

ACADEMIC AUDIT REPORT

2017-2022



**Department of Plant Science
School of Life Sciences
Central University of Himachal Pradesh
Academic Block, Shahpur**



IQAC/

Date:

INFORMATION FOR ACADEMIC AUDIT OF THE DEPARTMENT

1. Name of the Department: Department of Plant Sciences
2. Year of establishment: 2017
3. Courses offered:

Undergraduate	Post Graduate	Doctorate
NA	M.Sc. Plant Science (Botany)	Ph.D. in Plant Science (Botany)

4. Courses introduced during last year:

Undergraduate	Post Graduate	Add-on/Value Added
NA	<u>M.Sc. Botany Year 2017</u> Core Compulsory Courses (4 Credit) BOT 501 Plant Cell Biology BOT 502 Biodiversity of Viruses, Bacteria and Fungi BOT 503 Phycology BOT 504 Bryophytes and Pteridophytes BOT 505 Genetics and Cytogenetics BOT 506 Gymnosperms BOT 507 Angiosperms BOT 508 Plant Physiology and Metabolism BOT 509 Plant Ecology and Evolution BOT 510 Anatomy and Development of Plants Core Open Courses (4 Credit) BOT 521 Biomathematical and Computer Applications BOT 522 Applied and Industrial Botany BOT 523 Bioinstrumentation and analysis Elective specialization (4 credit) Specialization I: Plant Biotechnology BOT 551 Plant Cell and Tissue Culture BOT 552 Plant Genetic Engineering BOT 553 Plant Breeding and Intellectual Property Rights BOT 554 Industrial Biotechnology Specialization II: Computational Biology BOT 555 Bioinformatics BOT 556 Statistical Techniques BOT 557 Computer Applications in Plant Sciences BOT 558 Biosystematics Specialization III: Applied Ecology and Environment	BOT 421 - Plants and Society BOT 422 -Bioethics and Bio safety BOT 423 -Botanical and Ecological Principles BOT 424 -Herbal and Medicinal Plants BOT 425 -Plant Products in Human Healthcare

BOT 559 Plant resource utilization and conservation
 BOT 560 Plant Biodiversity
 BOT 561 Energy and Environment
 BOT 562 Phytoremediation

Specialization IV: Microbiology and Pathology

BOT 563 Plant Microbes Interaction
 BOT 564 Plant Protection and Quarantine
 BOT 565 Applied and Industrial Microbiology
 BOT 566 Environmental Microbiology

Specialization V: Proteomics and Genomics

BOT 567 Plant Molecular Biology
 BOT 568 Proteins Structure, function and Biology
 BOT 569 Genome structure, function and dynamics
 BOT 570 Applied Genetic Engineering

Specialization VI: Field Botany and Herbarium

BOT 571 Plant Taxonomy
 BOT 572 Methods in Field Biology
 BOT 573 Seed Biology
 BOT 574 Field Study tour and plant material preservation

Elective Open Courses (4 Credit)

BOT 401 Paleobotany
 BOT 402 Ethnobotany
 BOT 403 Phytochemistry
 BOT 404 Horticulture and Forestry
 BOT 405 Seminar
 BOT 406 Project Report/Advance practical/Assignment
 BOT 407 Ecological Modelling

M.Sc. Botany Year 2018

Core Compulsory Courses (2 Credit)

BOT 503 Phycology
 BOT 504 Bryophytes and Pteridophytes
 BOT 506 A Introduction of Gymnosperms
 BOT 410 Mycology and Plant Pathology (4 Credit)
 BOT 514 Cytogenetics and Molecular Biology
 BOT 412 Practical Course on Bryophytes and Pteridophytes and Gymnosperms
 BOT 413 Practical Course on Phycology, Mycology and Plant Pathology and Biology
 BOT 416 Embryology of Angiosperms
 BOT 415 Plant Physiology and Biochemistry (4 Credit)

BOT 411 Ecology and Environment
 BOT 417 Practical Course on Embryology of Angiosperms, Ecology
 BOT 418 Practical Course on Plant Physiology and Biochemistry
 BOT 419 Anatomy and Development of Plants
 BOT 420 Practical Course on Anatomy of Plants
 BOT 414 Taxonomy of Angiosperms
 BOT 514 Practical Course on Cytogenetics Molecular Biology, Microbiology
 BOT 515 M.Sc. Dissertation (4 Credit)

