Prashant Kalgotra, Rajdeep Singh and Kritika Sethi participated in 19th International Environment Moot Court competition organized by Surana and Surana and The Law School, University of Jammu.
- Kritika Sethia and Swakriti Mahajan bagged running trophy of Veerana Aivalli Memorial Inter College Debate October, 2014.
- Parkhi Parihar and Kritika Sethi bagged First prize and trophy at - Sher-i-Kashmir Inter University Debate Competition October, 2013, Udhampur
First Prize - Parkhi Parihar
Winning Trophy- The Law School, University of Jammu
Consolation Prize- Kritika Sethi
- Inter-Collegiate/Departmental Debate competition organized by DSW, 2012-1st Prize
- Inter-Collegiate/Departmental Debate on population education organized by DSW- 2012-1st Prize.
- Justice Bodh Raj Sawhny Memorial Debate, 2013-2nd Prize
- Inter-Departmental Debate competition (Display your Talent) organized by DSW, 2013-1st Prize
- Justice Bodh Raj Sawhny Memorial Debate, October-2013-1st Prize.
- Sher-i-Kashmir Inter College Debate Competition November, 2013-Cousolation/ Overall Best team.
- Great Debate competition, Chandigarh organized by British High Commission, 2014-2nd
- Veerana Aivalli Memorial Debate, 2014-cousolation-Runners Trophy.
- Stetson International Environmental Moot-Court Competition-2014.
- Inter-Departmental installation competition, 2011, organized by DSW-Merit
- Inter-Departmental Poem Recitation competition, 2012, DSW.
- Inter-Departmental Photography competition, 2011, DSW.
- Zonal Essay writing competition organized by CBI, J&K, 2013

30. Seminars/ Conferences/Workshops organized and the source of funding (national / international) with details of outstanding participants, if any. (w.e.f. 1st June 2009 to 28th February 2015) : 03

31. Code of ethics for research followed by the departments : As per university norms

32. Student profile programme-wise: (w.e.f. 1st June 2009 to 28th February 2015)

Name of the Programme	Applications received	Selected		Pass percentage	
		Male	Female	Male	Female
BA LLb. 5 year (2009-10)	600	39	21	78%	85%
(2010-11)	300	43	35	75%	80%
(2011-2012)	215	36	36	76%	88%
(2012-2013)	208	41	29	72%	86%
(2013-2014)	225	40	28	79%	85%
(2014-2015)	191	41	29	76%	83%

33. Diversity of students

Being an undergraduate programme, the Department gets students enrolled from different Secondary School Boards.

34. How many students have cleared Civil Services and Defense Services examinations, NET, SET, GATE and other competitive examinations? Give details category-wise. (w.e.f. 1st June 2009 to 28th February 2015)

Defence services

Capt. Rajat Gupta

Capt. Atul Gupta

Capt. Arunima Sehgal

Capt. Abhik

Capt, Indu Dutta

Around 500 students practicing Law in J&K High Court

Judicial Services

Touseef Magray (Munsif)

Sla-ud-Din(Munsif)

Junaid(Munsif)

Simranjeet Kour(Munsif)

Administrative services

Tabish

Ambica Bali

Suninder Kour

Waaheed

35. Student progression (w.e.f. 1st June 2009 to 28th February 2015)

Student progression	Percentage against enrolled
UG to PG	Around 20 %
PG to M.Phil.	NA
PG to Ph.D.	NA
Ph.D. to Post -Doctoral	NA
Employed	-
Campus selection	
Other than campus recruitment	
Entrepreneurs	-

36. Diversity of staff

Percentage of faculty who are graduates	
of the same university :	93.3%
from other universities within the State	
from universities	
from other States :	6.6%

37. Number of faculty who were awarded M.Phil., Ph.D., D.Sc. and D.Litt. during the assessment period (w.e.f. 1st June 2009 to 28th February 2015): Four

38. Present details of departmental infrastructural facilities with regard to Library

Total No of Books in the library:- 5465

Complimentary Books : 900

Books in The Year 2015 - 333

Total Number of Newspaper in the library:- 7

Total Number of Magazines : 5

Total No of Journals: 14

1. Online Journals : 200

- Internet facilities for staff and students : Available
- Total number of class rooms : Five plus one moot court room
- Class rooms with ICT facility : One Moot Court Room

- d) Students' laboratories : Computer Lab
 - e) Research laboratories : NA
39. List of doctoral, post-doctoral students and Research Associates (w.e.f. 1st June 2009 to 28th February 2015): NA
- a) from the host institution/university
 - b) from other institutions/universities
40. Number of post graduate students getting financial assistance from the university. NA
41. Was any need assessment exercise undertaken before the development of new programme(s)?
If so, highlight the methodology.
- Yes a three day workshop was organised by the Law School in collaboration with the Law Department
42. Does the department obtain feedback from
- a. faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize the feedback?
Yes, in revamping the curriculum
 - b. students on staff, curriculum and teaching-learning-evaluation and how does the department utilize the feedback?
in revamping the curriculum
 - c. alumni and employers on the programmes offered and how does the department utilize the feedback? NA
43. List the distinguished alumni of the department (maximum 10)

Defence services

Capt. Rajat Gupta

Capt. Atul Gupta

Capt. Arunima Sehgal

Capt. Abhik

Judicial Services

Touseef Magray (Munsif)

Sla-ud-Din (Munsif)

Simranjeet Kour (Munsif)

Junaid (Munsif)

Administrative Services

Suninder Kour

Ambica Bali

Tabish

Waaheed

Iesha

Arshad

Arif Sikender Additional Advocate General at New Delhi

Corporate Sector

Around 10 students have been placed in reputed firms in the corporate sector.

44. Give details of student enrichment programmes (special lectures / workshops / seminar) involving external experts. (w.e.f. 1st June 2009 to 28th February 2015).

Special lectures 10 in every session

Workshops/Seminars

Training Programs Attended

- Three-Day Teacher training Programme on International Humanitarian Law from 18th to 20th February, 2010 organized by The Law School in collaboration with ICRC, in capacity of convener of various committees.
- Two Day Teaching Session on International Humanitarian Law organized by The Law School and International Committee of Red Cross during 17th and 18th November, 2009.

Workshops Attended

- Two-Day workshop on International Humanitarian Law organized by The law School In Collaboration With ICRC from 23rd to 24th November, 2009.
- One day Placement Workshop organized by TLC on 12th September'09.
- One day workshop for civil society on Better Policing in Jammu & Kashmir, organised by The Law School, University of Jammu, 2008.

Annual Inter-University Bodh Raj Sawhny Debate (North-Zone) since 2009

- Moot Court competitions
- International Moot Court Competition organised by The law School in collaboration with Surana & Surana Attorneys in November 2014

- 1st Annual Inter-Collegiate Moot Court Competition organized by the The Law School, University of Jammu, held from 15th-16th November 2010
- National Seminar on “ Satyagraha, Self Discipline And Gandhi: A Discussion” organized by the Law School , in collaboration with National Human Rights Commission from 29th- 30th Oct 2014.

45. List the teaching methods adopted by the faculty for different programmes.

Principally lecture based supplemented by group discussions, presentations , seminars and workshops

46. How does the department ensure that programme objectives are constantly met and learning outcomes are monitored? By post programme analysis

47. Highlight the participation of students and faculty in extension activities.

Legal Aid Camps organised by the department

S. No		Place of camp	Date
1		Akhnoor	8 th May 2009
2		Salon , Kathua	6 th May 2010
3		Marh Block	June 2011
4		Krimchi	April 2012
5		Rajeev Nagar, Bahu Fort	10 th May 2013
6		Surinsar	June 2014

48. Give details of “beyond syllabus scholarly activities” of the department.

Training Programs

- Three-Day Teacher training Programme on International Humanitarian Law from 18th to 20th February, 2010 organized by The Law School in collaboration with ICRC, in capacity of convener of various committees.
- Two Day Teaching Session on International Humanitarian Law organized by The Law School and International Committee of Red Cross during 17th and 18th November, 2009.

Workshops

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- Annual Inter-University Bodh Raj Sawhny Debate (North-Zone) since 2009

Moot Court competitions

- International Moot Court Competition organised by The Law Scool in collaboration with Surana & Surana Attorneys in November 2014
- 1st Annual Inter-Collegiate Moot Court Competition organized by the The Law Scool, University of Jammu, held from 15th-16th November 2010
- National Seminar on “ Satyagraha, Self Discipline And Gandhi: A Discussion” organized by the Law School , in collaboration with National Human Rights Commission from 29- 30th of oct 2014.
- Legal Aid Camps organised by the department

S. No	Place of camp	date
1	Akhnoor	8 th May 2009
2	Salon , Kathua	6 th May 2010
3	Marh Block	June 2011
4	Krimchi	April 2012
5	Rajeev Nagar, Bahu Fort	10 th May 2013
6	Surinsar	June 2014

49. State whether the programme/ department is accredited/ graded by other agencies? If yes, give details.

Recognised by Bar Council of India

50. Briefly highlight the contributions of the department in generating new knowledge, basic or applied.

Refer .44 and 47.

51. Detail five major Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department.

52. Strengths

- Highly qualified faculty
- Predominantly female faculty
- Highly skilled in organising and coordinating events at national and international level

Weaknesses

- Non sanctioning of grants.

53. Future plans of the department:

- To initiate the introduction of Masters and Doctorate in the department.
- To introduce specialised diploma courses in the department.
- To improve the infrastructure.

Faculty of Life Sciences

FOREWORD

FROM

DEAN, FACULTY OF LIFE SCIENCES

This foreword attempts to provide a snapshot of some of the research and academics that currently drive postgraduate programmes and research in the Faculty. The Faculty of Life Sciences is a community of dynamic faculty members, students, and staff members who are passionate and committed to serving and leading the life sciences through teaching and instruction. The innovative research endeavors, and timely development and participation in research projects have taken the faculty to progressing heights. The Faculty has grown considerably and comprises of School of Biotechnology, Department of Botany, Department of Environmental Sciences and Department of Zoology and has seen an unprecedented augmentation in student numbers at all levels over the past few years. Coupled with this, research and innovation outputs have increased dramatically, as has the Faculty's investment in new infrastructure and research equipment.

The **School of Biotechnology** comprises seven faculty members with thrust areas of research in microbial, plant and animal biotechnology, bioinformatics, metagenomics, fermentation technology, molecular biology, plants genomics, bioprocess engineering, bioprocess development, biofuel, bioplastics, probiotics and natural products from plant and animals. Apart from offering post graduate, M.Phil and Ph.D programmes in Biotechnology, the School also runs interdisciplinary programmes in Microbiology and Biochemistry at the post graduate and Ph.D level. The dedicated faculty has been instrumental in producing 40 students who have qualified NET, GATE, CSIR-JRF and DBT-JRF fellowship. The School has the distinction of bagging 24 national and 2 international projects (ongoing and completed) funded by DBT, DST-FIST, UGC-SAP and PURSE with a grant in aid upto 1.5 crores. The faculty of School of Biotechnology has published nearly 125 research papers in reputed journals with high impact factor during the period under report. The research laboratories of the Department are very modern and comply with national and international standards. The School of Biotechnology, from time to time ,organizes lectures, workshops and seminars to encourage research and academics.

The **Department of Botany** has nine dedicated and hard working faculty members doing intensive research in the thrust areas such as mycotoxicology, soil micromycetes, keratinophilic fungi, morphology and diversity of vascular plants, mushroom diversity, plant taxonomy and biosystematics, reproductive biology of economically important taxa and weeds, ecology and ethnobotany. Apart from offering post graduate, M.Phil and Ph.D programmes in Botany, department also runs interdisciplinary programmes in Plant Propagation and Entrepreneurship. The

faculty members of the department have to their credit 12 national and 1 international projects (ongoing, completed and recommended) funded by CSIR, UGC, GBPIHED, MoEF, FAO Rome, DST, DBT and UGC-SAP with grant in aid upto Rs.40.9 lacs. The Department also has the pride of securing 4 national and 1 international inter-institutional projects (ongoing, completed and recommended) in collaboration with many prestigious funding agencies, research institutes and some renowned universities of India. Apart from this there is one departmental project also going on under the UGC-SAP DRS-I Scheme. The research laboratories of the department are modern and well equipped. More than 200 papers, 8 books and 5 book chapters have been published by the assiduous faculty of the department in some prestigious and high impact factor journals and publishing houses. The diligent faculty have attended and delivered presentations in 61 seminars/refreshers/orientation programme/workshop/training/programme and have been honored with 60 awards and recognition at the national and international level. Doctoral/ Post doctoral fellows/ research scholars of the department have also received 25 awards and recognition at the national and international level. 83 students of the department have qualified NET, SET, GATE and competitive exams such as IAS, KAS, IFS, FCI, and ACF. All the enrolled research scholars of the department are getting fellowships to aid in their research. From time to time department organizes lectures/workshops/seminars by calling experts from other universities and institutes for the benefit of the students. Department contains a rich library with over 4550 books. Department also maintains a beautiful botanical garden and herbarium along with glass and green houses.

The **Department of Environmental Sciences** comprises 6 faculty members with one Professor Emeritus who are working diligently in the various fields of environmental sciences having major thrust areas of research and academics in terrestrial ecology, solid waste management, air and water monitoring, phytodiversity and natural resource monitoring, waste water treatment/ bioremediation, EIA and EMP studies and Limnology. Apart from offering post graduate, M.Phil and Ph.D programmes in Environmental Sciences, department also runs interdisciplinary programmes in Climate change: Issues and policies, Man & Environment: Issues and policies, Computer application, Environment Economics and Natural resources: conservation and management. The persevering faculty of Environmental sciences department has bagged two projects with grant in aid upto Rs.36 lacs from DBT. There are two inter-institutional projects running in the department having national and international collaboration with a grant in aid of nearly Rs.13 lacs. The department has also been conferred with one departmental project worth Rs.43, 63,267/- lacs by UGC-SAP. The hard-working faculty has published 3 books, 6 book chapters, 100 national and 30 international research papers in high impact factor and peer reviewed journals. The competent department has 5 times provided EIA and EMP (Environment Management Plan) services throughout J&K to the various funding agencies such as J&K cable car Corporation, SIDCO, Jammu; Patnitop Development Authority and CVPP with a grant in aid upto Rs.27 lacs. The faculty members, post doctoral/ doctoral students have been honoured at national and international levels. From time to time department organizes lectures/workshops/seminars by calling experts from other universities and institutes for enhancing research and academics. More than 150 students of the department have qualified NET-JRF, NET-LS, SET,

civil and defense services. The department has a rich library housing 2579 books. The research laboratories of the department are modern and comply with national and international standards.

The **Department of Zoology** comprises of eight dedicated, diligent and meticulous faculty members. Since its inception in 1998 out of trifurcation of erstwhile Biosciences department, the department has secured new heights and has progressed at good pace. The major thrust areas of research and academics of the department include invertebrate diversity, fish diversity, diversity of terrestrial and aquatic invasive species, diversity of pollinators and spiders, Pollution: status and monitoring, bioflocs utilization, fish growth reproduction and nutrition, value addition of fish as food, ornamental fish and prawn culture, biology of pests, cytological and molecular studies and molecular genetic disorders of human genetic disorder and cytogenetic analysis of congenital anomalies.

Apart from offering post graduate, M.Phil and Ph.D programmes in Zoology, the department also runs interdisciplinary P.G programmes in Human Genetics in the main campus and Sericulture in Poonch campus of the University. The faculty members of the department have to their credit 5 national and 2 international projects (ongoing, completed and recommended) funded by UGC, DST, J&K state DST, DBT and GEF/UNED/FAD and IJRC-PTS China. Apart from this, there are many minor projects also going on under the UGC-SAP. The research laboratories of the department are well equipped and comply with national and international standards.

More than 200 papers and 3 book chapters have been published by the tireless faculty of the department in some prestigious and high impact factor journals and publishing houses. The faculty have attended and delivered presentations in 70 seminars/refresher/orientation programme/workshops/training/programmes and have been honoured with awards and recognition at the national level. Prof. K. K. Sharma of Zoology department awarded Lifetime Achievement for his research related to Ecology and environment was conferred with M C Dash Medal of the Zoological Society of India (ZSI). Prof. Roopma Gandotra, Head, Department of Zoology was also awarded with Dr. V.R.P Sinha Gold Medal by Zoological Society of India (ZSI) during 26th All Indian congress of Zoology held in B B Ambedkar Central University Lucknow from 29th to 31st Oct, 2015 for her research work on Aquaculture and Fisheries Sciences. More than 62 students of the department have qualified NET-JRF, NET-LS, SET and civil services exams/ IFS/KAS. The department has a rich library comprising 3100 books. The research laboratories of the department are modern and comply with national and international standards.

Almost all the faculty members from the entire Life Sciences faculty are a part of various committees of University of Jammu and actively participate in the curriculum development and other activities of the University of Jammu. The faculty of Life Sciences is a team of vibrant, enthusiastic, assiduous and dynamic workers who are in continuous quest to provide an atmosphere of hard work, discipline, freedom and practicality with focus on education and research, together as a team with one mind, and to make contributions to the research and education of life sciences, as well as the economic growth of the country.

EVALUATIVE REPORT OF THE DEPARTMENT

1. Name of the Department : School of Biotechnology
2. Year of Establishment : 1998
3. Is the Department part of a School/Faculty of the university?
Faculty of Life Science
4. Names of programmes offered :
PG., M.Phil., Ph.D., in Biotechnology
PG., Ph.D., in Microbiology
PG., Ph.D., in Biochemistry
P.G. Diploma in Bioinformatics
5. Interdisciplinary programmes and departments involved:- Nil
6. Courses in collaboration with other universities, industries, foreign institutions, etc.
NA
7. Details of programmes discontinued, if any, with reasons : NA
8. Examination System:-
Semester System and Choice Based Credit System
9. Participation of the department in the courses offered by other departments : Nil
10. Number of teaching posts sanctioned, filled and actual (Professors/Associate Professors/Asst. Professors/others)

	Sanctioned	Filled Under Direct Recruitment	Filled Under Career Advancement Scheme	Total
Professor	01	01	-	01
Associate Professors	01	01	01	02
Asstt. Professors	05	04	-	04
Contractual	-	-	-	03

11. Faculty profile with name, qualification, designation, area of specialization, experience and research under guidance

Name	Qualification	Designation	Specialization	No. of years of Experience	No. of Ph.D / M.Phil students guided for the last 4 years
Prof. M. K. Dhar	M.Sc, M.Phil, Ph.D	Director	Plant Genomics and Molecular Biology, Molecular Cytogenetics	23 yrs	Ph.D completed : 5 Ongoing : 4 Submitted : 4 M.Phil completed : 5
Dr. Jyoti Vakhlu	M.Sc., Ph.D	Associate Professor	Microbial Biotechnology Metagenomics	15 yrs	Ph.D completed : 2 Ongoing : 4 Submitted : 1 M.Phil completed : 1
Dr. B.K. Bajaj	M.Sc., Ph.D	Associate Professor	Industrial Biotechnology	15 yrs	Submitted : 3 Ongoing : 3 M.Phil completed : 8 Ongoing : 2
Dr. Sanjana Kaul	M.Sc, M.Phil, Ph.D	Sr. Assistant Professor	Fungal Biotechnology, Microbial Diversity and Prospecting	12 yrs	Ph.D awarded : 1 Ph.D submitted : 1 Ongoing: 4 M.Phil awarded : 7
Dr. Madhulika Bhagat	M.Sc, Ph.D	Sr. Assistant Professor	Cell culture techniques, Natural Product Research Pharmacogenosy	10 yrs	M.Phil guided : 1
Dr. Ritu Mahajan	M.Sc, Ph.D	Assistant Professor	Plant Molecular Genetics and Plant tissue culture	6 yrs	Ph.D ongoing : 4 M.Phil : 1
Dr. Nisha Kapoor	M.Sc Ph.D	Assistant Professor	Immunology	3 yrs	-

12. List of senior Visiting Fellows, adjunct faculty, emeritus professors

1. Prof. B.S. Gill, Distinguished Professor, Kansas, State University USA.
2. Prof. Andreas Houben, IPK, Gatersleben, Germany
3. Dr. Micha Horacers, Austria

4. Prof. K.L. Dhar, Emeritus Professor, formerly IIIM, Jammu
5. Dr. P. Srinivasa Rao, ICRISAT, Hyderabad
6. Prof. T. Satyanarayana, Delhi University South Campus, New Delhi
7. Prof. Neeraj Dilbaghi, Department of Biotechnology, Guru Jambheshwar University, Hisar
8. Prof. V Verma, Shri Mata Vaishno Devi University, Katra
9. Dr. R Prashad, Ex Chief Scientist, IIIM, Jammu
10. Prof. U.C. Banerjee, NIPER, Mohali
11. Prof. R.S. Singh, Department of Biotechnology, Punjabi University, Patiala
12. Dr. Swarkar, Shri Mata Vaishno Devi University, Katra
13. Dr. Sharda Potukochi, Shri Mata Vaishno Devi University, Katra
13. Percentage of classes taken by temporary faculty – programme-wise information

M.Sc Microbiology

Year wise	No. of students	Contractual faculty	Percentage of classes (semester wise)
2014-15	01	02 nos.	1 st -50% , 2 nd -50%
2013-14	03	02 nos.	1 st -50%, 2 nd -0%, 3 rd - 25%, 4 th -50%
2012-13	10	03 Nos.	1 st -50%, 2 nd -0%, 3 rd -25%, 4 th -50%
2011-12	10	03 Nos.	1 st -50%, 2 nd -0%, 3 rd -25%, 4 th -50%
2010-11	10	04 Nos.	1 st -50%, 2 nd -0%, 3 rd -25%, 4 th -50%
2009-10	10	03 Nos.	1 st -50%, 2 nd -0%, 3 rd -25%, 4 th -50%

M.Sc Biochemistry

Year wise	No. of student	Contractual faculty	Percentage of classes taken by semester wise
2014-15	12+4	03/02 Nos.	1 st – 75%, 2 nd – 0%, 3 rd - 50%, 4 th -100%
2013-14	5+12	03 /04 Nos.	1 st - 60%, 2 nd - 0%, 3 rd -50% , 4 th -100%
2012-13	13+12	03 Nos.	1 st -50% , 2 nd -0%, 3 rd – 50%, 4 th -100%
2011-12	13+15	03 Nos.	1 st -50%, 2 nd -0%, 3 rd -50%, 4 th - 66%
2010-11	15+15	03 Nos.	1 st -50%, 2 nd -25%, 3 rd -25%, 4 th -66%
2009-10	15+15	03 Nos.	1 st -50%, 2 nd -25%, 3 rd -25%, 4 th -66%

14. Programme-wise Student Teacher Ratio

M.Sc Biotechnology

2015	Semester 1 st - 11:7, 2 nd -14:7, 3 rd -14:7, 4 th -14:7
2014	Semester 1 st - 14:7, 2 nd -14:7, 3 rd -14:7, 4 th -14:7
2013	Semester 1 st 14:7, 2 nd 14:7, 3 rd 14:7, 4 th 14:7
2012	Semester 1 st 14:7, 2 nd 14:7, 3 rd 14:7, 4 th 14:7
2011	Semester 1 st -14:7, 2 nd -14:6, 3 rd -14:6, 4 th -13:6
2010	Semester 1 st -14:6, 2 nd -13:5, 3 rd -13:6, 4 th :13:6
2009	Semester 1 st -13:5, 2 nd -13:5, 3 rd -13:3, 4 th -13:5

M.Sc Microbiology

2015	Semester 1 st - 1:2
2014	Semester 1 st - 1:2, 2 nd -1:3, 3 rd -10:2, 4 th -10:2
2013	Semester 1 st 3:2, 2 nd 3:4, 3 rd 3:3, 4 th 3:7
2012	Semester 1 st 10:2, 2 nd 10:4, 3 rd 10:3, 4 th 10:7
2011	Semester 1 st 10:2, 2 nd 10:4, 3 rd 10:3, 4 th 10:5
2010	Semester 1 st 10:2, 2 nd 10:4, 3 rd 10:3, 4 th 10:5
2009	Semester 1 st 10:2, 2 nd 10:4, 3 rd 10:3, 4 th 10:5

M.Sc Biochemistry

2015	Semester 1 st -0%, 2 nd 6:1, 3 rd -0%, 4 th 2:1
2014	Semester 1 st - 5:3, 2 nd 5:3, 3 rd -4:3, 4 th -4:1
2013	Semester 1 st -5:3, 2 nd 5:3, 3 rd -4:1, 4 th -4:1
2012	Semester 1 st 4:1, 2 nd 4:1, 3 rd 4:1, 4 th 5:1
2011	Semester 1 st 4:1, 2 nd 4:1, 3 rd 4:1, 4 th 4:1
2010	Semester 1 st 5:1, 2 nd 5:1, 3 rd 5:1, 4 th 5:1
2009	Semester 1 st 5:1, 2 nd 5:1, 3 rd 5:1, 4 th 5:1

15. Number of academic support staff (technical) and administrative staff: sanctioned, filled and actual

	Sanctioned	Filled	Actual
Senior Asstt.	2	2	2
Steno-typist	1	1	1
Lab Asstt.	1	1	1
Lab Attendant	2	2	2
Chowkidar	1	1	1

16. Research thrust areas as recognized by major funding agencies
 1. Plant Genomics and Molecular Biology
 2. Plant Biotechnology
 3. Fermentation Technology and Bioprocess Engineering
 4. Microbial Biotechnology
 5. Metagenomics
 6. Natural products from plants and microbes
 7. Animal Biotechnology
 8. Bioinformatics
 9. Bioprocess development for production of robust enzymes
 10. Biofuel production from lignocellulosic biomass
 11. Polyhydroxyalkanoates as potential sources for bioplastics.
 12. Killer yeast for potential bioethanol fermentation
 13. Probiotics and health intervention
17. Number of faculty with ongoing projects from a) national b) international funding agencies and c) Total grants received. Give the names of the funding agencies, project title and grants received project-wise. (w.e.f. 1st June 2009 to 28th February 2015)

Prof. Manoj K. Dhar

National

S. No.	Project title	Funding agency	Period	Grants sanctioned
1.	Saffron: Induction of variability and Functional Genomics	Department of Biotechnology, Govt. of India	March 2013 3 years	4.5 crores (Network project – 5 partner Institutions)
2.	Tomato Metabolomics Network Group	Department of Biotechnology, Govt. of India	October 2011 5 years	18 crores (Network project – 3 partner Institutions)
3.	Cloning and characterization of mucilage genes in <i>Plantago ovata</i>	Department of Biotechnology, Govt. of India	August 2011 3 years	32.8 lacs
4.	Etiology of oesophageal carcinoma in Jammu	J & K State Council for Science and Technology	May 2011 3 years	17.5 lacs
5.	Creating a genomics platform for apple research in India	Department of Biotechnology, Govt. of India	July 2010 5 years	3.7 crores (Network project – 5 partner Institutions)
6.	Molecular approaches in understanding the organization of novel chromosome	Department of Science and Technology, Govt. of India	July 2009	28 lacs

International:

Project Title	Funding Agency	Period	Grant (Rs. In Lacs)
Isolation and characterization of plant DNA amplification promoting sequences	Department of Science and Technology, Govt. of India & DAAD Germany	June 2012	2.64 lacs

Dr. Jyoti Vakhlu**National**

S. No.	Project Title	Funding Agency	Period	Grant (Rs. In Lacs)
1	Development of microbial consortia as biocontrol for corm rot in <i>Crocus sativus</i> .	Indian Council of Agricultural Research, Govt. of India	3 years 2014-17	57 lacs
2	Identification and characterization of PGPR influencing growth of <i>Crocus sativus</i> in its life cycle to develop PGP bacteria consortia	Department of Biotechnology, Govt. of India	3 years 2013-16	50 lacs
3	Metagenomic analysis of rhizosphere diversity of crocus sativus grown in Kashmir	University Grants Commission, Govt. of India	3 years 2013-16	14 lacs
4	Identification and Characterisation of pyocin produced by <i>Pseudomonas aerogenosa</i> Ch-1 isolated from totemic clay of Chamblyal (J & K)	Council of Scientific and Industrial Research	3 years 2010-13	14 lacs
5	Exploration and conservation of genodiversity from soil metagenome of Leh, Amarnath and its neighbourhood"	Department of Biotechnology, Govt. of India	4 years 2010-14	41 lacs

Dr. B.K. Bajaj

National

S. No.	Project Title	Funding Agency	Period	Grant (Rs. In Lacs)
1	Enzymology and bioprocess development of robust industrially important microbial xylanases	Department of Science and Technology	2008-11	33.75 lacs
2	Biotechnological perspectives for production of Poly γ -hydroxybutyrate (PHB)	Council of Scientific and Industrial Research	2010-13	27 lacs
3	Bioprocess development for production of sturdy bacterial proteases for potential commercial applications using agricultural residues as substrates	University Grants Commission, Govt. of India	2013-16	11.51 lacs
4	Cost-effective approaches for production of novel microbial fibrinolytic proteases with high thrombolytic potential	Indian Council of Agricultural Research, Govt. of India	2013-16	36.14 lacs

International

S. No.	Project Title	Funding Agency	Period	Grant (Rs. In Lacs)
1	'Transnational Industrial Biotechnology: Utilization of Extremophiles' through academic-industry Partnership (TRIBUTE)	BBSRC UK - India International Partnering Awards:	2014-17	3.5 lacs

Dr. Sanjana Kaul**National**

S. No.	Project title	Funding agency	Period	Grants sanctioned
1.	Bioprospecting of fungi from unexplored ecological niches of J & K for antimicrobial and bioactive compounds.	Council of Scientific and Industrial Research New Delhi	2011 - 14	27 lacs
2	Molecular characterization of keratinophilic fungi isolated from soils	Department of Science and Technology, Govt. of India	2007 - 10	15 lacs
3	Cloning and characterization of some virulent genes in opportunistic fungi	University Grants Commission, New Delhi	2010 - 13	12.5 lacs

Dr. Madhulika Bhagat**National**

S. No.	Project title	Funding agency	Period	Grants sanctioned
1	Isolation, characterization and exploring antioxidant properties of some economically important bioactive compounds from <i>Arisaema</i> growing in J&K	University Grants Commission, New Delhi	3 years 2012-15	14.5 lacs
2	Chemical and biological investigations of some important medicinal plants growing in North-western Himalayan region for anticancer and antioxidant activity	Council of Scientific and Industrial Research New Delhi	1 years 2013-16	21.2 lacs
3	Exploring <i>in vitro</i> anticancer efficiency of medicinal plants from Jammu region	University Grants Commission, New Delhi	2 years 2013-16	8.74 lacs

Dr. Ritu Mahajan

National

S No	Project Title	Agency	Period	Grant/Amount Mobilized (Rs)
1	Development of efficient and rapid micropropagation system and molecular characterization of <i>Gloriosa superba</i> L. - an endangered medicinal plant	University Grants Commission, New Delhi	2012-15	12.67 lacs
2	Phytochemical and antimicrobial analysis of in-vitro grown plants of <i>Picrorhiza kurroa</i> and <i>Aconitum heterophyllum</i> for exploring their medicinal importance	National Medicinal Plant Board	2014-	27.016 lacs
3	“Molecular characterization and genetic diversity of Wild Pomegranate”.	Department of Science and Technology, Govt. of India	2014-	22.0 lacs

18. Inter-institutional collaborative projects and associated grants received

- a) National collaboration
- b) International collaboration
(w.e.f. 1st June 2009 to 28th February 2015)

Prof. Manoj K. Dhar

Isolation and characterization of plant DNA amplification promoting sequences	Department of Science and Technology, Govt. of India & DAAD Germany	June 2012	2.64 lacs
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Dr. B.K. Bajaj

- 1. UK-India International Partnering Awards : Partners: Aberystwyth University UK, University of Jammu, NDRI Karnal, CCMB Hyderabad, Gaythrai Biotech Hyderabad.

2. BBSRC UK-India International Partnering Awards:Reference: BB/L027097/1 ‘Transnational Industrial Biotechnology : Utilization of Extremophiles’ through academic-industry Partnership (TRIBUTE) Total £ 29600.00;JU =£3500/ INR 3.5 lakh 2014-2017
19. Departmental projects funded by DST-FIST; UGC-SAP/CAS, DPE; DBT, ICSSR, AICTE, etc.; total grants received. (w.e.f. 1st June 2009 to 28th February 2015)

DST-FIST	: November, 2014	=	Rs.1 Crore, 70 lacs
UGC-SAP	: 2012-17	=	Rs.50 lacs
DBT	: 2009-10	=	Rs.19.92 lacs
	2010-11	=	Rs.20.82 lacs
	2011-12	=	Rs.25.84 lacs
	2012-13	=	Rs.22.85 lacs
	2013-14	=	Rs.27.95 lacs
PURSE	2011-12	=	Rs.2.00 lacs
	2013-14	=	Rs.3.00 lacs
	2014-15	=	Rs.1.5 Crore
20. Research facility / centre with
 - a. state recognition
 - b. national recognition
 - c. international recognition
21. Special research laboratories sponsored by / created by industry or corporate bodies
22. Publications: (w.e.f. 1st June 2009 to 28th February 2015)

Prof. M. K. Dhar

Imran Bukhari, B. Pattnaik, S. Rayees, Sanjana Kaul and Manoj K. Dhar. (2015) Safranal of *Crocus sativus* L. Inhibits Inducible Nitric Oxide Synthase and Attenuates Asthma in a Mouse Model of Asthma. *Phytother. Res.* DOI: 10.1002/ptr.5315 (Impact Factor : 2.39)

Shelly Sehgal, Sanjana Kaul, and Manoj K. Dhar (2015) Mechanism of Gene Amplification via Yeast Autonomously Replicating Sequences. *The Scientific World Journal* <http://dx.doi.org/10.1155/2015/387367>

Manoj K. Dhar, Rupali Sharma, Archana Kaul and Sanjana Kaul (2014). Development of fruit color in Solanaceae: A story of two biosynthetic pathways. *Briefings in Functional Genomics* 06/2014; DOI:10/bfpg/elu018 (Impact Factor : 4.2)

Sanjana Kaul, Maroof Ahmed, Tanwi Sharma and Manoj K. Dhar (2014) Unlocking The Myriad Benefits of Endophytes : An Overview , In 'Microbial Diversity and Biotechnology in Food Security' Editors R. N. Kharwar et al. Springer Verlag pp 41 - 58

Yash Paul Khajuria, Sanjana Kaul, B A Wafai and Manoj K Dhar (2014) Screening of apple germplasm of Kashmir Himalayas for scab resistance. Ind. J. Biotech. (Accepted) (Impact factor : 0.4)

Sanjana Kaul, Suruchi Gupta, Maroof Ahmed and Manoj K. Dhar (2013) Endophytes from medicinal plants: A treasure hunt for bioactive metabolites. Phytochemistry Reviews 11(4):487 – 505

Manoj K. Dhar, Archana Koul and Sanjana Kaul (2013) Farnesyl pyrophosphate synthase: A key enzyme in isoprenoid biosynthetic pathway and potential molecular target for drug development. New Biotechnology 30 (2):114-23

Sanjana Kaul, Maroof Ahmed, Khalid Zargar, Pooja Sharma, Manoj K. Dhar (2013) Prospecting endophytic fungal assemblage of *Digitalis lanata* Ehrh. (foxglove) as a novel source of Digoxin - a cardiac glycoside. 3 Biotech DOI: 10.1007/s13205-012-0106-0

Shivanjali Kotwal, Manoj K. Dhar, Balbir Kour, Kuldeep Raj and Sanjana Kaul (2013) Molecular markers unravel intraspecific and interspecific genetic variability in *Plantago ovata* and some of its wild allies. Journal of Genetics 92(2) : 293-298 (Impact Factor : 1.013)

Sanjana Kaul, Harjit Kour, Dharti Pandita, Smit Kour and Manoj K. Dhar (2013) polymerase Chain Reaction Restriction Fragment Length Polymorphism differentiates the environmental and clinically important fungal isolates. National Academy Science Letters 36 (2) : 139 (Impact Factor : 0.240)

Gurmeet Kour, Sanjana Kaul, and Manoj K. Dhar (2013) Molecular characterization of repetitive DNA sequences from B chromosome in *Plantago lagopus* L. Cytogenetic and Genome Research 142(2):121-8 (Impact factor : 1.9)

Balbir Kour, Mohd. Azhar, Sanjana Kaul and Manoj K. Dhar (2013) In vitro regeneration of *Prunella vulgaris*: a Himalayan medicinal plant. National Academy of Science Letters 37:81 - 86 (IF : 0.24)

Sapna Sharma, Dania Mirza, Arjun Manhas, Sanjana Kaul and Manoj K. Dhar (2013) Transformation of *Colletotrichum* with hygromycin resistant marker from *E. coli*. Journal of International Academic Research Multidisciplinary (Accepted)

Yashpal Khajuria, Sanjana Kaul and Manoj K. Dhar (2013) Molecular characterization of *Alternaria alternata* (Apple pathotype) from Kashmir valley. Biotechnology 7(2): 49-53

Shelly Sehgal, Sanjana Kaul and Manoj K. Dhar (2013) Integration of Bioinformatics and Genomics approaches unveils novel aspects of *Saccharomyces cerevisiae* Ste20 Kinases Journal Mycology and Plant Pathology 43: 44 - 50

S. Ali, R. Chopra, S. Manvati, Y. P. Singh, N. Kaul, Anita Behura, A. Mahajan, P. Sehajpal, S. Gupta, M. K. Dhar et al. (2013) Replication of Type 2 Diabetes Candidate Genes Variations in three Geographically Unrelated Indian Population Groups. PLOS ONE 8: 3 e58881.doi: 10.1371/ journal.pone.0058881. (Impact factor : 3.5)

Harjit Kour, Manoj Kumar Dhar and Sanjana Kaul (2012) PCR - RFLP analysis of internal transcribed spacer region differentiates clinically important fungal species isolated from humans. Journal Mycology and Plant Pathology 42: 256 – 259.

Shelly Sehgal, Sanjana Kaul and Manoj K. Dhar (2012) Risk factors and survival analysis of the esophageal cancer in the population of Jammu, India. Indian Journal of Cancer 49: 245 – 250. (Impact Factor: 1.13)

Shelly Sehgal, Sanjana Kaul and Manoj K. Dhar (2012) Study of inherent fragile sequences of the Yeast SCH9 Kinase. In Biodiversity Evaluation – Botanical perspectives (Ed. N. S. Atri, R. C. Gupta, M. I. S. Saggoo and V. K. Singhal), Publ. M/S Bishen Singh Mahendra pal Singh, Dehradun , India, pp 137 – 144.

Manoj K. Dhar, Shelly Sehgal, Sanjana Kaul (2012) Structure, replication efficiency and fragility of yeast ARS elements. Research in Microbiology 163: 243-253 (Impact Factor: 2.889)

Maroof Ahmed, Muzaffer Hussain, Manoj K. Dhar and Sanjana Kaul (2012) Isolation of microbial endophytes from some ethnomedicinal plants of Jammu and Kashmir. Journal of Natural Products and Plant Resources 2: 215 – 220

Yashpal Khajuria, Sanjana Kaul and Manoj K. Dhar (2012) Molecular characterisation of *Venturia inequalis* causing Apple scab in Kashmir. Scientific Reports 1:339, doi:10.4172

Gurmeet Kour, Balbir Kour, Sanjana Kaul and Manoj K. Dhar (2012) Analysis of the morphological effects of B chromosomes in a population of *Plantago lagopus*. Journal of Microbiological Biotechnological Research 2 (4):598-602.

Balbir Kour, Gurmeet Kour, Sanjana Kaul, Manoj K. Dhar (2012) Screening of *Phaseolus vulgaris* cultivars growing in various areas of Jammu and Kashmir for anthracnose resistance. Int. J. Sci. Res. Pub. 2 (6): 1 - 8

Mohit K. Sharma, Manoj K. Dhar and Sanjana Kaul (2012) Bioinformatics: An introduction and Overview. Int. J. Engg. Res. Dev. 3: 88-99

Manoj K. Dhar, Sanjana Kaul and Jasmeet Kour (2011) Towards the development of better crops by genetic transformation using plant artificial chromosome vectors. Plant Cell Reports 30 : 799–806 (Impact Factor: 2.509)

Manoj K. Dhar, Sanjana Kaul, Pooja Sharma and Mehak Gupta (2011) *Plantago ovata* : cultivation, genomics, chemistry and therapeutic applications. In : Genetic resources, chromosome engineering and crop improvement, vol. 6, Medicinal Plants (ed. R. J. Singh) CRC press, USA pp 763 – 792.

Shelly Sehgal, Manoj K. Dhar and Sanjana Kaul (2011) Molecular characterisation of keratinophilic fungi isolated from high altitude regions of Kashmir. *Environment Conservation Journal* 12: 109 – 114.

Balbair Kour, Namesha Dogra, Gurmeet Kour, Sanjana Kaul and Manoj K. Dhar (2011) Analysis of diversity in *Alternaria* species with retrotransposon based molecular markers, *Vegetos* 24 (2) : 70-74. (Impact Factor: 0.04)

M. A. Wani, Sanjana Kaul, M. K. Dhar and K. L. Dhar (2010) GC - MS analysis reveals production of 2 – Phenylethanol from *Aspergillus niger* endophytic in rose. *J. Basic Microbiol.* 50:110–114. (Impact Factor: 1.822)

Sanjana Kaul, Masood Wani, K. L. Dhar and M. K. Dhar (2009) Production and GC-MS trace analysis of methyl eugenol from endophytic isolate of *Alternaria* from rose. *Annals of Microbiology* 58:443–445. (Impact Factor: 1.549)

*Number of papers published in peer reviewed journals (national / international) : 31

*Chapters in Books: 3

*Impact Factor – Range (0.04-4.2)

Dr. Jyoti Vakhlu

Gupta R, Vakhlu J, Agarwal A & Nilawe P D. (2014). Draft genome sequence of plant growth promoting *Bacillus amyloliquefaciens* strain W2 associated with *Crocus sativus* (saffron). *Genome Announcements*. 2(5):e00862-14. doi:10.1128/genomeA.00862-14.