BOT 424 (Herbal and Medicinal Plants)
 BOT 427 (Organic Farming and Practices)
 BOT 421 (Plants and Society)
 BOT 425 (Plant Products in Human Healthcare)

	<p>Core Open/Elective Open Courses (2 Credit) BOT 525 Biostatistics BOT 574 Basics of Bioinformatics BOT 403 Phytochemistry BOT 575 Cell Biology BOT 401 Paleobotany BOT 572 Methods in Field Biology and Analytical Techniques BOT 565 Applied and Industrial Microbiology BOT 519 Plant Biodiversity and Bioresource Utilization BOT 520 Bio-resource and Biotechnology BOT 578 Genomics, Proteomics and Metabolomics BOT 577 Economic Botany and Medical Plants BOT 576 Genetics BOT 407 Ecological Modelling BOT 404 Horticulture and Forestry BOT 576 Biosafety, IPR and Patenting BOT 402 Ethnobotany BOT 573 Seed Biology</p> <p>Elective specialization (4 credit) BOT 516 Genetics and Molecular Biology BOT 515 Microbiology and Plant Pathology BOT 518 Plant Ecology and Evolution BOT 121 Plant Physiology BOT 525 Plant Biotechnology and Genetic Engineering BOT 564 Plant Protection and Quarantine BOT 527 Plant Biodiversity and Biosystematics</p> <p><u>M.Sc. Plant Science (Botany) Year 2020</u></p> <p>Core-Compulsory (2 credit / 4 Credit) PLS 401 Fundamentals of Phycology and Mycology PLS 402 Bryophytes, Pteridophytes and Gymnosperms PLS 403 Principles of Microbiology and Plant Pathology PLS 401 (L) Fundamentals of Phycology and Mycology -Lab PLS 402 (L) Bryophytes, Pteridophytes and Gymnosperms -Lab PLS 403 (L) Principles of Microbiology and Plant Pathology -Lab PLS 451 Fundamentals of Plant Physiology and Biochemistry PLS 452 Taxonomy of Angiosperms (4 Credit) PLS 453 Plant Biotechnology and Genetic Engineering PLS 451 (L) Fundamentals of Plant Physiology and Biochemistry -Lab PLS 453 (L) Plant Biotechnology and Genetic -Lab PLS 501 Advances in Molecular Biology PLS 502 Modern Bio-analytical Techniques PLS 503 Principles of Ecology & Environment PLS 501 (L) Advances in Molecular Biology -Lab</p>	<p>PLS 407 (Commercial Horticultural Crops) PLS 408 (Mushroom Production) PLS 457 (Plants and Society) PLS 458 (Plant Products in Human Healthcare)</p>
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PLS 503 (L) Principles of Ecology & Environment – Lab
 PLS 551 Research Methodology and Biostatistics (4 Credit)
 PLS 599 M.Sc. Dissertation (4 Credit)
Core-Open (2 credit)
 PLS 404 Organic and Natural Farming
 PLS 405 Histology and Micro techniques
 PLS 406 Protected cultivation of High Value Crops
 PLS 454 Advances in Cell Biology
 PLS 455 Pharmacognosy and Phytochemistry
 PLS 456 Basic and Advanced Bioinformatics
Elective open (2 credit)
 PLS 508 Community Development
 PLS 509 Seed Technology
 PLS 510 Field Methods for Vegetation Mapping
 PLS 552 Biosafety, IPR and Patenting Issues in Plant Sciences
 PLS 553 Commercially Important Medicinal & Aromatics Plants
 PLS 554 Modern Trends in Systematics

Elective specialization (4 credit)
 PLS 504 Biotic and Abiotic Stress Management in Plants
 PLS 505 Fundamentals of Plant Breeding and Genetics
 PLS 506 Artificial Intelligence and Plant Sciences
 PLS 507 Historical Perspectives of Economic Plants of India
 PLS 555 Advanced Biochemistry
 PLS 556 Plant diseases & Protection
 PLS 557 Genomics & Proteomics
 PLS 558 Herbal Healthcare and Nutraceuticals