Grewal S, Vakhlu J, Gupta V, Sangwan N, Kohli P, Nayyar N, Rani P, Sance S & Lal R. (2014). Draft genome sequence of *Pseudomonas* sp. strain JMM, a sediment-hosted environmental isolate. *Genome Announcements*. 2(5):e00879-14.

Sharma, S., & Vakhlu, J. (2014). Metagenomics as advanced screening methods for novel microbial metabolites. *Microbial Biotechnology : Progress and Trends*, 43.

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Ambardar S, Sangwan N, Manjula A, Rajendhran J, Gunasekaran P, Lal R, & Vakhlu J. (2014). Identification of bacteria associated with underground parts of *Crocus sativus* by 16S rRNA gene targeted metagenomic approach. *World Journal of Microbiology and Biotechnology*. 30(10): 2701-2709. (Impact Factor: 1.5)

Grewal S, Bhagat M & Vakhlu J. (2014). Antimicrobial protein produced by *Pseudomonas aeruginosa* JU-Ch 1, with a broad spectrum of antimicrobial activity. *Biocatalysis and Agricultural Biotechnology*. DOI: 10.1016/j.bcab.2014.04.006 (Impact Factor: 0.6)

Grewal S, Vakhlu J. (2013) An Antimicrobial Peptide produced by *Bacillus sonorensis* JU-50, isolated from Totemic Soil of Chambyal. *The Microbes* 5:1-14.

Ambardar S, & Vakhlu J. (2013). Plant growth promoting bacteria from *Crocus sativus* rhizosphere. *World Journal of Microbiology and Biotechnology*. 29(12): 2271-2279. (Impact Factor: 1.5)

Sudan A K, & Vakhlu J. (2013). Isolation of a thioesterase gene from the metagenome of a mountain peak, Apharwat, in the northwestern Himalayas. *3 Biotech* 3(1): 19-27.

Vakhlu J, Ambardar S, & Johri B N. (2012). Metagenomics: A Relief Road to Novel Microbial Genes and Genomes. In *Microorganisms in Sustainable Agriculture and Biotechnology* (pp. 263-294). Springer Netherlands.

Khan I, Gupta P, & Vakhlu J. (2011). Thermo-alkaliphilic halotolerant detergent compatible. *African Journal of Microbiology Research*. 5(23): 3968-3975. (Impact Factor: 0.8)

Gupta P, & Vakhlu J. (2011). Metagenomics: A Quantum Jump from Bacterial Genomics. *Indian journal of microbiology*. 51(4): 539-541. (Impact Factor: 0.8)

*Number of papers published in peer reviewed journals (national / international) : 12

*Impact Factor – Range (0.6-1.5)

Dr. B.K. Bajaj

Bijender Kumar Bajaj, Konika Razdan, Ingmar JJ Claes, Sarah Lebeer, (2014) Physico-chemical Characterization of Exopolysaccharides of Potential Probiotic *Enterococcus faecium* Isolates from Infants'gut ,*Current Biochemical Engineering*, DOI: 10.2174/2212711901666140813195303

Bijender Kumar Bajaj, Mukul Sharma, Ravella S. Rao (2014) Agricultural residues for production of cellulase from *Sporotrichum thermophile* LAR5 and its application for saccharification of rice straw. *Journal of Materials and Environmental Sciences*, 5: 1354-1360

Mukul Sharma and Bijender Kumar Bajaj (2014) Cellulase production from *Bacillus subtilis* MS 54 and its potential for saccharification of biphasic-acid-pretreated rice straw. *Journal of Biobased Materials and Bioenergy*, 8: 449-456

Satbir Singh and Bijender K Bajaj (2014) Medium optimization for enhanced production of protease with industrially desirable attributes from *Bacillus subtilis* K1. *Chemical Engineering Communications*, Accepted DOI:10.1080/00986445.2014.900052 (Impact Factor: 0.9)

Satbir Singh , Puneet Gupta , Vishal Sharma , Shweta Koul , Kamaldeep Kour and Bijender Kumar Bajaj (2014) Multifarious potential applications of keratinase of *Bacillus subtilis* K-5. *Biocatalysis and Biotransformation* 32: 333–342 (Impact Factor: 1.0)

Bijender Kumar Bajaj, Satbir Singh, Mowkshi Khullar, Kaurab Singh and Shikha Bhardwaj, Optimization of Fibrinolytic Protease Production from *Bacillus subtilis* I-2 Using Agro-Residues. *Braz. Arch. Biol. Technol* Vol.57: 653-662 (2014) (Impact Factor: 0.45)

Bijender Kumar Bajaj, Tabia Andrabi, Ingmar JJ Claes and Sarah Lebeer (2014) Bioprospecting for Functionally-Proficient Potential Probiotics. *Current Nutrition & Food Science*, , 10: 251-263 (2014)

Sunny Dholpuria, Bijender Kumar Bajaj, Satyanagalakshmi Karri, Anju Bhasin, Kanika Razdan, Nitika Gupta and Neeraj Sethi (2014) Production and Purification of alkali stable xylanase from *Bacillus* sp. *Int. J. Curr. Microbiol. App. Sci* 3: 365-377 (2014)

Bijender K Bajaj, Neha Sharma and Satbir Singh (2013) Enhanced production of fibrinolytic protease from *Bacillus cereus* NS-2 using cotton seed cake as nitrogen source. *Biocatalysis and Agricultural Biotechnology* 2: 204-209 (Impact Factor: 0.86)

Bijender Kumar Bajaj and Gaytri Jamwal (2013) Thermostable alkaline protease production from *Bacillus pumilus* D-6 by using agro-residues as substrates. *Advances in Enzyme Research*, 1: 30-36 (Impact Factor: 1.07)

Bijender Kumar Bajaj et al. (2013) Enhanced production of fibrinolytic protease from *Bacillus cereus* NS-2 using cotton seed cake as nitrogen source *Biocatalysis and Agricultural Biotechnology* 2: 204-209(Impact Factor: 0.8)

Bijender Kumar Bajaj, Sandeepu Raina and Satbir Singh (2013) Killer toxin from a novel killer yeast *Pichia kudriavzevii* RY55 with idiosyncratic antibacterial activity. *J. Basic Microbiology*, 2013, 53, 645–656 (Impact Factor: 1.82)

Konika Razdan, Jyotsana Parihar, Bijender Kumar Bajaj* (2012) Isolation and characterization of a lipolytic and phytase producing probiotic for potential application in poultry feed *Online Journal of Animal and Feed Research* 2: 369-377 (Impact Factor: 0.40)

Bijender Kumar Bajaj, Kalpana Manhas, (2012) Production and characterization of xylanase from *Bacillus licheniformis* P11(C) with potential for fruit juice and bakery industry *Biocatalysis and Agricultural Biotechnology*, 1: 330–337(IF: 0.86)

Bijender Kumar Bajaj, Yash Paul Khajuria and Vijay P Singh, (2012) Agricultural residues as potential substrates for production of xylanase from alkali-thermotolerant bacterial isolate *Biocatalysis and Agricultural Biotechnology*, 1:314–320 (Impact Factor: 0.86)

Bijender Kumar Bajaj and M. A. Wani, Enhanced production of a phytase with potentially suitable attributes for animal feed application from *Nocardia* sp. MB 36 by employing agro-residues as substrates., *Eng. Life Sci.* 11:620-628, (2011) (Impact Factor: 1.89)

Bijender Kumar Bajaj and M. Abbass, Studies on an alkali-thermostable xylanase from *Aspergillus fumigatus* MA28. *3Biotech* 1: 161-171.2011

Bijender Kumar Bajaj, Mukul Sharma, Sunny Sharma, Alkalistable endo- β -1,4-xylanase production from a newly isolated alkalitolerant *Penicillium* sp. SS1 using agro-residues. *3 Biotech* 1:83-90; 2011

Bijender Kumar Bajaj, Priyanka Sharma (2011) An alkali-thermotolerant extracellular protease from a newly isolated *Streptomyces* sp. DP2. *New Biotechnol.* 28:725-732, (Impact Factor: 2.49)

Bijender Kumar Bajaj and Narendera Pratap Singh (2010) Production of xylanase from an alkalitolerant *Streptomyces* sp. 7b under solid-state fermentation, its purification and characterization. *Appl. Biochem. Biotechnol.* 162:1804-1818; (Impact Factor: 1.68)

Bijender Kumar Bajaj, Konika Razdan, Ajay Sharma (2010) Thermostable-alkali-stable xylanase production from a newly isolated *Streptomyces* sp. SU 9. *Indian J. Chem. Technol.* 17: 375-380 (Impact Factor: 0.58)

Bijender Kumar Bajaj and Suresh Sharma, (2010) Construction of killer industrial yeast *Saccharomyces cerevisiae* and its fermentation performance. *Braz. J. Microbiol.* 41: 477-485, (Impact Factor: 0.76)

Sheikh Nizamudeen and Bijender Kumar Bajaj, (2009) A novel thermo-alkalitolerant endoglucanase production using cost effective agricultural residues as substrates by a newly isolated *Bacillus* sp. NZ. *Food Technol. Biotechnol.* 47: 435-440, (Impact Factor: 0.97)

Bijender Kumar Bajaj, Himani Pangotra, Masood A Wani, Priyanka Sharma & Ajay Sharma (2009) Partial purification and characterization of a highly thermostable and pH stable endoglucanase from a newly isolated *Bacillus* strain M-9 *Indian J. Chem. Technol.* 16:382-387, (Impact Factor: 0.58)

Bijender Kumar Bajaj, Himani Pangotra, Masood A Wani, Ajay Sharma and Priyanka Sharma Characterization of thermo-tolerant and acid/alkali tolerant β -glucosidase from bacterial isolate M+. *J. Sci. Ind. Res.*, 68:242-247; (2009) (Impact Factor: 0.5)

Bijender Kumar Bajaj Optimization of fibrinolytic protease production from *Bacillus subtilis* I-2 using agro-residues. *Braz Arch Biol Technol.* 57: 653-662

*Number of papers published in peer reviewed journals (national / international) : 26

*Impact Factor – Range (0.4-2.49)

Dr. Sanjana Kaul

Imran Bukhari, B. Pattnaik, S. Rayees, Sanjana Kaul and Manoj K. Dhar. (2015) Safranal of *Crocus sativus* L. Inhibits Inducible Nitric Oxide Synthase and Attenuates Asthma in a Mouse Model of Asthma. *Phytother. Res.* DOI: 10.1002/ptr.5315 (Impact Factor: 2.39)

Shelly Sehgal, Sanjana Kaul, and Manoj K. Dhar (2015) Mechanism of Gene Amplification via Yeast Autonomously Replicating Sequences. *The Scientific World Journal* <http://dx.doi.org/10.1155/2015/387367>

Manoj K. Dhar, Rupali Sharma, Archana Kaul and Sanjana Kaul (2014). Development of fruit color in Solanaceae: A story of two biosynthetic pathways. Briefings in Functional Genomics 06/2014; DOI:10/bfgp/elu018 (Impact Factor: 4.2)

Sanjana Kaul, Maroof Ahmed, Tanwi Sharma and Manoj K. Dhar (2014) Unlocking The Myriad Benefits of Endophytes : An Overview , In 'Microbial Diversity and Biotechnology in Food Security' Editors R. N. Kharwar et al. Springer Verlag pp 41 – 58.

Yash Paul Khajuria, Sanjana Kaul, B A Wafai and Manoj K Dhar (2014) Screening of apple germplasm of Kashmir Himalayas for scab resistance. Ind. J. Biotech. (Accepted) (Impact Factor: 0.4)

Balbir Kour, Gurmeet Kour, Sanjana Kaul and Manoj K. Dhar (2014) In-vitro mass multiplication and assessment of genetic stability of in-vitro raised *Artimesia absinthium* L. plants using ISSR and SSAP molecular markers. Advances in Botany (in press).

Mehak Gupta, Balbir Kour, Sanjana Kaul and Manoj K. Dhar (2014) Mucilage synthesis in callus cultures of *Plantago ovata* Forsk. Natl. Acad. Sci.Lett.(accepted) (Impact Factor: 0.240)

Sanjana Kaul, Suruchi Gupta, Maroof Ahmed and Manoj K. Dhar (2013) Endophytes from medicinal plants: A treasure hunt for bioactive metabolites. Phytochemistry Reviews 11(4) : 487 – 505 (Impact Factor: 4.147)

Manoj K. Dhar, Archana Koul and Sanjana Kaul (2013) Farnesyl pyrophosphate synthase: A key enzyme in isoprenoid biosynthetic pathway and potential molecular target for drug development. New Biotechnology 30 (2):114-23 (Impact Factor: 2.106)

Sanjana Kaul, Maroof Ahmed, Khalid Zargar, Pooja Sharma, Manoj K. Dhar (2013) Prospecting endophytic fungal assemblage of *Digitalis lanata* Ehrh. (foxglove) as a novel source of Digoxin - a cardiac glycoside. 3 Biotech DOI: 10.1007/s13205-012-0106-0

Shivanjali Kotwal, Manoj K. Dhar, Balbir Kour, Kuldeep Raj and Sanjana Kaul (2013) Molecular markers unravel intraspecific and interspecific genetic variability in *Plantago ovata* and some of its wild allies. Journal of Genetics 92(2) : 293-298. (Impact Factor: 1.013)

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Balbir Kour, Mohd. Azhar, Sanjana Kaul and Manoj K. Dhar (2013) In vitro regeneration of *Prunella vulgaris*: a Himalayan medicinal plant. National Academy of Science Letters 37:81 - 86 (Impact Factor: 0.240)

K.K. Sharma, Neha Antal, Sanjana Kaul, Aarti Devi, Sarbjeet Kour and Arti Sharma (2013) Bacteriological quality assessment of a subtropical temple pond of Birpur, Jammu (J&K, India) J. Env. Sci. Tox. Food Tech. 3 : 19-25.

Sapna Sharma, Dania Mirza, Arjun Manhas, Sanjana Kaul and Manoj K. Dhar (2013) Transformation of *Colletotrichum* with hygromycin resistant marker from *E. coli*. Journal of International Academic Research Multidisciplinary (Accepted)

Yashpal Khajuria, Sanjana Kaul and Manoj K. Dhar (2013) Molecular characterization of *Alternaria alternata* (Apple pathotype) from Kashmir valley. Biotechnology 7(2): 49-53

Shelly Sehgal, Sanjana Kaul and Manoj K. Dhar (2013) Integration of Bioinformatics and Genomics approaches unveils novel aspects of *Saccharomyces cerevisiae* Ste20 Kinases Journal Mycology and Plant Pathology 43: 44 - 50

Harjit Kour, Manoj Kumar Dhar and Sanjana Kaul (2012) PCR - RFLP analysis of internal transcribed spacer region differentiates clinically important fungal species isolated from humans. Journal Mycology and Plant Pathology 42: 256 – 259.

Shelly Sehgal, Sanjana Kaul and Manoj K. Dhar (2012) Risk factors and survival analysis of the esophageal cancer in the population of Jammu, India. Indian Journal of Cancer 49: 245 – 250. (Impact Factor: 1.13)

Shelly Sehgal, Sanjana Kaul and Manoj K. Dhar (2012) Study of inherent fragile sequences of the Yeast SCH9 Kinase. In Biodiversity Evaluation – Botanical perspectives (Ed. N. S. Atri, R. C. Gupta, M. I. S. Saggoo and V. K. Singhal), Publ. M/S Bishen Singh Mahendra pal Singh, Dehradun , India, pp 137 – 144.

Manoj K. Dhar, Shelly Sehgal, Sanjana Kaul (2012) Structure, replication efficiency and fragility of yeast ARS elements. Research in Microbiology 163: 243 - 253 (Impact Factor: 2.889)

Maroof Ahmed, Muzaffer Hussain, Manoj K. Dhar and Sanjana Kaul (2012) Isolation of microbial endophytes from some ethnomedicinal plants of Jammu and Kashmir. Journal of Natural Products and Plant Resources 2: 215 – 220

Abhishek Budhiraja, Kunal Nepali, Sanjana Kaul and K. L. Dhar (2012) Antimicrobial and cytotoxic activities of fungal isolates of medicinal plant *Gloriosa superba*. International Journal of Recent Advances in Pharmaceutical Research 2: 1 – 9.

Yashpal Khajuria, Sanjana Kaul and Manoj K. Dhar (2012) Molecular characterisation of *Venturia inaequalis* causing Apple scab in Kashmir. Scientific Reports 1:339, doi:10.4172

Gurmeet Kour, Balbir Kour, Sanjana Kaul and Manoj K. Dhar (2012) Analysis of the morphological effects of B chromosomes in a population of *Plantago lagopus*. Journal of Microbiological Biotechnological Research 2 (4):598-602.

Balbir Kour, Gurmeet Kour, Sanjana Kaul, Manoj K. Dhar (2012) Screening of *Phaseolus vulgaris* cultivars growing in various areas of Jammu and Kashmir for anthracnose resistance. Int. J. Sci. Res. Pub. 2 (6): 1 - 8

Mohit K. Sharma, Manoj K. Dhar and Sanjana Kaul (2012) Bioinformatics: An introduction and Overview. Int. J. Engg. Res. Dev. 3: 88-99

Manoj K. Dhar, Sanjana Kaul and Jasmeet Kour (2011) Towards the development of better crops by genetic transformation using plant artificial chromosome vectors. Plant Cell Reports 30 : 799–806 (Impact Factor: 2.509)

Manoj K. Dhar, Sanjana Kaul, Pooja Sharma and Mehak Gupta (2011) *Plantago ovata* : cultivation, genomics, chemistry and therapeutic applications. In : Genetic resources, chromosome engineering and crop improvement, vol. 6, Medicinal Plants (ed. R. J. Singh) CRC press, USA pp 763 – 792.

Shelly Sehgal, Manoj K. Dhar and Sanjana Kaul (2011) Molecular characterisation of keratinophilic fungi isolated from high altitude regions of Kashmir. Environment Conservation Journal 12: 109 – 114.

Balbir Kour, Namesha Dogra, Gurmeet Kour, Sanjana Kaul and Manoj K. Dhar (2011) Analysis of diversity in *Alternaria* species with retrotransposon based molecular markers, Vegetos 24 (2) : 70-74. (Impact Factor: 0.04)

M. A. Wani, Sanjana Kaul, M. K. Dhar and K. L. Dhar (2010) GC - MS analysis reveals production of 2 – Phenylethanol from *Aspergillus niger* endophytic in rose. J. Basic Microbiol. 50:110–114. (Impact Factor: 1.822)

Sanjana Kaul, Masood Wani, K. L. Dhar and M. K. Dhar (2009) Production and GC-MS trace analysis of methyl eugenol from endophytic isolate of *Alternaria* from rose. Annals of Microbiology 58:443–445. (Impact Factor: 1.549)

<p>* Number of papers published in peer reviewed journals (national / international) : 34</p> <p>* Impact Factor – Range (0.04-4.2)</p>

Dr. Madhulika Bhagat

N. Ahmed, M. Riaz, A. Ahmed, and M. Bhagat (2015). Synthesis, Characterisation, and Biological Evaluation of Zn(II) Complex with Tridentate (NNO Donor) Schiff Base Ligand. int. J. inorg Chem. Article ID 607178, 5 pages (Hindawi Publishing Corporation).

S. Grewal, M. Bhagat and J. Vakhlu. Antimicrobial protein produced by *pseudomonas aeruginosa* JU-Ch 1, with a broad spectrum of antimicrobial activity (2014). Biocatal Agric Biotechnol. 3(4): 332-337. (Elsevier). (Impact factor : 0.860)

M. Bhagat, R. Sudan, S. Gupta, A. Kaul and J. Singh. Antioxidant and Immunomodulatory Potential of Cobra lily Species of North-western Himalayan Region: A Comparative Analysis (2014). TBAP. 4(3): 179-187. (Talyor and Francis).

R .Sudan, M.Bhagat, S. Gupta, J. Singh and A. Koul (2014). Iron (FeII) Chelation, Ferric Reducing Antioxidant Power, and Immune Modulating Potential of *Arisaema jacquemontii*

(Himalayan Cobra Lily) (2014). Bio. Med. Research International. Article ID 179865, 7 pages. (Hindawi Publishing Corporation). (Impact factor: 2.880).

S. Thusoo, S. Gupta, R. Sudan, J. Kour, S. Bhagat, R. Hussain and M. Bhagat (2014). Antioxidant Activity of Essential Oil and Extracts of Valeriana jatamansi Roots. BioMed Research International. Article ID 614187, 4 pages (Hindawi Publishing Corporation). (Impact factor: 2.880).

P.A. Rose, P.K. Praseetha, M. Bhagat, P. Alexander, S. Abdeen and M. Chavali (2013). Drug embedded PVP coated magnetic nanoparticles for targeted killing of breast cancer cells. Technol. Cancer. Res Treat. 12(5): 463-72. ISSN 1533-0338. (Impact factor: 1.943).

M. Bhagat, R. M. Pandita and A.K Saxena (2013). In vitro and in vivo Biological Activities of Nardostachys Jatamansi Roots. Med Aromat Plants. 2:6, 2-4. (Omics groups publications).

R. Suravajhala, N. Suri, M. Bhagat and A.K. Saxena (2013). Biological evaluation of 8-alkyl xanthines as potential cytotoxic agents. Adv Biol Chem. 3: 314-319. (Scientific Research) (Impact factor: 0.46).

R. Sudan, M. Bhagat, S. Gupta, Chitra and T. Devi (2013) Comparative analysis of cytotoxic and antioxidant potential of edible Cinnamomum verum (bark) and Cinnamomum tamala (Indian bay leaf). Free radicals and antioxidants (FRA). 3: 570-573. (Elsevier) ISSN: 2231-2536. (Impact factor: 0.939)

G.D. Bajju, S. Kundan, M. Bhagat, D. Gupta, A. Kapahi, G .Devi (2014) Synthesis and Spectroscopic and Biological Activities of Zn(II) Porphyrin with Oxygen Donors Bioinorg. Chem. App 1. Volume 2014, Article ID 782762, 13 pages. (Hindawi Publishing Corporation). (Impact factor: 1.165)

G.D. Bajju, G. Devi, S. Katoch, M. Bhagat, Deepmala, Ashu, Kundan, S.K. Ananad (2013). Synthesis, Spectroscopic, and Biological Studies on New Zirconium(IV) Porphyrins with Axial Ligand (2013). Bioinorg. Chem. Appl., 15 pages. (Hindawi Publishing Corporation). (Impact factor: 1.165)

G.D. Bajju, P. Sharma, A. Kapahi, M. Bhagat, S. Kundan and D. Gupta (2013). Oxovanadium(IV) Complexes with Nitrogen Donors: Synthesis, Characterisation, and Biological Activities. J. Inorg. Chem. 11 pages. (Hindawi Publishing Corporation).

M. Bhagat, J.S. Arora and A.K. Saxena (2013). In vitro and in vivo antiproliferative potential of Cuscuta reflexa Roxb. J. Pharm. Res. 6: 690-695. (Elsevier) ISSN: 0974- 6943.

M. Bhagat, V. Sharma and A.K. Saxena (2012). Antiproliferative effect of leaf extracts of Eucalyptus citriodora on human cancer cells in vitro and in vivo. Indian Journal of Biochemistry & Biophysics (IJBB). 49, Dec 2012, 451-457. ISSN: 0975-0959. (Impact factor: 1.026.)

R M. Pandita, M. Bhagat and A.K. Saxena (2012). Evaluation of in vitro Cytotoxicity of *Nardostachys jatamansi* Roots extracts and Fractions against neuroblastoma human cancer cell lines. *J. Pharm. Res.* 5(5): 2720-2722.

M. Bhagat and A.K. Saxena (2011). In vitro antiproliferative, antibacterial potential and induction of DNA strand break of partially purified *Cuscuta reflexa* Roxb. *Inter. J. Green. Pharm.* 307-313.

M. Bhagat and A.K. Saxena (2010). Evaluation of *Cassia occidentalis* for in vitro cytotoxicity against human cancer cell lines and antibacterial activity. *Ind. J. Pharm.* 42(4): 234-237.

V. Sharma and M. Bhagat (2010) A comparative study of quality of river waters in the city of Allahabad, U.P., India. *Asian J. Bio. Sci.* 4(2) Oct., 2009- March 2010, 296-297.

M. Bhagat and V. Sharma (2010) Evaluation of in vitro anticancer potential of plant parts of *Calotropis procera*- An ethnobotanical approach. *Green farming*, 3(1), May-June (New series), 2010, 318-19

M. Bhagat, JS. Arora and AK. Saxena (2010) Studies on in vitro cytotoxicity of *Ficus hispida* leaves. *Asian J. Bio. Sci.* 4(2): 286-288.

P. Gupta and M. Bhagat (2010) Immunomodulatory activities of aqueous extract of *Alseodaphne andersonii* in mice. *Int. J. Med. Sci.* 2: 177-180.

M. Bhagat and V. Sharma (2009) Anti-cancer activity of Arka (*Calotropis procera*) on HCT-15 cancer cell line. *Int. J. Med. Sci.* 2(2): 152-154.

* Number of papers published in peer reviewed journals (national / international): 22

* Chapters in Books :2

* Impact Factor – Range (0.46-2.8)

Dr. Ritu Mahajan

Ritu Mahajan and Harpreet Kaur (2014) Assessment of genetic diversity of Basmati rice of Jammu Province using RAPD markers. *International Journal of Advanced Biotechnology and Research* 5: 567-575

Ritu Mahajan, Lubna Aslam and Hejazy Kousar (2013) Effect of growth regulators on in vitro cultures of two basmati rice genotypes: Ranbir basmati and Basmati 370. *IJPCBS*, 3: 1131-1138

Ritu Mahajan, Kamini Sharma, Sashi Bandryal, Pratiba Jamwal and Pallavi Billowria (2013) In vitro propagation and cryopreservation of Snow Mountain Garlic endemic to Himalayan region. *Int J of Adv Biotech Res*, 4: 372-379

Ritu Mahajan, Syed Tabia, Gourav Raina and Neha Mangotra (2012) Assessment of genetic diversity of non-basmati rice of Jammu and Kashmir using microsatellite markers. *Journal of Cereals and Oil seeds*, 3: 21-27

Ritu Mahajan and Priyanka Gupta (2012) Molecular markers: their use in tree improvement. *Journal of Forest Science*, 58: 137-144

Ritu Mahajan, Ankesh Kotwal, Kalpana Chib and Nishkamini Sharma (2011) Assessment of Basmati rice germplasm of Jammu province using aroma specific microsatellite markers. J of Plant Science Research 27: 229-234

Ritu Mahajan, Mehak Manhas, Bhanu Priya, Kaval Kaur and Gurdeep Kaur (2011) Isolation and optimization of amylase producing bacteria from different soils of Jammu province. RJPBCS, 2:239-246

Dharminder Bhatia, Rajiv Sharma, Yogesh Vikal, G.S. Mangat, Ritu Mahajan, Neerja Sharma, Naveen Singh, Tajinder S. Bharaj and Kuldeep Singh (2011) Marker-assisted Development of Bacterial Blight Resistant, Dwarf and High Yielding Versions of Two Traditional Basmati Rice Cultivars. Crop Science, 51: 759-770 (Impact Factor : 1.64)

Ritu Mahajan (2010) Sterility genes in interspecific hybrids of *Oryza glaberrima* and *Oryza sativa*. Asian Journal of Bioscience, 5: 147-150.

Ritu Mahajan and Priyanka Gupta (2010) Proteomics : where genomics leaves off. Czech J. Genetics and Plant Breeding, 46: 47-53 (Impact Factor : 0.53)

* Number of papers published in peer reviewed journals (national/ / international) : 10
* Chapters in Books: 1
* Impact Factor – Range (0.53-1.64)

Dr. Nisha Kapoor

* Number of papers published in peer reviewed journals (national/international) : 02

* Chapters in Books: 1

23. Details of patents and income generated : NA
24. Areas of consultancy and income generated : NA
25. Faculty selected nationally / internationally to visit other laboratories / institutions/ Industries in India and abroad (w.e.f. 1st June 2009 to 28th February 2015)

Prof. Manoj K. Dhar

1. Invited to deliver lecture on Carotenoids: source, chemistry, genetic manipulation and their significance in human health during National Conference at GGM Science College, Jammu on 27th Feb. 2015
2. Invited to deliver lecture on Enhancing plant carotenoids by genetic manipulation of the biosynthetic pathway at DAV College, Jalandhar on 28th Feb. 2015.
3. Invited to deliver lecture on Genome organization of *Plantago ovata*, during International Conference on Medicinal and Aromatic Plants held at Central Institute of Medicinal and Aromatic Plants (CIMAP), CSIR, Lucknow, March 2010

Dr. Jyoti Vakhlu

International
Invited to deliver a lecture on “Metagenomics and Bioprospecting” at Laboratoire Ampere, UMR CNRS 5005, France on 24-09-2012
Invited to deliver a lecture on “Microbes and Metagenomes” at University of Lyon, France on 29-09-2012
Invited to deliver a lecture on “Saffron Rhizosphere Biology” at University of Nuechetal, Switzerland on 29-09-2012

Dr. B.K. Bajaj

National	International
Visiting Faculty Fellowship-DST-2013 (Govt. of India) for visiting University of Delhi	VLIR-UOS (Govt. of Belgium) Short Research Stay Scholarship-2014, at Antwerp University, Antwerpen, Belgium,
INSA-Visiting Scientist Fellowship-NDRI, Karnal	Commonwealth Fellowship-2013, at Aberystwyth University UK
	ERASMUS MUNDUS Invited Professorship-2012 for - Visiting University of Naples, Italy
	International Travel Grant-2012 (DST, GOI) for Presenting paper at Cambridge University, UK
	INDO-US (ASM-IUSSTF)-2011 Visiting Professorship in Microbiology - Ohio State University, US

26. Faculty serving in

- a) National committees b) International committees c) Editorial Boards d) any other

National Committees

Prof. M. K. Dhar

- i) Member, Expert Committee on Fast Track Projects of DST, Govt. of India (2012-cont.)
 - ii) Member, Expert Committee on Major Research Projects, University Grants Commission, New Delhi (2012-2014)
 - iii) Expert member for selection of students for Commonwealth fellowships offered by MHRD, 2014
 - iv) Member, Standing Committee of the Academic Council of Central University of Kashmir, Srinagar
 - v) Member, Academic Council of Central University of Kashmir, Srinagar
 - vi) Member, Board of Studies in Biotechnology, Shri Mata Vaishno Devi University, Katra
 - vii) Member, Academic Council of Sher-i-Kashmir University of Agricultural Science and Technology, University of Kashmir
 - viii) Member, Faculty of Agriculture, Sher-i-Kashmir University of Agricultural Sciences and Technology, University of Jammu
 - ix) Member, Academic Council, Baba Ghulam Shah Badshah University, Rajouri
 - x) Member, Curriculum Development Committee (Bioinformatics), H.P. Central University
 - xi) Member, Advisory Committee of Department of Biotechnology, University of Kashmir
27. Faculty recharging strategies (UGC, ASC, Refresher / orientation programs, workshops, training programs and similar programs). (w.e.f. 1st June 2009 to 28th February 2015)

S.No.	Name of the Teacher	Attended	Dated
1	Prof. M.K. Dhar	Workshop on “Trends in Bioinformatics” organized by Bioinformatics Centre ,School of Biotechnology, University of Jammu, Jammu & BIF Lab, School of Biotechnology, Shri Mata Vaishno Devi University, Katra	16 th to 19 th March, 2009

2	Prof. M.K. Dhar	Workshop on “Bioinformatics: Converging Data to Knowledgebase” organized by Shri Mata Vaishno Devi University, Katra and School of Biotechnology, University of Jammu	6 th -9 th 2010
3	Dr. Jyoti Vakhlu	Workshop on “Trends in Bioinformatics” organized by Bioinformatics Centre ,School of Biotechnology, University of Jammu, Jammu & BIF Lab, School of Biotechnology, Shri Mata Vaishno Devi University, Katra	16 th to 19 th March,2009
4	Dr. Jyoti Vakhlu	Workshop on “Bioinformatics: Converging Data to Knowledgebase” organized by Shri Mata Vaishno Devi University, Katra and School of Biotechnology, University of Jammu	6 th -9 th 2010
5	Dr. B.K. Bajaj	Workshop on “Trends in Bioinformatics” organized by Bioinformatics Centre ,School of Biotechnology, University of Jammu, Jammu & BIF Lab, School of Biotechnology, Shri Mata Vaishno Devi University, Katra	16 th to 19 th March,2009
6	Dr. B.K. Bajaj	Workshop on “Bioinformatics: Converging Data to Knowledgebase” organized by Shri Mata Vaishno Devi University, Katra and School of Biotechnology, University of Jammu	6 th -9 th 2010
7	Dr. B.K. Bajaj	Refresher Course conducted by Academic Staff College in the subject of Environmental Sciences at University of Jammu	December,2009 to January,2010
8	Dr. B.K. Bajaj	Advances in Biotechnology (DBT workshop at TERI, New Delhi)	November, 14 th - 19 th , 2011
9	Dr. Sanjana Kaul	Workshop on “Trends in Bioinformatics” organized by Bioinformatics Centre ,School of Biotechnology, University of Jammu, Jammu & BIF Lab, School of Biotechnology, Shri Mata Vaishno Devi University, Katra	16 th to 19 th March,2009
10	Dr. Sanjana Kaul	Workshop on “Bioinformatics: Converging Data to Knowledgebase” organized by Shri Mata Vaishno Devi University, Katra and School of Biotechnology, University of Jammu	6 th -9 th 2010
11	Dr. Sanjana Kaul	Attended and participated in the UGC sponsored refresher course in the subject of Environmental Sciences conducted by Academic Staff College University of Jammu	21 st Nov. 2012 to 11 th Dec. 2012

12	Dr. Sanjana Kaul	Attended and participated in Indo-Italian Workshop on Bacteria and fungi for environmental sustainability organised by Embassy of Italy and Amity University	Nov. 29 - Dec. 1, 2010
13	Dr. Madhulika Bhagat	Workshop on “Trends in Bioinformatics” organized by Bioinformatics Centre ,School of Biotechnology, University of Jammu, Jammu & BIF Lab, School of Biotechnology, Shri Mata Vaishno Devi University, Katra	16 th to 19 th March, 2009
14	Dr. Madhulika Bhagat	Workshop on “Bioinformatics: Converging Data to Knowledgebase” organized by Shri Mata Vaishno Devi University, Katra and School of Biotechnology, University of Jammu	6 th -9 th 2010
15	Dr. Madhulika Bhagat	One day workshop on Right to Information, organised by Directorate of Internal Quality Assurance in collaboration with office of the public information officer, University of Jammu	4 th Nov., 2011
16	Dr. Madhulika Bhagat	Mentorship workshop for women scientists for NASc complex , New Delhi, organised by DBT , Govt of India & BCIL	14 th Nov., 2011
17	Dr. Madhulika Bhagat	Workshop on “Development of concepts in Modern biology” at School of Life Sciences , JNU, New Delhi, India	6 th -9 th February, 2012
18	Dr. Madhulika Bhagat	Brainstorming session/Awareness workshop for “Developing and Identification of Location specific R&D and Demonstration projects for Scheduled caste and Scheduled Tribes’ organized by University of Jammu in collaboration with J&K State Council for Science and Technology (DST, GOI), J&K	25 th September, 2012
19	Dr. Ritu Mahajan	Workshop on “Trends in Bioinformatics” organized by Bioinformatics Centre ,School of Biotechnology, University of Jammu, Jammu & BIF Lab, School of Biotechnology, Shri Mata Vaishno Devi University, Katra	16 th to 19 th March, 2009
20	Dr. Ritu Mahajan	Workshop on “Bioinformatics: Converging Data to Knowledgebase” organized by Shri Mata Vaishno Devi University, Katra and School of Biotechnology, University of Jammu	6 th -9 th 2010
21	Dr. Ritu Mahajan	Attended and participated in the UGC sponsored refresher course in the subject of Environmental Sciences conducted by Academic Staff College University of Jammu	21 st Nov. 2012 to 11 th Dec. 2012

Faculty Improvement courses			
22	Prof. M. K. Dhar	DBT-Short Term Training Course on ‘Bioprocess Engineering’ Organized by School of Biotechnology, University of Jammu, Jammu	10 th Dec 2014 to - 24, Dec, 2014
23	Dr. Jyoti Vakhlu	DBT-Short Term Training Course on ‘Bioprocess Engineering’ Organized by School of Biotechnology, University of Jammu, Jammu	10 th Dec 2014 to - 24, Dec, 2014
24	Dr. B.K. Bajaj	DBT-Short Term Training Course on ‘Bioprocess Engineering’ Organized by School of Biotechnology, University of Jammu, Jammu	10 th Dec 2014 to - 24, Dec, 2014
25	Dr. Sanjana Kaul	DBT-Short Term Training Course on ‘Bioprocess Engineering’ Organized by School of Biotechnology, University of Jammu, Jammu	10 th Dec 2014 to - 24, Dec, 2014
26	Dr. Madhulika Bhagat	General Orientation Course (UGC-Sponsored) attended organized by UGC Academic Staff college, University of Jammu.	19/10/2009 to 16/11/1009
27	Dr. Madhulika Bhagat	Faculty improvement programme on MS PowerPoint, organized by Department of Life Long Learning, University of Jammu	3 rd Oct 2011 to 17 th November, 2011
28	Dr. Madhulika Bhagat	Refresher course (UGC-sponsored) in the subject Environmental (ID) organized by UGC Academic Staff College, University of Jammu.	08-02-2014 to 28-02-2014
29	Dr. Madhulika Bhagat	DBT-Short Term Training Course on ‘Bioprocess Engineering’ Organized by School of Biotechnology, University of Jammu, Jammu	10 th Dec 2014 to - 24, Dec, 2014
30	Dr. Ritu Mahajan	DBT-Short Term Training Course on ‘Bioprocess Engineering’ Organized by School of Biotechnology, University of Jammu, Jammu	10 th Dec 2014 to - 24, Dec, 2014
31	Dr. Ritu Mahajan	Faculty improvement programme on MS PowerPoint, organized by Department of Life Long Learning, University of Jammu	24 th Feb. 2012 to 12 th March, 2012
32	Dr. Ritu Mahajan	Orientation course conducted by Computer Science, University of Jammu	15 th December, 2010 to 11 th January, 2011

28. Student projects (w.e.f. 1st June 2009 to 28th February 2015)

- a percentage of students who have done in-house projects including inter-departmental projects : **100%**
- b percentage of students doing projects in collaboration with other universities industry / institute : nil

29. Awards / recognitions received at the national and international level by Faculty (w.e.f. 1st June 2009 to 28th February 2015)

Prof. M. K. Dhar

Awarded DST-DAAD International Collaborative Research project and visited Leibniz Institute of Plant Genetics and Crop Research, Germany w.e.f. 26th Nov. 2011 to 12th Dec. 2011

Awarded Ekbote Prize by the Maharashtra Association for Cultivation of Science.

Awarded distinguished Scientist Award by the Society for Plant Research.

Appointed as Controller of Examinations, University of Jammu, Jammu

Appointed as Registrar, University of Jammu.

Dr. Jyoti Vakhlu

Awarded 2nd prize in 3rd Global Conference on Plant pathology for food security. Dr Norman E Borlaug Memorial celebrations, organized by Indian Society of Mycology and Plant Pathology and Maharana Pratap University of Agriculture & technology, Udaipur, January 10-13, 2012.

Awarded 2nd prize in poster presentation in Symposium on Microbial Diversity and Bio-prospecting held at Department of Botany, University of Jammu on 28-30 October 2011.

Best paper award in 2010, in National conference National seminar on technological innovations in Saffron, November 25-26 2011 SKUAST Kashmir.

Dr. B.K. Bajaj

Promoted as Associate Professor in the School of Biotechnology

VLIR-UOS (Govt. of Belgium) Short Research Stay Scholarship-2014, at Antwerp University, Antwerpen, Belgium, April 2014, (Probiotics for Health).

Commonwealth Fellowship-2013, at Aberystwyth University UK, Sep.2013-Nov.2013 (Biomass to Bioethanol).

Visiting Faculty Fellowship- DST-2013 (Govt. of India) for visiting University of Delhi for Research interactions, Dec. 2012; (Microbial Xylanases).

ERASMUS MUNDUS Invited Professorship-2012 for -Visiting University of Naples, Italy to deliver Seminars on Food/Fermentation Biotechnology (Nov. 2012) .

INSA-Visiting Scientist Fellowship-NDRI, Karnal, May-June 2012, Rumen Microbes for cellulases and xylanases).

Awarded International Travel Grant-2012 (DST, GOI) for Presenting paper at Annual Symposium - Frontiers in Biological Catalysis 10-12 Jan. 2012, Cambridge University, UK.

INDO-US (ASM-IUSSTF)-2011 Visiting Professorship in Microbiology - Ohio State University, US Mar. 2011-Aug 2011, (Cellulase / xylanase enzymes for biomass saccharification).

Dr. Sanjana Kaul

North Zone Councillor of the Society for Mycology and Plant pathology for the year 2013.

Co - Organizing Secretary of the Indian Society of Mycology and Plant Pathology North Zone Meet and National Symposium on “Microbial Diversity and Bio-Prospecting” organized in the Department of Botany, University of Jammu from 29th -30th October, 2010.

Dr. Madhulika Bhagat

Fellow Award Society for Applied Biotechnology – 2011.

Dr. Ritu Mahajan

Overall Achievement Award in Conference on “Perspectives in Phyllosphere Biology”, Amity University, Noida, February 15-17, 2012.