M.Sc. Plant Science (Botany) Year 2021
(Under NEP-2020)

Major Courses (2 credit)
 PLS 415 Fundamental of Phycology and Mycology
 PLS 416 Bryophytes, Pteridophytes and Gymnosperms
 PLS 415 (L) Fundamentals of Phycology and Mycology – LAB
 PLS 416 (L) Bryophytes, Pteridophytes and Gymnosperms – LAB
 PLS 417 Fundamentals of Plant Anatomy and Micro Techniques
 PLS 465 Plant Physiology and Advanced Biochemistry
 PLS 466 Microbiology and PhytoPathology
 PLS 467 Advances in Molecular biology
 PLS 465 (L) Plant Physiology and Advanced Biochemistry – LAB
 PLS 466 (L) Microbiology and PhytoPathology - LAB
 PLS 467 (L) Advances in Molecular biology – LAB

INTERDISCIPLINARY
COURSES 1st Semester (02 Credit)
 PLS 418 Advances in Cell Biology
 PLS 419 Principles of Organic and Natural farming
 PLS 420 Fundamentals of Enzymology

<p>Minor Courses (2 credit) PLS 418 Advances in Cell Biology PLS 419 Principles of Organic and Natural farming PLS 420 Fundamentals of Enzymology PLS 421 Elements of Plant Breeding</p> <p>Vocational/Skill Courses (2 credit) PLS 422 Protected cultivation of High Value Crops PLS 423 Biosafety, IPR and Patenting Issues in Plant Sciences PLS 424 Gardening and Landscaping PLS 425 Commercial Horticulture Crops PLS 471 Community Development PLS 472 Methods for Vegetation Mapping PLS 473 Fundamentals of Seed Technology</p> <p>IKS Courses (2 credit) Indian Knowledge System PLS 474 Historical Perspectives of Economic Plants of India</p> <p>Elective specialization (4 credit) PLS 515 Fundamentals of "Omics" Technologies PLS 516 Ethnobotany and Ethnopharmacology PLS 517 Plant Biotechnology and Genetic Engineering PLS 518 Underutilized Economic plants PLS 565 Herbal medicines in Human Health Care PLS 566 <i>In Vitro</i> Plant Biology PLS 567 Plant Stress Biology PLS 568 Grafting techniques in Plants</p> <p>Research Methodology (4 credit) PLS 519 Fundamentals of Research Methodology</p> <p>Software based Data Analysis (2 credit) PLS 520 Biostatistics PLS 521 Fundamentals of Computer Applications in data analysis PLS 571 Application of Artificial intelligence in Plant Science PLS 572 Advanced softwares used in Plant Sciences for Data Analysis (GPS, GIS, Image analysis, Biorender, Mendley, Turnitin, Statistical softwares)</p> <p>Review of Literature, Research proposal (4 credit) PLS 522 Data mining for Review of Literature PLS 523 Research Proposal/Project writing</p> <p>(2 credit) PLS 569 Academic Writings PLS 570 Paper Publications/Seminar, Conferences Presentation at National Level</p> <p>Dissertation and Viva –Voce (8 Credit) PLS 595 M.Sc Dissertation (50% Dissertation, 50% Presentation & Viva-Voce)</p>	<p>PLS 421 Elements of Plant Breeding</p> <p>INTERDISCIPLINARY COURSES 2nd Semester (02 Credit) PLS 468 Bio-analytical Techniques in Plant Science PLS 469 Plant Systematics PLS 470 Principles of Ecology and Environment</p>
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Undergraduate	Doctorate	Add-on/Value Added
NA	<p><u>Ph.D. in Plant Science (Botany)Year 2020</u></p> <p>Core Compulsory Courses (2 & 4 Credit) CPE-RPE Research and Publication Ethics PLS 600 Advances in Research Methodology</p> <p>Elective Courses (4 Credit) PLS 601 Abiotic Stress Management in Plants PLS 602 Greenhouse Technology for High Value Plants PLS 603 Advanced Plant Biochemistry PLS 604 Recent Techniques in Plant Sciences PLS 605 Advanced Plant Biotechnology PLS 606 “Omics” Approaches - Technologies and Applications</p> <p><u>Ph.D. in Plant Science (Botany)Year 2021</u></p> <p>Core Compulsory Courses (2 & 4 Credit) CPE-RPE Research and Publication Ethics PLS 600 Advances in Research Methodology PLS-ITK Indian Traditional Knowledge and practices PLS-PTL Pedagogy of teaching learning Process</p> <p>Elective Courses (4 Credit) PLS 601 Abiotic Stress Management in Plants PLS 602 Greenhouse Technology for High Value Plants PLS 603 Advanced Plant Biochemistry PLS 604 Recent Techniques in Plant Sciences PLS 605 Advanced Plant Biotechnology PLS 606 “Omics” Approaches - Technologies and Applications</p>	