30. Seminars/ Conferences/Workshops organized and the source of funding (national / International) with details of outstanding participants, if any. (w.e.f. 1st June 2009 to 28th February 2015)

Workshop	National / International	Source of funding	Outstanding participants
National workshop on “Bioinformatics: trends in Bioinformatics w.e.f 16-19 th March, 2009	National	DST, GOI	Prof. D. K. Gupta Allahabad University Prof. V.Verma SMVDU, Katra Dr. Amit Nargotra IIIM, Jammu
First Indian Virtual Conference “Inbix 10” on Bioinformatics w.e.f 13 th -14 th February, 2010	International		
National workshop on Bioinformatics : “converting data to knowledgebase’ w.e.f 06-09 September, 2010	National	DST, GOI	1. Dr. D. Sunder, IIT Delhi
Symposium on “Cheminformatics & drug Discovery w.e.f 23 rd -24 th September, 2011	National		Dr. Raghu Schrodinger India Pvt. Ltd.
National Symposium on Bioinformatics “Challenges in the post-genomic era” on 2 nd February, 2012	National	DST, GOI	Prof. B.S. Gill Prof. T. Mahapatra Prof. R.N.K. Bamezai

The School organized the New Biology session w.e.f 5-7 th February, 2014	National	Indian Science Congress Association	Prof. Parimal C. Sen Prof. U.C. Banerjee Dr. Prahlad K. Seth Dr. B.N. Pandey Prof. V. Verma
Short Term Training Course (DBT-STTC): Bioprocess Engineering for University/Collage faculty w.e.f 10 th -24 th , December, 2014	National	DBT, GOI	Prof. T. Satyanarayana Prof. R.S. Singh Prof. Neeraj Dilbaghi Dr. Swarkar Prof. V. Verma
Biotechnology session of 10 th J&K Science Congress w.e.f 14 th -16 th March, 2015	National	J&K Council for Science and Technology,	Prof. Rajendra Prasad Prof. Guleria Prof. Prabhjeet Singh Dr. Naveen Anand

31. Code of ethics for research followed by the departments

There is an Institutional Ethical Committee in place which gives clearance for projects requiring ethical clearance.

The proposals to be sent to different funding agencies are discussed in the Departmental Research Committee before being sent to Dean Research Studies for further action.

The synopsis, M. Phil, Ph. D thesis, Research publications etc. are checked for any Plagiarism

32. Student profile programme-wise: (w.e.f. 1st June 2009 to 28th February 2015)

Biotechnology

Name of the Prog.	Applications Received			Selected						Pass percentage					
				Male			Female			Male			Female		
	M.Sc BT	M.Phil	Ph.D	M.Sc	M.Phil	Ph.D	M.Sc	M.Phil	Ph.D	M.Sc	M.Phil	Ph.D	M.Sc	M.Phil	Ph.D
2009-11	Conducted by JNU	-	90	4	-	4	9	-	2	100 %	-	-	100%	-	Ongoing
2010-12	-do-	12	-	3	-	-	11	7	1	-do-	100%	-	-do-	-	-do-
2011-13	-do-	15	58	3	4	1	11	2	1	-do-	-do-	-	-do-	100 %	-do-
2012-14	-do-	18	69	5	-	4	9	-	1	80%	-	-	100%	-	-do-
2013-15	-do-	75	90	8	1	6	6	5	-	ongoing	-	-	ongoing	-	-do-
2014-16	-do-		32	-	-	3	-	-	2		-	-	-	-	-

Microbiology

Name of the Prog.	Applications Received			Selected						Pass percentage					
				Male			Female			Male			Female		
	M.Sc Microbiology	M. Phil	Ph.D	M.Sc	M. Phil	Ph. D	M. Sc	M. Phil	Ph.D	M.Sc	M. Phil	Ph.D	M.Sc	M. Phil	Ph.D
2009-11	76	-	-	3	-	-	7	-	1	66.66%	-	-	85.71%	-	1
2010-12	116	-	-	2	-	-	8	-	-	50%	-	-	75%	-	-
2011-13	58	-	-	1	-	-	9	-	-	100%	-	-	88.88%	-	-
2012-14	40	-	-	1	-	1	9	-	-	100%	-	ongoing	88.88%	-	-
2013-15	34	-	-	0	-	-	3	-	-	ongoing	-	-	ongoing	-	1
2014-16	54	-	-	0	-	-	1	-	-	ongoing	-	-	ongoing	-	-

Biochemistry

Name of the Prog.	Applications Received			Selected						Pass percentage					
				Male			Female			Male			Female		
	M.Sc Biochemistry	M. Phil	Ph.D	M.Sc	M. Phil	Ph.D	M.Sc	M. Phil	Ph.D	M.Sc	M. Phil	Ph.D	M.Sc	M. Phil	Ph.D
2009-11	72	-	-	3	-	-	12	-	-	-	-	-	-	-	-
2010-13	92	-	-	5	-	-	10	-	-	-	-	-	-	-	-
2011-13	-	-	-	3	-	-	10	-	-	-	-	-	-	-	-
2012-14	-	-	-	1	-	-	11	-	-	-	-	-	-	-	-
2013-15	-	-	-	1	-	-	4	-	-	-	-	-	-	-	-
2014-16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

33. Diversity of students

Biotechnology

Name of the Program -me	% of students from the same university			% of students from other universities within the state			% of students from universities outside the state			% of students from other countries		
	M.Sc	M.Phil	Ph.D	M.Sc	M.Phil	Ph.D	M.Sc	M.Phil	Ph.D	M.Sc	M.Phil	Ph.D
2009-10	46	-	-	Nil	-	-	53.8	-	-	-	-	-
2010-11	35.11	85.7	100	14.21	-	-	50	14.2	-	-	-	-
2011-12	64.2	100	50	0.071	-	-	28.5	-	50	-	-	-
2012-13	71.4	-	80	14.2	-	20	14.2	NA	-	-	-	-

Microbiology

Name of the Progra -mme	% of students from the same university			% of students from other universities within the state			% of students from universities outside the state			% of students from other countries		
	M.Sc	M.Phil	Ph.D	M.Sc	M.Phil	Ph.D	M.Sc	M. Phil	Ph.D	M.Sc	M.Phil	Ph.D
2009-10	80	-	-	-	-	-	20	-	-	-	-	-
2010-11	30	-	-	20	-	-	50	-	-	-	-	-
2011-12	80	-	-	-	-	-	20	-	-	-	-	-
2012-13	100	-	-	-	-	20	-	-	-	-	-	-

Biochemistry

Name of the Programme	% of students from the same university			% of students from other universities within the state			% of students from universities outside the state			% of students from other countries		
	M.Sc	M.Phil	Ph.D	M.Sc	M.Phil	Ph.D	M.Sc	M.Phil	Ph.D	M.Sc	M.Phil	Ph.D
2009-10	90.14	-	87.5	5.63	-	Nil	4.22	-	11.11	-	-	-
2010-11	-	-	-	-	-	-	-	-	-	-	-	-
2011-12	-	-	-	-	-	-	-	-	-	-	-	-
2012-13	-	-	-	-	-	-	-	-	-	-	-	-

34. How many students have cleared Civil Services and Defence Services examinations, NET, SET, GATE and other competitive examinations? Give details category-wise. (w.e.f. 1st June 2009 to 28th February 2015)

Biotechnology

Name of the students	Year	NET, JRF, SET, GATE	Placement
Rupali Sharma	2009-10	DBT- JRF, CSIR JRF	FCI, Jammu
Ravish Sharma	2009-10	NET-LS	Ph.D at NII, New Delhi
Akhil Kotwal	2009-10	DBT- JRF, CSIR- JRF	Ph.D at CCMB, Hyderabad
Rohini Bhat	2009-10	CSIR-JRF	Ph.D at IIIM, Jammu
Mehak Gupta	2009-10	DBT-JRF, CSIR- JRF	Ph.D at IIIM, Jammu
Tanvi Sharma	2009-10	CSIR NET- LS, GATE	Ph.D at University of Jammu
Anju Bhasin	2009-10	-	Working in Pune
Sunny Dholpuria	2009-10	DBT- JRF, CSIR- JRF	Ph.D at NDRI Karnal
Nisha Kumari	2009-10	GATE	-

Kanika Ujla	2009-10	-	Working in Delhi
Nitika Gupta	2009-10		Teacher in School
Syed Tabia Andrabi	2009-10		M.Phil at University of Jammu
Nishant Gupta	2009-10	CSIR -LS, SET, GATE	M.Phil at University of Jammu
Kaurab Singh	2010-11	CSIR-JRF	Ph.D at IGIB, New Delhi
Rikita Gupta	2010-11	CSIR- JRF	Ph.D at University of Jammu
Shalini Verma	2010-11	CSIR- NET LS	Ph.D at NII, New Delhi
Ayushi Tiwari	2010-11	CSIR -NET LS	Working at Gurgaon
Pumitra Bhat	2010-11	-	Working in FCI, Jammu
Bhamini Sharma	2010-11	CSIR-LS(NET-LS)	Working in Lupin, Pune
Sakshi Sharma	2010-11	CSIR- NET LS, Inspire	Ph.D at University of Jammu
Tishu Devi	2010-11	CSIR NET LS	Ph.D at SMVDU
Gourav Modi	2010-11	-	J&K Bank, P.O. Jammu
Mowkshi Khular	2010-11	-	Ph.D at IIIM, Jammu
Aparna Bhat	2010-11	-	Working at Cadila Pharmaceuticals, Jammu
Archana Bhat	2011-12	Inspire fellow	Ph.D at University of Jammu
Harpreet Kour	2011-12	CSIR- NET LS	Ph.D at PGI, Chandigarh
Sonal Mahajan	2011-12	CSIR- NET LS, ARS NET, DBT- JRF	Ph.D at IMTECH, Chandigarh
Vinica Dhar	2011-12	DBT-JRF, CSIR- NET	Ph.D at IISER Mohali
Rehana	2011-12	CSIR- NET-LS	
Supriya Sharma	2011-12	ARS NET	M.Phil at University of Jammu
Mehak Gupta	2011-12	-	M.Phil at University of Jammu
Preeti Choudhary	2011-12	-	Project fellow at Jammu Univ.

Puneet Kotwal	2012-13	Inspire Fellow	Self employed
Monila	2012-13	-	B.Ed Jammu
Younis Majeed	2012-13	GATE	-
Monika Kumari	2012-13	-	B.Ed Jammu
Pooja Sharma	2012-13	-	Project fellow at University of Jammu
Stazin Dawa	2012-13	DBT JRF	IGIB, New Delhi
Shilpi Sharma	2012-13	-	B.Ed
Rekha Chouhan	2013-14	GATE	-

Biochemistry

S. No.	Name of the students	Year	NET, JRF, SET, GATE Inspire fellowship	Placement
1	Ashok	2008-10	Inspire fellowship	Ph.D, IIIM, Jammu
2	Vidushi Khajuria	2009-11	Inspire fellowship	Ph.D, IIIM, Jammu
3	Bhavana Bhan	2009-11	Inspire fellowship	Ph.D, University of Jammu
3	Ramanjeet Kour	2010-12	Inspire fellowship	Ph.D, University of Jammu
4	Lubna Aslam	2011-13	Inspire fellowship	Ph.D, University of Jammu
5	Sonam	2012-14	Inspire fellowship	B.Ed

35. Student progression (w.e.f. 1st June 2009 to 28th February 2015)

Biotechnology

Student progression	Percentage against enrolled
UG to PG	N.A.
PG to M.Phil.	4
PG to Ph.D.	17
Ph.D. to Post-Doctoral	1
Employed <ul style="list-style-type: none"> • Campus selection • Other than campus recruitment 	14.2% 37.5%
Entrepreneurs	

Biochemistry

Student progression	Percentage against enrolled
UG to PG	N.A.
PG to M.Phil.	Nil
PG to Ph.D.	8
Ph.D. to Post-Doctoral	-
Employed <ul style="list-style-type: none"> • Campus selection • Other than campus recruitment 	Nil Nil
Entrepreneurs	

Microbiology

Student progression	Percentage against enrolled
UG to PG	-
PG to M.Phil.	Nil
PG to Ph.D.	3
Ph.D. to Post-Doctoral	-
Employed <ul style="list-style-type: none">● Campus selection● Other than campus recruitment	
Entrepreneurs	

36. Diversity of staff

Percentage of faculty who are graduates	
of the same University	3
from other universities within the State	Nil
From Universities from other States	4
From Universities outside the country	Nil

37. Number of faculty who were awarded M.Phil., Ph.D., D.Sc. and D.Litt. during the assessment period (w.e.f. 1st June 2009 to 28th February 2015)

One

38. Present details of departmental infrastructural facilities with regard to

- a) Library Books : 2036
- b) International Journals : 8
- c) Indian Journals : 21
- d) Internet facilities for staff and students : Bioinformatics lab having 40 computers, labs and faculty rooms equipped with internet facility, Wi fi connectivity on laptops
- e) Total number of class rooms : 4

39. List of doctoral, post-doctoral students and Research Associates (w.e.f. 1st June 2009 to 28th February 2015)

No. of registered Ph.D scholars : 21

	Biotechnology	Microbiology	Biochemistry
2009	6	2	2
2010	-	-	-
2011	1	-	1
2012	2	1	-
2013	5	-	-
2014	-	-	1

- Diploma in Bioinformatics :- It was surveyed that no such innovative programme is offered in the J&K State. The proposal was funded by UGC, New Delhi under Innovative Programmes.

- The faculty regularly modifies the curriculum based on teaching-learning-evaluation and feedback. The changes are discussed and incorporated in the curriculum. Regular Board of Studies meetings are held.

- ii. Students on staff, curriculum and teaching-learning-evaluation and how does the department utilize the feedback?

The department takes the feedback from the students and after threadbare discussions tries to add on whatever is deemed fit.

- iii. Alumni and employers on the programmes offered and how does the department utilize the feedback?

Alumni :- Yes

Employers :- Yes

The feed back is discussed and wherever required the changes and suggestions are incorporated.

43. List the distinguished alumni of the department (maximum 10)

1. Dr. Yash Paul Khajuria, Principal Investigator (DST Fast Track Project)
2. Mr. Parvez Singh Slathia, Assistant Professor, SMVDU, Katra
3. Mr. Rahul Sharma, Assistant Professor, GGM Sc. College, Jammu
4. Ms. Kiran Bala, Assistant Professor, Women College, Gandhi Nagar, Jammu
5. Dr. Khalid Zaffer Massoodi, Assistant Professor, SKUAST, Kashmir
6. Ms. Reema Roshan, ICMR, Jr. Scientist
7. Mr. Sumeer Raina, MERCK, Industry
8. Ms. Monika Sharma, As a resource person in Biotech company
9. Mr. Ashwani Sharma, Post doc in USA
10. Ms. Shaheena Parween, ICGEB New Delhi

44. Give details of student enrichment programmes (special lectures / workshops / seminar) involving external experts. (w.e.f. 1st June 2009 to 28th February 2015)

Lectures organized by the School

01. Lecture on “454 Sequencing : A tool for genetic discovery and analysis” by Roche on 7th August, 2012
02. Lecture on “Recent trends in Post Optical Massive parallel Oligo Sequence” by ABI (Ion Torrent) on 13th August, 2012
03. Lecture on “Tools of Post Genomics Era” by Illumina on 27th August, 2012
04. Lecture on “Intellectual Property Rights in Agriculture” by Prof. Bushan L Jalali Hisar Agricultural University, Hisar on 21st December, 2012

05. Organized a special lecture on “Biology of B chromosomes” by Dr. Andreas Houben, IPK, Germany on 27th April, 2010
06. Organized a special lecture under popular science lecture series on “Evolution of Species via Genome recombination” by Dr. Andreas Houben, IPK, Germany on 28th April, 2010

Special Lectures delivered by external experts

01. Prof. H.Y. Mohan Ram, University of Delhi, Delhi
02. Prof. Akhilesh Tyagi, Director, NIPGR, New Delhi
03. Prof. R.N.K Bamezai, Vice-Chancellor, SMVDU, Katra
04. Prof. E. Hasnain, Vice-Chancellor, University of Hyderabad, Hyderabad
05. Prof. G. N. Qazi, Vice-Chancellor, Jamia Hamdard University, New Delhi
06. Prof. S. Bhattacharya, Director, Indian Institute of Geomagnetism, Mumbai
07. Dr. A. Mukhopadhyay, Advisor, DST, New Delhi
08. Dr. Manoj Prasad, Sr. Scientist, NIPGR, New Delhi
09. Prof. J.P. Khurana, Delhi University South Campus, New Delhi
10. Prof. B.S. Gill, Distinguished Professor, Kansas State University USA.
11. Prof. Andreas Houben Leibniz Institute of Crop Science and Genetics, Germany
12. Prof. K.L. Dhar, Emeritus Professor
13. Dr. P. Srinivasa Rao, ICRISAT, Hyderabad
14. Prof. T. Satyanarayana, Delhi University South Campus, New Delhi.
15. Prof. Neeraj Dilbaghi, Department of Biotechnology, Guru Jambheshwar University, Hisar
16. Prof. V Verma, Shri Mata Vaishnav Devi University, Katra
17. Dr. R Prashad, Ex Chief Scientist, IIIM, Jammu
18. Prof. U.C. Banerjee, NIPER, Mohali
19. Prof. R.S. Singh, Department of Biotechnology, Punjabi University, Patiala
20. Dr. Swarkar Sharma, Shri Mata Vaishno Devi University, Katra
21. Dr. Sharda Potukochi, Shri Mata Vaishno Devi University, Katra
22. Dr. Prabhjeet Singh, GNDU, Amritsar
23. Dr. Rakesh Thussoo, Shri Mata Vaishno Devi University, Jammu
24. Dr. Fayaz Malik, IIIM, Jammu
25. Dr. Sumit Gandhi, IIIM, Jammu

Seminars / workshops organized by the School

01. National workshop on “Bioinformatics: trends in Bioinformatics w.e.f 16th-19th March, 2009.
02. Invited Dr. Manoj Prasad, Staff Scientist, National Institute of Plant Genome Research to deliver a lecture on “Development and Application of Molecular markers in Crop Improvement on 24th June, 2009.
03. A Seminar was organized in the School wherein a lecture was delivered on “Chromatography” on 19th November, 2009.
04. A Seminar was organized on the topic “Liquid Handling Systems” on 25th November, 2009.
05. First Indian Virtual Conference “Inbix 10” on Bioinformatics w.e.f 13th-14th February, 2010.
06. National Workshop on Bioinformatics : “Converting data to knowledgebase’ w.e.f 6th–9th September, 2010.
07. Symposium on “Cheminformatics & Drug Discovery w.e.f 23rd-24th September, 2011.
08. National Symposium on Bioinformatics “Challenges in the post-genomic era” on 2nd February, 2012.
09. Organized Biotechnology Session during 5th J&K Science Congress held at University of Jammu.
10. Organized New Biology Session during 101st Indian Science Congress held at University of Jammu w.e.f 5th-7th February, 2014.
11. Short Term Training Course (DBT-STTC): Bioprocess Engineering for University/Collage faculty w.e.f 10th -24th, December, 2014.
12. Organized Biotechnology Session during 10th J&K Science Congress held at University of Jammu w.e.f 14th -16th March, 2015.
45. List the teaching methods adopted by the faculty for different programmes.
ICT, Smart Board, Group discussions, Seminars, Journal Club, Debates, Industrial trip, In house Projects
46. How does the department ensure that programme objectives are constantly met and learning outcomes are monitored?
Mid term evaluation, Academic Audit, Corrective measures are taken as and when required
Internal Assessment test monitored by faculty
47. Highlight the participation of students and faculty in extension activities (w.e.f. 1st June 2009 to 28th February 2015)

Lectures given by the faculty in Schools / colleges to sensitize the students about the subject

Popular / Invited lectures by faculty

Organization, involvement and participation in the workshops / conferences by faculty and students

Debates / Guest lectures for general public awareness

48. Give details of “beyond syllabus scholarly activities” of the department.

Quizzes, Research presentations, Industrial trip to industries and other research institutions, Journal Club, Seminars, Invited Talks, Guest/Special Lectures delivered by eminent scientists

49. State whether the programme/ department is accredited/ graded by other agencies? If yes, give details.

Yes the Department is accredited by DBT, Govt. of India, BCIL and Biospectrum. Recently, in Oct 2014, the Department was ranked “A” by DBT, Govt. of India

50. Briefly highlight the contributions of the department in generating new knowledge, basic or applied.

Research Papers, Books, National and International Journals, Research Projects, Workshops, Implementation of new knowledge in the form of research projects is generated on frontier research areas like Probiotics, Plant Biotechnology, Microbial Biotechnology, Natural Product Research etc.

51. Detail five major Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department.

Strengths :

1. Good student teacher ratio : 1:2
2. Excellent research infrastructure
1. Well equipped labs
2. Extramural research projects
3. Highly learned and motivated faculty

Weaknesses:

1. Limitation of Biotech industries in the area
2. Location
3. Faculty in specialized courses required
4. Academia industry interface lacking

5. Technical manpower / staff for maintaining / running for high class facility in the School
6. Lack of awareness and resources from the established industries

Opportunities:

1. J&K is the hot spot of rich unexplored biodiversity which needs thorough exploration
2. World class research infrastructure facility
3. NGS facility is being developed in the School, which is the only facility of its kind in the state of J& K and could be offered to other Institutes of the State as well.
4. Establishment of apple repository at Bhaderwah which would provide not only job opportunity for the locals but will maintain elite germplasm which could also be made available to the farmers.

Challenges:

1. To find a niche on the global map
 2. Job employability
 3. Publications in high Impact journals
52. Future plans of the department.
1. Establish Animal House facility
 2. Bioprocess facility
 3. To achieve excellence in teaching / research / academics
 4. Facility for cryopreservation of highly endangered plants

EVALUATIVE REPORT OF THE DEPARTMENT

1. Name of the Department - Department of Botany
2. Year of establishment - 1998
3. Is the Department part of a School/Faculty of the university? Faculty of Life Sciences
4. Names of programmes offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., D.Sc., D.Litt., etc.) – PG, M.Phil., Ph.D
5. Interdisciplinary programmes and Departments involved -
Two open papers (Plant propagation in Semester 3rd and Entrepreneurship in Botany in Semester 4th) for students of Departments other than Department of Botany, University of Jammu under Choice Credit Based System
6. Courses in collaboration with other universities, industries, foreign institutions, etc.
Ph.D., Post Doctoral Research and Projects.
7. Details of programmes discontinued, if any, with reasons -
None so far
8. Examination System: Annual/Semester/Trimester/Choice Based Credit System-
Semester System and Choice Based Credit System.
9. Participation of the Department in the courses offered by other Departments.-
Students opt for one course each in 3rd and 4th Semester in Departments other than the Department of Botany under the Choice Based Credit System.
10. Number of teaching posts sanctioned, filled and actual (Professors/Associate Professors/Asst. Professors/others)

	Sanctioned	Filled Under Direct Recruitment	Filled Under Career Advancement Scheme	Total
Professor	03	02	01	03
Associate Professor	03	-	01	01
Assistant Professor	06	03	-	03
Contractual	-	-	-	-

11. Faculty profile with name, qualification, designation, area of specialization, experience and research under guidance

Name of the Faculty Member	Qualification	Designation	Specialization	No. of years of experience	No. of Ph.D./M.Phil students guided for the last 5 years
Prof. Anima Langer***	Ph.D	Professor	Cytogenetics Bryology	30	M.Phil- 11 Ph.D- 2
Prof. Rani Magotra**	Ph.D	Professor	Taxonomy Reproductive Biology Biodiversity and Conservation	26	M.Phil- 6 Ph.D - 1
Prof. Geeta Sumbali	Ph.D.	Professor	Microbiology Mycology Mycotoxicology Plant Pathology	28 years	M.Phil- 6 Ph.D- 2
Prof. Yash Pal Sharma	Ph.D.	Professor	Mycology and Plant Pathology	19 years	M.Phil- 11 Ph.D- 4
Prof. Namrata Sharma	Ph.D.	Professor	Plant Reproduction	18 years	M.Phil- 8 Ph.D- 5 + 1
Dr. Veenu Kaul	Ph.D.	Associate Professor	Cytogenetics and Reproductive Biology	15 years	M.Phil- 6 Ph.D- 5
Dr. Sikander Pal	Ph.D.	Assistant Professor	Plant Physiology Plant Biochemistry	5 years	M.Phil- 1 Ph.D- Nil
Dr. Geeta	Ph.D.	Assistant Professor	Cytogenetics Plant Tissue Culture	5 years	M.Phil- Nil Ph.D- Nil
Dr. Harish Chander	Ph.D.	Assistant Professor	Ecology Plant Taxonomy	4 years	M.Phil- Nil Ph.D- Nil

** Superannuated on 31st Oct 2012

*** Superannuated on 31st March 2014

12. List of senior Visiting Fellows, adjunct faculty, emeritus professors

Nil

13. Percentage of classes taken by temporary faculty – programme-wise information

M.Sc- 15-20%

14. Programme-wise Student Teacher Ratio-

M.Sc.- 7:1

M.Phil. - 1-2:1

Ph.D. - 1-2:1

15. Number of academic support staff (technical) and administrative staff: sanctioned, filled and actual

Category	Number of Permanent Employees	Number of Vacant Positions	Number of permanent positions filled during the Year	Number of positions filled temporarily
Administrative Staff	05	Nil	01	Nil
Technical Staff	06	02	Nil	Nil

16. Research thrust areas as recognized by major funding agencies

Thrust areas of Research

- Exploration of plant pathogens and mycotoxicology
- Analysis of soil micromycetes and keratinophilic fungi
- Reproductive Biology of economically important and RET taxa, and weeds.
- Morphological and Molecular Diversity of vascular plants
- Mushroom Diversity and Ethnomycology
- Analysis of Cytological variability
- Plant Taxonomy and Biosystematics
- Ecology and Ethnobotany

17. Number of faculty with ongoing projects from a) national b) international funding agencies and c) Total grants received. Give the names of the funding agencies, project title and grants received project-wise.

Name of PI	Title of Project	National/ International	Funding Agency	External Support	Status Completed/Ong oing
Prof. Geeta Sumbali	a. Bioactive molecules from micromycetes of Jammu and Kashmir state. (2008-12).	National	CSIR	Rs.27 lacs	Completed
	b. Investigations on the prevalence and enzymatic potential of fungi causing onychomycosis. (2012-15)	National	UGC	Rs.12.78 lacs	Completed
	c. Cultivation & productive potential of milky mushroom (<i>Calocybe indica</i> P&C) on different lignocellulosic wastes of Jammu Division. (2014 onwards)	National	GBPIHED	Rs.8.62 lacs	Ongoing
Prof. Yash Pal Sharma	a. Mycobial and Mycotoxin contamination in dried Apricots and Date Plum (<i>Persimmons</i>) from Jammu province (2009-11).	National	UGC	Rs. 3.00 lacs	Completed
	b. Diversity and ethnomycology of wild macrofungi of Kistwar High Altitude National Park, Jammu and Kashmir. (2015)	National	UGC	Rs.10.90 lacs	Recommended
Prof. Namrata Sharma	a. Reproductive biology of rare, endangered and threatened tree species. (2010)	National	MoEF	Rs.36.9 lacs	Ongoing
	b. Conservation and management of pollinators for sustainable agriculture through an ecosystem approach. (2010)	International	FAO, Rome	Rs.30.00 lacs	Ongoing
	c. Studies on the sex expression, pollination mechanism and breeding system of some common cucurbits of Jammu district (2015).	National	UGC	Rs.17.07 lacs	Recommended
Dr. Veenu Kaul	a. Cytological and Molecular characterization of diversity in <i>Allium sativum</i> . (2007-10)	National	DST, GOI	Rs. 23.58 Lacs	Completed
	b. Survey of raw material availability and genetic diversity in seabuckthorn in Ladakh. (2009-13)	National	DBT	Rs. 37.24 lacs	Completed
	c. Characterization and consolidation of <i>Hippophae</i> genetic resources and propagation of elite genotypes for varietal evaluation. (2014 onwards)	National	DBT, GOI	Rs. 31.3 lacs	Ongoing

Dr. Geeta	a. Assessment of current status and cytomorphological diversity in five cucurbit genera from North-west India and determining molecular diversity in <i>Coccinia indica</i> .(2014)	National	DBT	Rs.18.92 lacs	Ongoing
Department	a. University Grants Commission Assistance to the department at the level of DRS-I for 5 years (2011-2016)	National	UGC, SAP	Rs. 40.9 lacs	Ongoing

18. Inter-institutional collaborative projects and associated grants received

- a) National collaboration
b) International collaboration

S.No.	Title of the Project	National/ International	Collaborative Organisations	Grant
1.	Conservation and management of pollinators for sustainable agriculture through an ecosystem approach (2010)	International	a. FAO, Rome b. GBPIHED, Almora	Rs. 30.00 lacs
2.	Reproductive biology of rare, endangered and threatened tree species (2010)	National	a. MoEF b. University of Delhi c. University of Agricultural Sciences, Bengaluru d. University of Nagaland, NEHU, Shillong	Rs.36.9 lacs
3.	Survey of raw material availability and genetic diversity in seabuckthorn in Ladakh (2009-13)	National	a.DBT, GOI b.IHBT, Palampur, c.TERI, Delhi & Guwahati d.DST, Sikkim	Rs. 37.24 lacs.
4.	Characterization and consolidation of <i>Hippophae</i> genetic resources and propagation of elite genotypes for varietal evaluation.(2014 onwards)	National	a.DBT, GOI b.IHBT, Palampur c.TERI, Delhi & Guwahati d.DST, Sikkim	Rs. 31.3 lacs
5.	Bioactive molecules from micromycetes of Jammu and Kashmir state(2008-12)	National	a.CSIR b.IICB, Kolkata c.ITRC, Lucknow d.CDRI, Lucknow e.IMTECH, Chandigarh	Rs.27 lacs

19. Departmental projects funded by DST-FIST; UGC-SAP/CAS, DPE; DBT, ICSSR, AICTE, etc.; total grants received.

S.No.	Scheme	Title	Grant
1.	UGC-SAP (DRS-I) (2011-16)	Biodiversity and Conservation of Rare and Threatened Plants	Rs. 40.9 lacs

20. Research facility / centre with

- Instrumentation Lab-I
- Instrumentation Lab-II

Major facilities available in both of the labs.

- a. UV-VIS Spectrophotometer
- b. Refrigerated High Speed Centrifuges
- c. HPLC
- d. Ultrasonicators
- e. Deep freezers (-20⁰) and (-80⁰)
- f. Compound and Stereo-microscope with Photographic attachment
- g. Gel documentation systems
- h. Microtome
- i. Thermal Cycler
- j. Rota evaporator
- k. Weighing balance

21. Special research laboratories sponsored by / created by industry or corporate bodies

Nil

10. Publications:

- a. Number of papers published in peer reviewed journals (national / international) - 201
- b. Monographs - Nil
- c. Chapters in Books - 05
- d. Edited Books - Nil

- e. Books with ISBN with details of publishers –
1. Sumbali G. and Mehrotra RS (2009). Principles of Microbiology, First Edition, Tata Mc Graw – Hill Education Pvt. Ltd. ISBN. 0-07-014120-7.
 2. Sumbali G. (2010). The Fungi', 2nd Edition, Narosa Publishing House Pvt. Ltd. (Narosa Publications). ISBN. 978-81-8487-037-4.
 3. Dutt H.C. (2010) Ecology of Medicinal Plants of Neeru Watershed in NW Himalaya, LAMBERT Academic Publishing AG & Co. KG, Germany. ISBN 978-3-8383-8591-4.
 4. Bhellum B.L and Magotra R. (2011). A Catalogue of Flowering Plants of Doda, Kishtwar and Ramban districts (Kashmir Himalaya), Bishen Singh, Mahendra Pal Singh, Dehradun.
 5. Bedi Y.S, Dutt H.C and Kaur H. (2011). Plants of Indian Systems of Medicine (Volume-I), LAMBERT Academic Publishing AG & Co. KG, Germany. ISBN 978-3-8465-1743-7.
 6. Bedi Y.S, Dutt H.C and Kaur H. (2011). Plants of Indian Systems of Medicine (Volume-II), LAMBERT Academic Publishing AG & Co. KG, Germany. ISBN 978-3-8473-1795-1.
 7. Jitender P. (2011) The Oedogoniales of Jammu (J&K), India: Taxonomic and Ecological studies on the Oedogoniales, LAMBERT Academic Publishing, Germany. ISBN 978-3-8383-9763-4.
 8. Bhellum B.L, Jee V. and Magotra R (2013). Flora Exotica of Jammu & Kashmir, Gyan Publishing House, ISBN 9788121211512.
 9. Tram L.P and Pal S. (2014). Phytohormones: a window to metabolism, signaling and biotechnological applications. (Springer Publication); ISBN - 978-1-4939-0490-7
- f. Number listed in International Database (For e.g. Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.) : 190
- g. Citation Index (average) 8.0
- h. SNIP 1.891
- i. SJR 1.149
- j. Impact Factor – range 0.3 –13.58
- k. Most of the publications have impact factor ranges 0.3 – 2
- l. h-index (MAXIMUM) 6.0
23. Details of patents and income generated : Nil
24. Areas of consultancy and income generated : Nil

25. Faculty selected nationally / internationally to visit other laboratories / institutions/ industries in India and abroad

S. No.	Name of the faculty member	Duration	Institute/ University
1.	Dr. Sikander Pal as Visiting Scientist	15.4.2011 to 15.6.2012	Chinese Academy of Sciences at Zhejiang University

26. Faculty serving in

a) National committees

1. Prof. Anima Langer

- Member, Academic Council, Kashmir University-Srinagar
- Member, Academic Council, SKUAST-Jammu
- Member, Expert Committee for Research Projects in Botany, UGC ,New Delhi

2. Prof. Geeta Sumbali

- Member, Expert Committee for Research Projects in Botany, UGC ,New Delhi
- Member, Selection Committee of some Indian Universities.
- Member, UPSC Examinations, Botany, New Delhi
- Member, Board of Studies in Microbiology, Kurukshetra University.
- Member, Board of Studies in Botany, Punjabi University, Patiala
- Member, Board of Undergraduate Studies in Botany, GNDU, Amritsar
- Member, Board of Studies in Botany & Board of Research Studies, University of Jammu.

3. Prof. Yash Pal Sharma

- Member, Board of Studies in Botany at H.P University, Shimla.

b) International committees:

1. Prof. Namrata Sharma

- Member, Review Committee, International Journal of Plant Reproductive Biology
- Co-ordinator, International Society for Studies on Sexual Reproduction in Plants (ISSSPR)

2. Prof. Veenu Kaul

a. Member, Review Committee, International Journal of Plant Reproductive Biology

c) Editorial Boards

1. Prof. Geeta Sumbali
2. Prof. Yash Pal Sharma
3. Prof. Namrata Sharma
4. Dr. Veenu Kaul
5. Dr. Harish Chander

27. Faculty recharging strategies (UGC, ASC, Refresher / orientation programs, workshops, training programs and similar programs).

Faculty Member	Seminar/Refresher/Orientation Programe/Workshop/training programme attended
Prof. Anima Langer	<ol style="list-style-type: none">1. National Conference on “Effect of Climate on Reproductive Biology of Plants” held at Agra w.e.f 7th – 8th November 2009.2. Academic Session of Botany, during “5th J&K Science Congress” held at Department of Botany, University of Jammu w.e.f. 8th -10th February, 2010 (as Convenor)3. “Global Congress on Plant Reproduction” held at Agra from 22nd – 24th October, 2010.4. SAP presentation for the Department of Botany, at UGC New Delhi on 14th December, 2010.5. “Two Day Refresher Course on Computers” organized by ASC, University of Jammu w.e.f. 14th -15th March, 2011.6. “Refresher Course in Life Sciences” at Department of Botany, University of Jammu w.e.f 14th February 2011 to 9th March 2011.7. “One-day Workshop on Setting Regional Policy Platform on Climate Change” at K.C Residency, Jammu organised by WWF on 12th March, 2011 (as organiser)8. UGC sponsored “National Seminar on Environmental Analysis and Remediation” held at Department of Botanical and Environmental Sciences, Guru Nanak Dev University, Amritsar w.e.f. 21st -22nd March, 2011.9. Brainstorming Meet on “Science and Technology Prospective for Changing India” held at University of Jammu w.e.f. 8th - 9th April, 2011.10. UGC expert committee for (a) Midterm Project Monitoring (b) Screening of fresh proposal for various Projects in November, 2011.

11. Convener, Technical Sessions Committee “7th J&K State Science Congress” held in University of Jammu w.e.f. 13th-15th October, 2011.
12. “UGC Sponsored Refresher Course in Life Sciences” held at Department of Botany, University of Jammu w.e.f. 15th February - 6th March 2012
13. Conference and Workshop on “Monitoring of Metals and Gases in Plants with Special Reference to Bryophyte Physiology and Climate Change” held at Bareilly College (U.P) w.e.f. 17th -18th December, 2012.
14. “Gene Sequencing” during the “UGC Sponsored Refresher Course in Life Sciences” on 1st February, 2013 at Department of Zoology.
15. Organized a two day “National Workshop on Bryology for College and University Teachers” held in Department of Botany, University of Jammu, w.e.f. 22nd-24th February, 2013.
16. “Third Global Congress on Plant Reproductive Biology, Conservation and Crop Improvement” organized by “The Society of Plant Reproductive Biologist”, Agra, India, w.e.f. 15th -17th December, 2014.

Prof. Geeta Sumbali

1. Organized “North Zone Meet and National Symposium on Microbial Diversity and Bioprospecting.” held from 29th-30th October 2010 in Department of Botany, University of Jammu.
2. “UGC sponsored Refresher Course in Environmental Sciences” in 2010.
3. Second INSPIRE Science Internship Camp w.e.f. 21st -25th November, 2010 as a resource person.
4. INSPIRE Science Camp w.e.f. 22nd -26th March, 2011 as a resource person.
5. Attended a Symposium of ISCA, Jammu Chapter in Oct. 2012.
6. Demonstrated two practicals during “Refresher Course in Life Sciences” organised by ASC at Department of Botany, University of Jammu w.e.f. 14th February 2011- 9th March 2011.
7. Attended the Refresher Course in Environment Science organized by ASC, University of Jammu w.e.f. 9th - 19th December 2011 as an organiser.
8. One day Symposium held at GCW for Women, Parade Ground, Jammu w.e.f. 20th October 2012 as a resources person and adjudicator.
9. Attended “General Orientation Course” organized by ASC, University of Jammu in 2013.
10. Attended “Orientation Course” as a resource person in Library Science Department, University of Jammu organized by ASC, University of Jammu on 31st December 2013.

11. Attended “Syndicate Meeting of University of Kashmir” on 26th September, 2013.
 12. Organized “Two Day Workshop on Bryology” in Department of Botany, University of Jammu w.e.f. 22nd -23th February, 2013
 13. Organized “National Workshop on Reproductive Biology for Biodiversity Conservation w.e.f. 22nd -26th November, 2013.
 14. General Orientation Course organized by ASC, University of Jammu, Jammu in Dec. 2013 as a resources person.
 15. Sectional Secretary, Plant Sciences, in Indian Science Congress held from 3th -7th February, 2014.
 16. Attended a “2-day RuTAG meet” organized by the Office of the Principal Scientific Advisor, New Delhi at University of Jammu, Jammu w.e.f. 3rd -4th December, 2014.
 17. Attended “UGC Expert Committee for Screening” of project proposals in January, 2015.
- Prof. Rani Magotra
1. Attended “5th J&K State Science Congress” in University of Jammu, w.e.f. 8th -10th February, 2010.
 2. “Environment Awareness Campaign” sponsored by the Department of Environment and Forests (Govt. of India) as a resource person
 3. Attended “7th J&K State Science Congress” in University of Jammu, w.e.f. from 13th -15th October, 2011.
 4. UGC sponsored Refresher Course in Sciences held at Department of Botany, University of Jammu w.e.f. 15th February – 6th March 2012, as a resource person.
- Prof. Yash Pal Sharma
1. Attended a “Workshop on Research Methods and Statistical Analysis” organised by Department of Commerce, University of Jammu w.e.f. 23rd -24th March, 2009 .
 2. “Three Day National Seminar on Spices: Improving Productivity and Quality with Focus on Himalayan Spices” organized by SKUAST and Directorate of Arecanut and Spices Development, Ministry of Agriculture, Calicut, Kerala at Jammu w.e.f 22nd - 24th October 2009.
 3. “National Seminar on Fungal Biodiversity and Bioprospecting in the Age of Global Warming” and 36th Annual meeting of MSI. organised by UGC_SAP Department of Botany, at Goa University, Goa w.e.f. 29th - 30th October 2009.
 4. 5th JK Science congress, organized by University of Jammu w.e.f. 8th -10th February, 2010 and presented a person.
 5. One Day Workshop-cum-Awareness Camp related to sustainability of the Environment and Role of people in Forest Preservation.” organized by Dr. Ambedkar Studies Centre, Department of Sociology, University of Jammu on 7th March, 2010.

6. North Zone meet and National Symposium on Microbial diversity and Bio-Prospecting” from 29th -30th October, 2010 organized by Department of Botany, University of Jammu and presented a paper.
7. “Three Day National Symposium on Innovations in Plant Pathology Research and Human Resource Development” organized by Junagarh Agricultural University, (Gujarat) on 24-26th Nov., 2010 and presented a paper.
8. Attended and delivered five invited lectures on “Career Options after 10 + 2” on 5th, 13th, 17th August and 14th and 22nd September 2010, at Govt. Hr. Sec. School Panjtirthi, Bahu Fort, Bishnah, Paloura and Sarwal, organized by CACE&E, University of Jammu.
9. Refresher Course organized by Department of Botany and ASC on 9th March, 2011, as a resource person.
10. General Orientation Course organized by ASC at the Department of Education, University of Jammu on 11th March, 2011, as a resource person.
11. “One-Day Workshop on Biodiversity Conservation” organized by WWF-Nature, India under National Awareness Campaign of WWF at Govt. Degree College, Udhampur, held on 7th May 2011, as a resource person.
12. National Symposium on Fungal Biology and Applications at Department of Botany, Punjabi University, Patiala w.e.f. 21st -22nd March, 2011, and presented a paper.
13. General Orientation Course and Refresher Course in Environment Sciences on 3rd and 15th December, 2011 organised by ASC, University of Jammu as a resource person.
14. 3rd Global Conference on “Plant Pathology and Food Security” held at MPUAT, Udaipur from 10th -13th January, 2012, as a resource person.
15. Attended and Symposium on “Biodiversity: Issues and Its Conservation” at Govt. Degree College, Kathua in collaboration with ISCA, Jammu Chapter on 19th March, 2012, as a resource person.
16. National Conference on “Innovative Research Trends in Biological Sciences” from 8th – 9th September, 2012 in the Department of Life Sciences, Shri Shivaji College of Art, Commerce and Science, Akola (Maharashtra) and gave an invited talk on “Wild mushrooms diversity and ethnomycology in Jammu and Kashmir, India”.
17. Attended Refresher Course organized by UGC-ASC, Amravati, University, Amravati (Maharashtra) in October, 2012, as a resource person.

18. Attended State Department of Science and Technology in November, 2012, at MAM College, Jammu.
19. Science Exhibition organized by Kendriya Vidhalaya, Sunjuwan, Jammu on 5th November 2012, as an adjudication.
20. Attended Orientation Course and one Refresher Course organized by UGC-ASC, University of Jammu in December, 2012, as a resource person.
21. Attended one week training programme on “Climate Change, Forest Ecosystems and Biodiversity: Vulnerabilities and Adaptation Strategies” conducted by Biodiversity Conservation Division, Directorate of Extension, Indian Council of Forestry Research and Education, Dehradun and sponsored by DST, Government of India under the scheme “National Programme for training of Scientists and Technologists Working in Government Sector” w.e.f. 17th -21st December, 2012, at Indian Council of Forestry Research and Education, Dehradun.
22. Attended DST- INSPIRE Science Camp at Department of Geology, University of Jammu on 19th January, 2013, as a resource person.
23. Delivered a lecture to Undergraduate students in the Department of Botany, Shri Swami Vishwatamanand Saraswati Degree College, Sunderbani, Rajouri on 2nd March, 2013.
24. Attended one day UGC sponsored National Conference on “Ethnobotany” in the Department of Botany, Indiraben Hariharbhai Patel Science College, Goregaon on 23rd February, 2013, as a resource person.
25. Attended two day training programme on “Physiological and Biochemical aspects of abiotic and biotic stress in Crop Plants” under SAMETI- Jammu at SKUAST, Jammu from 27th -28th February, 2013, as a resource person.
26. Attended “Two-Day Indian Mushroom Conference” at PAU Ludhiana w.e.f. 16th -17th April, 2013, as a resource person.
27. Attended “Translators Orientation Programme for Knowledge Text Translation into Dogri” at Govt. Degree College (Boys), Udhampur w.e.f. 23rd to 28th August, 2013, as a resource person.
28. Attended two day International Conference on “Interpretation of Built and Natural Heritage” organized by Punjab Heritage and Tourism Promotion Board from 30th September to 1st October, 2013 at Chandigarh, as a resource person.
29. Chaired a technical session in Two day DST sponsored 2nd J&K Women’s Science Congress held at Govt. College for Women, Parade, Jammu w.e.f. 5th -6th November, 2013.

30. Attended “National Seminar on Genetically Modified Foods: Issues and Concerns” held at Govt. Women College, Parade, Jammu on 30th November, 2013, as a resource person.
31. General Orientation Course organized by ASC, University of Jammu, Jammu at Department of Punjabi during November, 2013 as a resource person.
32. One day “National Workshop on Biotechnology” organized by Govt. Degree College, Udhampur and presented a paper.
33. Attended 101st Indian Science Congress organized by University of Jammu from 3rd – 7th February, 2014 and chaired two technical sessions and presented a paper.
34. Orientation Course organized by the ASC, University of Jammu in July, 2014, as a resource person.
35. Attended the Orientation Programme organized by Central Institute of Indian Languages, HRD Ministry, Govt. of India, Mysore for Indian Translators at Govt. College for Women, Gandhi Nagar, Jammu on 22nd August 2014, as a resource person.
36. Attended and participated in 5 day meet to prepare Glossary of Botany in Dogri (English to Hindi to Dogri) at Department of Botany, University of Jammu from 3rd-7th September, 2014.
37. Acted as a Project Evaluator in the 4th State Level Exhibition under INSPIRE Awards Scheme-2014 of Department of Science and Technology, at Jammu, Govt. of India on 1st October, 2014.
38. Attended and delivered a lecture on “Swachh Bharat Abhiyan” at Army Cantonment, Sunjwan, Jammu on 9th October, 2014.
39. Attended “National Symposium on Microbial Interaction for supporting Plant Health” held at Department of Botany, Guwahati University, Guwahati, Assam from 27th -28th October, 2014 and acted as chairperson in a technical session during symposium and presented a paper.
40. Attended and presented an invited lecture on “Mushrooms in Human Welfare” at SKUAST-Jammu on 28th November, 2014.
41. Attended 2-day RuTAG meet organized by the office of the Principal Scientific Advisor, New Delhi at University of Jammu, Jammu w.e.f. 3rd -4th December, 2014.
42. Attended and participated in two 5 day meets to prepare Glossary of Agriculture in Dogri (English to Hindi to Dogri) at SKUAST, Chatha, Jammu and Department of Botany, University of Jammu w.e.f. 6th -11th August, 2014 and 17th -21st December, 2014 respectively.

43. Attended “National Symposium on Mycological Research – Emerging Trends, Applications and Prospects” and 41st Annual Meeting of Mycological Society of India held at Patiala from 23rd to 24th February, 2015.
- Prof. Namrata Sharma
1. Attended a Workshop on “Reproductive Biology, Taxonomy and Biodiversity Conservation” conducted by CEMDE, University of Delhi, Delhi on 21st February, 2009, as a resource person.
 2. Attended 13th meeting of Expert Group on Conservation and Sustainable Utilization of Natural resources held at Delhi w.e.f. 6th -7th October, 2009 (Paryavaran Bhawan, Ministry of Environment & Forests).
 3. Attended “National Conference on Impact of Climate changes on Plant Reproductive Biology” held at Agra w.e.f. 7th – 8th November, 2009.
 4. Attended DBT sponsored Workshop on “Bioinformatics: Converting Data to Knowledge Base” held at University of Jammu, w.e.f. 6th -7th September, 2010 and at SMVDU, Katra, w.e.f. 8th – 9th September, 2010.
 5. Attended 1st Global Congress on Plant Reproductive Biology held at Agra. w.e.f. 22nd – 24th October, 2010, as a resource person.
 6. Attended SAP (DRS) meeting on October 12, 2010 at UGC, New Delhi.
 7. Attended UGC sponsored “National Seminar on Environmental Analysis and Remediations” held at GNDU in Amritsar w.e.f. 21st -22nd March, 2011, as a resource person.
 8. Attended a Workshop on Biosystematics of species complex held at CEMDE, University of Delhi, w.e.f. 2nd -11th February, 2012.
 9. Attended 21st Meeting of expert group on “Conservation and Sustainable Utilization of Natural Resources”, held at Delhi on 13th February, 2012, as a resource person.
 10. Attended “National symposium on Plant Cytogenetics ; New Approaches” held at Department of Botany, Punjabi University, Patiala w.e.f. 23rd -24th February, 2012, as a resource person.
 11. Attended “National Workshop on Reproductive Biology of Flowering Plants for their Conservation and Improvement” held at Department of Botany, Delhi University, w.e.f. 27th -29th April, 2012 and delivered a lecture.
 12. Attended 4th meeting of Programme Advanced Committee for Ecosystem Research Program, HFRT Shimla w.e.f. 6th -7th June, 2013.
 13. Delivered a lecture on “Carrier options in Biology” at Army Public School, Rattanuchak on 24th October, 2013.

14. Attended Children Science Congress organized by Navodya Vidyalaya at Naddi on 19th November, 2013, as an organiser.
 15. Chaired a session during 2nd J&K Women's Science Congress held at GCW, Parade, Jammu w.e.f. 5th -7th November, 2013.
 16. Organized "National Workshop on Reproductive Biology for Biodiversity Conservation" in Department of Botany, University of Jammu w.e.f. 22nd -26th November, 2013.
 17. Section of Plant Sciences during 101st Science Congress held at University of Jammu w.e.f. 3rd -7th February, 2014 and chaired one session.
 18. "National Workshop on Hands on Training in the field of Reproductive Biology" held at BGSBU, Rajouri, w.e.f. 21st -22nd February, 2014, as a resource person.
 19. Attended International Symposium on "Conservation and Management of Pollinators for Sustainable Agriculture and Ecosystem Services held at NASC, Pusa w.e.f. 24th -26th September, 2014 and presented a paper.
 20. Attended 2-day RuTAG meet organized by the office of the Principal Scientific Advisor, New Delhi at University of Jammu, Jammu w.e.f. 3rd -4th December, 2014.
 21. Attended, "3rd Global Congress on Plant Reproductive Biology , Conservation and Crop improvement" held at Agra w.e.f. 15th -17th December, 2014 and presented a paper.
-
1. Attended a Workshop on "Plant Reproductive Biology, Taxonomy and Biodiversity Conservation" held at Centre for Environmental Monitoring of Degraded Ecosystems, Delhi University on 21st February, 2009.
 2. Attended a Workshop on "Research Methods and Statistical Analysis" held at Department of Commerce, University of Jammu, w.e.f. 23rd – 24th March, 2009.
 3. Attended "National seminar on Spices: Improving Productivity and Quality with focus on Himalayan Spices" held at SKUAST-J, w.e.f. 22nd -24th October, 2009.
 4. Attended 5th J&K Science Congress held in University of Jammu, w.e.f. 8th -10th February, 2010.
 5. Attended "National seminar on Seabuckthorn—Emerging Trends from Production to Consumption" held at CSK HPKV, Palampur, w.e.f. 16th -18th February, 2010 and delivered a lecture.
 6. Attended and delivered a lecture in Refresher Course in Life sciences organised by Department of Zoology and ASC, University of Jammu, in March 2010.

Prof. Veenu Kaul

7. Attended a Workshop on “Bioinformatics” held in Department of Computer Sciences, University of Jammu, on 28th August, 2010.
8. Attended DBT sponsored Workshop on “Bioinformatics: Converting Data to Knowledge Base” held at University of Jammu, w.e.f. 6th -7th September, 2010 and at SMVDU, Katra w.e.f. 8th - 9th September 2010.
9. Attended First Global Conference on “Plant Reproductive Biology” held at Agra, w.e.f. 22nd -24th October, 2010 and delivered a lecture.
10. Attended North Zone meet and “National Symposium on “Microbial diversity and Bio-prospecting”, held at University of Jammu, w.e.f. 29th -30th October, 2010.
11. Attended Fourth International Conference on “Plants and Environmental Pollution (ICPEP-4)”, held at Lucknow w.e.f. 6th - 9th December, 2010.
12. Attended “National Seminar on Environmental Analysis and Remediation”, held at GNDU, Amritsar, w.e.f. 21st -22nd March, 2011.
13. Attended 7th JK Science Congress held at Jammu, w.e.f. 13th -15th October, 2011.
14. Attended “National Conference on Seabuckthorn: Emerging Trends in R & D on Health Protection and Environmental Conservation”, held at Palampur, w.e.f. 1st -3rd December, 2011.
15. Attended “National Symposium on Interdisciplinary Sciences”, held at Jammu, w.e.f. 2nd -3rd March, 2012.
16. Attended “National Workshop on Reproductive Biology of Flowering Plants for their Conservation and Improvement”, held at University of Delhi, w.e.f. 27th -29th April, 2012.
17. Attended Paper Coordinators and Content Writers Meeting of UGC-INFLIBNET e-PG Pathshala w.e.f. October 25, 2012 at Department of Botany, University of Pune, Pune.
18. Attended “National workshop on Bryology” for College and University teachers” w.e.f. 22nd -24th February, 2013 in the Department of Botany, University of Jammu, Jammu.
19. Attended XXXVI All India Conference of the Indian Botanical Society, held at DDU Gorakhpur University, Gorakhpur w.e.f. 18th -20th October, 2013
20. Attended 2nd J&K Women’s Science Congress held at Govt. College for Women, Parade, Jammu w.e.f. 5th-6th November, 2013, as a resource person.

21. Attended “National Workshop on Reproductive Biology for Biodiversity Conservation”, held in Department of Botany, University of Jammu, w.e.f. 22nd -26th November, 2013.
 22. Attended International Symposium on “Conservation and Management of pollinators for Sustainable Agriculture and Ecosystem Services”, held at National Agricultural Science Complex, Pusa, New Delhi, w.e.f. 24th -26th September, 2014.
 23. Attended National workshop on “Hands on training in Plant Reproductive Biology, CBS, BGBSU, Rajouri, w.e.f. 21st -22nd February, 2014.
 24. Attended 2-day RuTAG meet organized by the office of the Principal Scientific Advisor, New Delhi at University of Jammu, Jammu w.e.f. 3rd – 4th December, 2014.
 25. Attended 3rd Global Congress on “Plant Reproductive Biology, Conservation and Crop Improvement” organized by “The Society of Plant Reproductive Biologists”, Agra, India, 15th -17th December, 2014.
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1. Attended “National Seminar on Spices: Improving productivity and Quality with focus on Himalayan spices” held at Sher-e-Kashmir University of Agricultural Sciences and Technology of Jammu w.e.f. 22nd -24th October, 2009 and presented a paper.
 2. Attended 2-day workshop on “Bioinformatics: Converting Data to Knowledge base” at University of Jammu w.e.f. 6th -7th September, 2010.
 3. Attended “4th International Conference on Plants and Environmental pollution” at NBRI, Lucknow in November, 2010 and presented a paper.
 4. Attended One-day Workshop-cum-Orientation Program on “Conversion of B. Sc. Part II syllabus into e-content” organized in EMMRC, Kashmir University, Srinagar in the Department of Botany, University of Jammu on 2nd November, 2010.
 5. Attended 5th J&K State Science Congress held at University of Jammu, Jammu during 8th -10th February, 2010 and presented a paper.
 6. Attended 21-Day Refresher Course organized by ASC, and Department of Botany w.e.f. 14th February, 2011 to 9th March, 2011.
 7. Attended Four-Day Workshop on “Bio-informatics: Converting Data to Knowledge base” at Shri Mata Vaishno Devi University, Katra and School of Bio-technology, University of Jammu w.e.f. 6th -9th June, 2010.

Dr. Geeta

8. Attended National Seminar on Environment Analysis and Remediation at Guru Nanak Dev University, Amritsar, on 21st -22nd March, 2011 and presented a paper.
9. Attended 2-day National symposium on “Microbial Diversity and Bioprospecting” organized by ISMPP and Department of Botany, University of Jammu w.e.f. 29th -30th October, 2010.
10. Attended 7th J&K State Science Congress held at University of Jammu, Jammu w.e.f. 13th -15th October, 2011 and presented a paper.
11. Attended 18-day course on “Faculty Improvement Programme” on MS Powerpoint organized by Department of Life Long Learning, University of Jammu, Jammu w.e.f. 31st October - 17th November, 2011.
12. Attended Two-day “National Symposium on Interdisciplinary Sciences” held at Govt. Gandhi Memorial College, Jammu w.e.f. 2nd -3rd March, 2012 and presented a poster.
13. Attended “National Workshop on Bryology” for College and University teachers” held at Department of Botany, University of Jammu, Jammu w.e.f. 22nd -24th February, 2013.
14. Attended One day Conference on ‘Impact of climate change on Sustainability of Ecosystems’ jointly organized by P.G Department of Environmental Sciences, University of Jammu and WWF (J&K State Chapter) on 22nd April, 2013 and presented a paper.
15. Attended 36th Annual Conference of Indian Botanical held in Department of Botany, D.D.U. Gorakhpur University, w.e.f. 18th - 20th October, 2013 and presented a paper.
16. Attended 2nd J&K Women’s Science Congress held at Govt. College for Women, Parade, Jammu w.e.f 5th-6th November, 2013, as a resource person.
17. Attended “National workshop on Reproductive Biology for Biodiversity Conservation” held at University of Jammu w.e.f, 22nd -26th November, 2013.
18. Indian Science Congress held in Department of Botany, University of Jammu, Jammu w.e.f. 3rd -7th February, 2014 and presented a paper.
19. Attended “National Seminar on Environmental Education: The New Frontier” held in Govt. Degree College, Kathua w.e.f. 14th -15th February, 2014 and presented a paper.
20. Attended “International Conference on Environmental issues and Sustainable Development” organized by Department of Geography, University of Jammu w.e.f. 1st – 2nd March, 2013 and presented a paper.

21. Attended “National Seminar on Biodiversity: Sustainable Development and Conservation” w.e.f. 6th -8th March, 2014 in Department of Zoology, University of Jammu, Jammu and presented a paper.
 22. Attended National Conference on “Environmental Issues: Concerns and Solutions held in Department of Environmental Sciences, University of Jammu” w.e.f. 24th -25th March, 2014 and presented a paper.
 23. Attended National Symposium on “Natural Resource Management for Sustainable Hill Farming System for Livelihood Security” organized by “Division of soil science and Agricultural Chemistry” at SKUAST Jammu w.e.f. July 23rd-24th July, 2014 and presented a paper.
 24. Attended 2-day RuTAG meet organized by the office of the Principal Scientific Advisor, New Delhi at University of Jammu, Jammu w.e.f. 3rd -4th December, 2014.
1. Attended Indo-US Symposium on “Ayurvedic, Siddha & Unani (ASU) Drugs: Development and Marketing” held w.e.f. 2nd -4th December, 2009 at International Guest House, NASC Complex, New Delhi, as an organiser.
 2. Attended Refresher Course in the subject of Life Sciences organized by UGC ASC, University of Jammu, Jammu w.e.f. 14th February to 9th March 2011. (Grade A)
 3. Participated in “Bio-diversity of Jammu and Kashmir” in “Jammu footprints” 2009 organized by Symbiosis Institute of Media & Communication, Pune on 8th November, 2009 and delivered a lecture.
 4. Attended “The Himalayan Ecological and Conservation Research Foundation, Jammu” organized at Jammu on the eve of World Water Day, 2010 (Department of Computer Science and information technology, University of Jammu, J&K, INDIA) and delivered a lecture.
 5. Participated in Collection and Identification of Medicinal Plants in “Training programme for Research Scientists of Councils under the Department of AYUSH, MoHFW, GOI,” organized by Indian Institute Of Integrative Medicine, Jammu (CSIR) w.e.f 15th to 18th June 2010.
 6. Attended 7th JK Science Congress, University of Jammu, Jammu w.e.f. 13th -15th October, 2011 and presented a paper.
 7. Attended “Biodiversity and its Management for Food, Livelihood and Environmental Security” organized by Department of Zoology, GDC, Doda and HECRF on 18th February, 2013 and delivered a talk.

Dr. Harish Chander

8. Attended “National Workshop on Reproductive Biology for Conservation” organized by Department of Botany, University of Jammu. 22nd – 26th November, 2013 and delivered a talk.
 9. Attended “Indo-US Symposium on Botanical Drug Development held at Medanta-The Medicity, Gurgaon. W.e.f. 13th -14th December, 2013.
 10. Attended Training Course on “Aquifer Management and Local Ground Water Issues” organized by Central Groundwater Board, North Western Himalayan Region, GOI” on 26th March,2014 and delivered a lecture.
 11. Attended National Conference on “Environment Issues, Concerns and Solutions (EICS-2014)”, held in Department of Environmental Sciences, University of Jammu, Jammu w.e.f. 24th -25th March , 2014 and presented a paper.
28. Student projects (w.e.f. 1st June 2009 to 28th February 2015)
- percentage of students who have done in-house projects including inter-departmental projects
None so far
 - percentage of students doing projects in collaboration with other universities/ industry / institute.
Not yet on the curriculum
29. Awards / recognitions received at the national and international level by
- a. Faculty
- | Name of the Faculty member | Awards / recognitions received at the national and international |
|----------------------------|---|
| Prof. Geeta Sumbali | <ol style="list-style-type: none"> 1. Fellow of Indian Phytopathological Society in 2011 2. Fellow of Applied and Natural Science Foundation. (2012) 3. Convener, Board of Studies in Botany, University of Jammu. 4. Sectional Secretary (Plant Sciences), Indian Science Congress. 5. Member, Academic Council, University of Jammu. 6. Member, Board of Research Studies in Life Sciences, University of Jammu. 7. Member Advisory/ Editorial board: Journal of Applied and Natural Science. 8. Member, Syndicate, University of Kashmir. 9. Member, Syndicate University of Jammu. 10. Coordinator,SAP (Botany) 11. Head, Department of Botany (2nd January 2012-1st January 2015) |

- Prof. Anima Langer
1. Dean, Faculty of Life Sciences, University of Jammu.
 2. Member, Syndicate, University of Jammu.
 3. Co-ordinator, PURSE (DST, Govt. of India)
 4. Coordinator, UGC sponsored SAP project entitled “Biodiversity and Conservation of Rare and Threatened Plants” under Special Assistance Programme of UGC awarded to the Department.
 5. Councilor, Indian Botanical Society
 6. Convener, Board of Studies in Botany
- Prof. Yash Pal Sharma
1. Awarded UGC post Doctoral Research award in July 2009.
 2. Prof. H.C Dube Outstanding Young scientist award of Indian Society of Mycology and Plant Pathology in 2010
 3. Life member –
 - a) Indian Science Congress Association.
 - b) Mushroom Society of India, Solan (HP).
 - c) Indian Mushrooms Growers Association.
 - d) ASEAN Haridwar
 - e) Mycological Society of India
 - f) Indian Society of Mycology and Plant Pathology, Udaipur
 4. Managing Editor- Journal of Mycology & Plant Pathology published by Indian Society of Mycology & Plant Pathology, held at Udaipur (Rajasthan) in October 2014.
 5. Organising Secretary- National Symposium in the North-Zone Meet and National Symposium on Microbial Diversity and Bio-prospecting held at the Department of Botany, University of Jammu, from 29th -30th October, 2010.
 6. Head, Department of Botany, University of Jammu, January 2015 onwards.
 7. Deputy Co-ordinator, SAP (Botany)
 8. Honorary Editor, Journal of Plant Development Science.
- Prof. Namrata Sharma
1. Member, National Academy of Sciences, India (2009).
 2. Member, Editorial Board and Review committee International Journal of Plant Reproductive Biology.
 3. Fellow of the Society of Plant Reproductive Biologists, 26th January, 2013.
 4. Organizing secretary, “National Workshop on Reproductive Biology for Biodiversity Conservation” at Department of Botany, University of Jammu (22nd -26th November, 2013).
 5. Guest Editor, Current Science and Springer books.

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|--------------------|---|
| | 6. Councillor, Indian Botanical Society |
| | 7. Councillor, The Society of Plant Reproductive Biologists |
| Dr. Veenu Kaul | 1. Councillor, The Society of Plant Reproductive Biologists |
| | 2. Member, Editorial Board and Review Committee International Journal of Plant Reproductive Biology |
| | 3. Woman Scientist Gold medal in 35 th Botanical Conference of Indian Botanical Society held from 8 th -10 th December, 2012 |
| | 4. Fellow, The Society of Plant Reproductive Biologists in 2012. |
| | 5. Woman's Scientist Award in 2013 |
| | 6. Life Member, ISCA, 2013. |
| | 7. Member, National Academy of Sciences, India (2015). |
| Dr. Sikander Pal | 1. Awarded postdoctoral fellowship (August, 2010 to June, 2012) under Talent recruitment program at Zhejiang University, Hangzhou China. |
| Dr. Geeta | 1. Awarded Research Associateship under CSIR, GOI, Project entitled, "Studies on two track heredity in some unworked <i>Allium</i> (2007-10). |
| | 2. Certificate of merit for Best paper presentation in 25 th Botanical Conference held at M.J.P. Rohilkhand University, Bareilly w.e.f. 27 th -29 th October, 2012 |
| | 3. Awarded Woman Botanist Award for the year 36 th All India Botanical Conference of the Indian Botanical Society held at DDU Gorakhpur University, Gorakhpur w.e.f. 18 th -20 th October, 2013. |
| | 4. Awarded ISCA Poster Presentation Award during Indian science Congress held at University of Jammu w.e.f. 3 rd – 7 th February 2014. |
| Dr. Harish Chander | 1. Awarded Individual Fellowship by Idea Wild USA for study on "Status survey and spotting of common Otter" in 2014. |
| | 2. Awarded Individual Fellowship by The Rufford Foundation London, for running programme on "Community involvement in Conservation of Medicinal Plants in four hilly districts of Jammu and Kashmir, India" in 2014. |
| | 3. Featured as Young Leader from India for "Wetlands of Pir Panjal" in MOSAICQUE EZINE an International magazine, Issue July 2013. |
| | 4. Life member - |
| | a. Society of Ethnobotanists, India |
| | b. The Himalayan Ecological and Conservation Research Foundation, India |

- c. The International Association of Ecology
- d. Environmental Conservation Society, India

Doctoral / Post Doctoral fellows

Name	Awards/recognitions received at the national and international
Dr. Sanjeev Kumar	<ol style="list-style-type: none"> 1. Young Scientist Fellowship by State DST, in 2010. 2. Awarded SRF in 2011 by INSA New Delhi. 3. Conferred IInd prize in poster presentation entitled “Systematic studies on wild mushrooms in J&K” in National Symposium in ‘Emerging Trends in Plant Pathology’ organized by SKUAST, w.e.f. 19th -20th December, 2012. 4. DST Young Scientist Fellowship to visit China by Department of Science and Technology, Delhi in 2012. 5. Young Scientist Award at Mewar University, U.P. in 2013. 6. Best Science Teacher Award by State DST, in 2013.
Dr. Beetika Kohli	<ol style="list-style-type: none"> 1. Senior Research Fellow (CSIR) in Department of Botany, University of Jammu, Jammu w.e.f April, 2012 to September, 2013. 2. Best Poster presentation in “National Seminar on Spices – Improving productivity and quality with focus on Himalayan Species” organized by SKUAST – Jammu, w.e.f. 22nd -24th October, 2009. 3. Best (third) Poster presentation in “National Seminar on Environmental Analysis and Remediation” organized by Guru Nanak Dev University, Amritsar, w.e.f. 21st – 22nd March, 2011. 4. Best Poster presentation in “UGC Sponsored “National Symposium on Interdisciplinary Sciences” held at Jammu, w.e.f. 2nd - 3rd March, 2012. 5. Awarded Prof. K. S. Bilgrami Gold Medal award for the year 2013 in 36th Annual Conference held on 18th -20th October, 2013 at D.D.U. Gorakhpur University, Gorakhpur. 6. Selected for Paper presentation under ISCA Young Scientists Award Programme of 2014 -15 held at Mumbai University, Mumbai on 4th January, 2015.
Ms. Uzma Hamal	<ol style="list-style-type: none"> 1 Recipient of Merit fellowship from University of Jammu, Jammu during the M.Phil programme (2009) 2 Recipient of INSPIRE JRF (Junior Research Fellowship) from Department of Science and Technology, Govt. of India.(2010) 3 Awarded SRF (Senior Research Fellowship) under the INSPIRE programme of DST, New Delhi.(2012)

- 4 Conferred Best Oral presentation Award during 9th JK Science Congress held at University of Kashmir on the topic 'Resource allocation strategy in *Foeniculum vulgare* (Mill)' w.e.f. 1st -3rd October, 2013.
 - 5 Awarded young Scientist award during 2nd J&K Women's Science Congress sponsored jointly by J&K DST and DST, GOI w.e.f. 5th -7th November, 2013 at Govt. College for Women, Parade.
 - 6 Qualified SET (State Eligibility Test) (2013)
 - 7 Received Gold Medal for securing 1st position M.Sc. Botany (2008) in Special Convocation- November 2014 by University of Jammu, Jammu.
- Dr. Jyotsana Sharma Recipient of Dr. D. S. Kothari, Post Doctoral Fellowship in the year 2013.

Research Scholars

Name	Awards/recognitions received at the national and international
Ms. Meenakshi Kaul	Conferred Best Poster presentation Award during 5 th JK Science Congress in 2010 on the topic "In situ pollen germination and selective ovule abortion".
Dr. Amjad Ali	Conferred Best Oral presentation Award during 5 th JK Science Congress in 2010.
Mr. Deepak Gupta	Conferred Best poster presentation award during 7 th JK Science Congress in 2011.
Ms. Dimple Gupta	Conferred Best Poster Presentation Award in a Conference on "Mushrooms for medicinal value and Nutritional Security under Changing Climatic Conditions" held at Dr. Y.S. Parmar University of Horticulture and Forestry Nauni, Solan (H.P) w.e.f. 27 th - 28 th December, 2013
Ms. Mamata Jamwal	Conferred Best Poster Presentation Award in "III Global Congress Plant Reproductive, Conservation and Crop Improvement" held at Agra w.e.f. 15 th -17 th December, 2014 on the topic 'Genetic system in two species of <i>Luffa</i> .

P.G. Students:

1. Ms. Rani Kumari, a student of M.Sc bagged Best Actress Award in One Act play and consolation prizes in three events viz. Monoacting, Mimicry and Acting during "Display your Talent" held during 2010-11. In this event, a skit by students of 2nd Semester (Rubia Malik, Sonia Chalotra, Azhar, Sanjogita and Rani Kumari) was also adjudged second.

2. In the Debate Competition held on the topic “ Genetically Modified Crop Plants and Food Security” as a part of celebrations of National Science Day, a team of two students from the Department of Botany comprising of Ms. Roshi Sharma and Mr. Nawang Tundup secured second position.
30. Seminars/ Conferences/Workshops organized and the source of funding (national international) with details of outstanding participants, if any.

Title of the Conference/ Seminar	Date	In collaboration with any Department/ Agency, if any
Two day North Zone meet of the Indian Society of Mycology and Plant Pathology and National Symposium on Microbial diversity and Bio- prospecting.	29 th -30 th Oct. 2010.	Indian Society of Mycology and Plant Pathology, Udaipur
Fifth J&K State Science Congress (Academic sessions of Botany)	8 th -10 th Feb 2010	University of Jammu
21-day Refresher Course in Life Sciences	14 th Feb. -9 th Mar. 2011	Academic Staff College, University of Jammu.
7 th JK State Science Congress (Academic Session of Botany)	13 th -14 th October, 2011	University of Jammu
Refresher course in Life sciences	15 th Feb-6 th Mar. 2012	Academic Staff College, University of Jammu.
Two-day Workshop on Bryology	22-23 Feb., 2013	PURSE, DST
National Workshop on Reproductive Biology for Biodiversity Conservation	22nd -26th Nov 2013	BGSBU, Rajouri.

31. Code of ethics for research followed by the departments : NA
32. Student profile programme-wise:

Name of the programme	Year	Applications received	Selected		Pass percentage	
			Male	Female	Male	Female
PG	2009	685	6	24	83	88
M.Phil.		18	2	6	100	100
Ph.D.		33	0	2	Nil	50 (1 left Ph.D.)

PG	2010	879	5	24	60	75
M.Phil.		55	2	5	100	100
Ph.D.		33	2	5	100	0 (1 left Ph.D., 2 continuing, 2 submitted)
PG	2011	855	14	17	79	94
M.Phil.		32	2	7	100	100
Ph.D.		51	1	5	1 continuing	5 continuing
PG	2012	778	11	20	73	100
M.Phil.		35	2	6	0 (2 left M.Phil.)	83 (1 promoted to Ph.D. on the basis of INSPIRE)
Ph.D.		61	3	4	3 continuing	4 continuing
PG	2013	313	8	23	Course Work going on	Course Work going on
M.Phil.		71	1	2	0 (1 left M.Phil.)	0 (1 left M.Phil. and 1 promoted to Ph.D. on basis of INSPIRE)
Ph.D.		-	4	7	4 continuing	7 continuing
PG	2014	321	9	19	Classes on	Classes on
M.Phil.		48	1	5	1 Continuing	5 Continuing
Ph.D.		Admission is done on the basis of exempted category	2 (Synopsis submitted registration in progress)	6 (2 registered, 3 Synopsis submitted, 1 registration in progress)	2 Continuing	6 Continuing

33. Diversity of students

Name of the programme	Year	% of the students from the same university	% of the students from the other university within the state	% of the students from the universities outside the state	% of the students from other countries
PG	2009	100	Nil	Nil	Nil
M.Phil		88	Nil	12	Nil
Ph.D		100	Nil	Nil	Nil
PG	2010	100	Nil	Nil	Nil
M.Phil		86	Nil	14	Nil
Ph.D		100	Nil	Nil	Nil
PG	2011	100	Nil	Nil	Nil
M.Phil		100	Nil	Nil	Nil
Ph.D		67	Nil	33	Nil
PG	2012	100	Nil	Nil	Nil
M.Phil		100	Nil	Nil	Nil
Ph.D		75	Nil	25	Nil
PG	2013	100	Nil	Nil	Nil
M.Phil		100	Nil	Nil	Nil
Ph.D		Nil	Nil	Nil	Nil
PG	2014	100	Nil	Nil	Nil
M.Phil		83	Nil	17	Nil
Ph.D		87	Nil	13	Nil

34. How many students have cleared Civil Services and Defense Services examinations, NET, SET, GATE and other competitive examinations? Give details category-wise.

Civil Services and Defence Services examinations-

IAS-2

IFS - 7

KAS-17

ACF-10

NET- 31

SET- 12

GATE - 2

Other Competitive examinations-

FCI - 2

35. Student progression (w.e.f. 1st June 2009 to 28th February 2015)

Student progression	Percentage against enrolled					
	2009	2010	2011	2012	2013	2014
UG to PG (in %)	NA	NA	NA	NA	NA	NA
PG to M.Phil. (in %)	26	23	24	26	10	20
PG to Ph.D (in %)	22	13	20	23	37	27
Ph.D.to Post Doctoral (in %)	1	-	-	-	1	-
Employed:						
- Campus Selection (in %)	0	0	0	0	0	10
- Other than campus recruitment (in numbers)	-	15	18	5	6	2
Entrepreneurs (in %)	NIL	NIL	NIL	NIL	NIL	NIL

NA- Data of UG is not available.

36. Diversity of staff

	Faculty who are graduates	Percentage of faculty who are graduates
Of the same university	6	67
From other universities within the State	1	11
Universities from other States	2	22
Universities outside the country	0	Nil
Total	9	100

37. Number of faculty who were awarded M.Phil., Ph.D., D.Sc. and D.Litt. during the assessment period 01 (Dr. Sikander Pal- Ph.D from G.N.D. University, Amritsar)

38. Present details of Departmental infrastructural facilities with regard to

a. Library

The library maintained by the Department receives various national and international journals, encyclopedias, handbooks, periodicals, research journals, magazines and news papers regularly. Besides it houses about 4550 books.

b. Internet facilities for staff and students

The Department has a computer laboratory with internet facility for the students and research scholars. In addition, each research scholars is provided with WiFi connection for internet access. Each faculty member is provided with separate IP as well as WiFi connection for internet access.

c. Total number of class rooms

Classrooms cum Laboratories for M.Sc. students (02 No.)

A Seminar Hall with LCD Projector & OHP

d. Class rooms with ICT facility

NA

e. Students' laboratories

Laboratories cum classrooms (02 No.)

f. Research laboratories

Department of Botany has seven (07) research laboratories.

1. Bryology
2. Mycology and Plant Pathology
3. Mushroom Research
4. Biosystematics
5. Cytogenetics and Reproductive Biology
6. Ecology and Plant Taxonomy

g. Others

1. Central facility for Ph.D/M.Phil Scholars
2. Central facility for M.Sc. Students
3. Glass House
4. Green House
5. Herbarium and Museum
6. Botanical Garden

39. List of doctoral, post-doctoral students and Research Associates (w.e.f. 1st June 2009 to 28th February 2015)

a. From the host institution/university

Doctoral students

Dr. Bhuvi Sharma

Dr. Sanjeev Kumar

Dr. Seema Zakir

Dr. Jyoti Parihar

Dr. Konchok Dorjey

Dr. Satish Dhar

Dr. Shallu Sambyal

Dr. Rohini Sharma

Dr. Sumesh Bhat

Dr. Indu Sharma

Dr. Swati Gupta

Dr. Dinesh Koul

Dr. Lakhvinder Singh

Dr. Amjad Ali

Dr. Beetika Kohli

Dr. Anil Sharma

Post Doctoral students

Dr. Geeta (RA) (Now as Assistant Professor, Department of Botany, JU)

b. From other institutions/Universities

Dr. Jyotsana Sharma (Dr. D.S. Kothari Post Doctoral Fellow)

40. Number of post graduate students getting financial assistance from the university.

05

41. Was any need assessment exercise undertaken before the development of new programme(s)? If so, highlight the methodology.

Yes, Departmental Brain storming session and interdepartmental Workshop was organized for curriculum restructuring under Choice based credit system before the implementation of new programme.

42. Does the Department obtain feedback from

i. Faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the Department utilize the feedback?

- Department used to take feedback from faculty on curriculum as well as teaching-learning-evaluation.

ii. Students on staff, curriculum and teaching-learning-evaluation and how does the Department utilize the feedback?

iii. Alumni and employers on the programmes offered and how does the Department utilize the feedback?

- Not Applicable

43. List the distinguished alumni of the Department (maximum 10)

Prof. Irshad A Hamal, V.C BGSBU

Sh. Ravi Kumar Kesar, Additional PCCF, IFS.

Mr. O.P Sharma, IFC

Ms. Vinod Kotwal, IAS

Mr. Rajeshwar Singh Jasrotia, IFS

Prof. M.K Dhar, Registrar,JU

Sh. Roshen Jaggi, IFS

Dr. Arun Sharma, Director, MAU

Dr. Sindhu Sareen, ARS

Mr. S.D.S Jamwal, IPS

Mr. B.M Sharma, IFS

Dr. B.M Bhau, Principal Scientist, CSIR

Dr. Sushil Verma, Associate Prof. BGSBU

Sh. Jagdeep Kumar, IAS

Ms. Nisha Goswami, IFS

Ms. Shweta Jandial, IFS

Ms. Renu Bala, IFS

Sh. SC Sharma, IFS

Dr. A.S Soodan, Assoc. Prof. GNDU, Amritsar.

Dr. Rakesh Bhargav, Principal Scientist, Bikaner.

Arun Kumar, IAS

Suresh K Gupta, IFS.

Preeti Bhandari, IFS.

44. Give details of student enrichment programmes (special lectures / workshops / seminar) involving external experts.

S.No.	Resource Person	Lecture	Date
1.	Prof. A.K Koul BGSB University, Rajouri	Our planet in crisis: role of reproductive biology in overcoming it New perspective in the conservation of threatened plants Innovations in technology	9.02.2010 22.11.2013 04.02.2014
2.	Prof. N.S Atri Punjabi University, Patiala	Fascinating World of Mushrooms	10.02.2010
3.	Dr. P.L Uniyal Associate Prof, University of Delhi	Adaptive Strategies of Bryophytes Moss Identification	10.02.2010 23.02.2013
4.	Prof. Shashi Kant Department of Botany, University of Jammu	Climate Change Algal biodiversity as biological indicator of water pollution	9.02.2010 06.02.2014
5.	Dr. Amarjeet Singh Soodan, G.N.D.U Amritsar	Origin and Grammar of Plant names	14.05.2010
6.	Dr. Pradeep Kumar Srivastava, CDR, Lucknow	Scientoons	21.01.2011
7.	Prof.B.A.Wafai, University of Srinagar	Holocentric chromosomes	13.11.2011
8.	Prof. S.K Sopory, Vice – Chancellor,JNU	Linking gene functions to stress tolerance in plants	18-5-2012
9.	Prof. Virender Nath, Scientist Emeritus, NBRI, Lucknow	Tissue Culture Techniques in ex- situ conservation of Bryophytes	22.2.2013

10.	Prof. Dinesh Kumar Saxena, P.G College Bareilly	Bryophytes as pollution indicators	22.2.2013
11.	Dr. S.K Singh Scientist, BSI, Shillong	Handling of Bryophytes and identification of foliose hepatics Identification of Thalloid Hepatics	22.2.2013 23.02.2013
12.	Dr. D.K Singh Joint Director, BSI, Kolkata	Hornworts: Distribution and Identification	23.2.2013
13.	Prof. G.H Dar	Biodiversity crisis: Concern of current century	2.9.2013
14.	Prof. R. N. Gohil University of Jammu, Jammu	How relevant is cytology to the fields of reproductive biology & conservation Tools, techniques and plants- Potential, progress and pitfalls	23.11.2013 06.02.2014
15.	Dr. J. L. Karilaloo New Delhi	Genetic diversity and conservation strategies	23.11.2013
16.	Prof. Zafar Reshi, University of Kashmir	Clonal reproduction sufficiently focussed in reproductive biology studies	23.11.2013
17.	Dr. Rajesh Tandon Delhi University, New Delhi	System Biology approach for Conservation of Biodiversity	25.11.2013
18.	Dr. Vishnu Bhat Delhi University, New Delhi	Apomixis: Developmental Enigma	26.11.2013
19.	Prof. S.P.Khullar, Department of Botany, Punjab University, Chandigarh	Innovative technologies and Biodiversity Taxonomy, Conservation and Development in Pteridophytes	04.02.2014

20.	Dr. Paramjit Singh Director, BSI, Kolkata	The status of Plant Taxonomy in India	04.02.2014
21.	Dr. P. S. Ahuja Director, CSIR- IHBT Palampur	Bioresources and Biotechnology at High Altitudes	04.02.2014
22.	Dr. Archana Sharma , Botany Department Panjab University Chandigarh	Exploring Ferns in Genomic Age`	04.02.2014
23.	Prof. Klaus Mehrtreter Mexico	New frontiers of Fern Ecology	04.02.2014
24.	Prof. Ashwani Kumar Department of Botany University of Rajasthan	Biofuels for Green House Gas Mitigation	04.02.2014
25.	Dr. U. C. Lavania Scientist CSIR-CDRI, Lucknow	Innovative breeding approaches in MAPs	04.02.2014
26.	Dr. Smitha Hegde St. Aloysius College, Mangalore	Tissue Culture of Ferns	04.02.2014
27.	Prof. A. S. Ahluwallia Department of Botany, Panjabi University, Chandigarh.	Role of Spirulina in improving oxidative stress in malnourished wistar rats	04.02.2014
28.	Prof. S. S. Sandhu, R. D. University Jabalpur (M.P.)	Potentability of Biotechnological Research in India with reference to Plant sciences: Current Scenario	05.02.2014