5. Does the Department have Academic flexibility? If yes since when?:

Yes, 2018

Post Graduate	Add-on/Value Added
<p><u>Year 2018</u></p> <p>Core Open Courses (4 credit) 3rd Semester BOT 426 Practical Course on Botany-I</p> <p>4th Semester BOT 524 Practical Course on Botany-II</p> <p>Core Compulsory Courses (4 credit) 4th Semester BOT 599 M.Sc. Dissertation</p>	

<p><u>Year 2018</u></p> <p>Semester Wise</p> <p>1st Semester BOT 503 A Algae BOT 504 A Biology and diversity of Bryophytes and Pteridophytes BOT 506 A An Introduction to Gymnosperms BOT 410 Mycology and Plant Pathology BOT 514 Cytogenetics and Molecular Biology BOT 412 Practical Course on Bryophytes and Pteridophytes and Gymnosperms BOT 413 Practical Course on Phycology, Mycology and Plant Pathology and Biology</p> <p>2nd Semester BOT 403 Phytochemistry BOT 575 Cell Biology BOT 415 Plant Physiology and Biochemistry BOT 416 Embryology of Angiosperms BOT 411 Ecology and Environment BOT 418 Practical Course on Plant Physiology and Biochemistry BOT 417 Practical Course on Embryology of Angiosperms, Ecology</p> <p>3rd Semester BOT 419 Anatomy and Development of Plants BOT 420 Practical Course on Anatomy of Plants BOT 565 Applied and Industrial Microbiology BOT 576 Genetics BOT 578 Genomics, proteomics and Metabolomics BOT 577 Economic Botany and Medicinal Plants BOT 121 Plant Physiology BOT 516 Genetics and molecular Biology</p> <p>4th Semester BOT 552 Plant Genetic Engineering BOT 580 Environmental Biotechnology BOT 524 Practical Course on Botany-II BOT 581 Fundamentals of Biochemistry BOT 577 Economic Botany and Medicinal Plants BOT 576 Biosafety, IPR and Patenting BOT 599 M.Sc. Dissertation BOT 402 Ethnobotany BOT 404 Horticulture and Forestry BOT 414 Taxonomy of Angiosperms BOT 514 Practical Course on Cytogenetics and Molecular Biology, Microbiology BOT 515 M.Sc. Dissertation BOT 525 Plant Biotechnology & Genetic Engineering BOT 527 Plant Biodiversity and Biosystematics</p> <p><u>Year 2020</u></p> <p>BOT 515 A Microbiology and Plant Pathology (4</p>	<p>BOT 424 Herbal and Medicinal Plants BOT 427 Organic Farming and Practices</p> <p>BOT 421 Plant and Society BOT 425 Plant Product in Health Care</p>
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Credit) (for Academic Session 2019) BOT 514 L Practical Course on Cytogenetics Molecular Biology, Microbiology (for Academic Session 2019)	
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Doctorate	Add-on/Value Added
<u>Ph.D. in Plant Science (Botany) Year 2021</u> Core Compulsory Courses (2 Credit) PLS-ITK Indian Traditional Knowledge and practices PLS-PTL Pedagogy of teaching learning Process	

6. Interdisciplinary programs offered and departments involved:

Name of the Course/Paper	Interdisciplinary paper shared with department
<u>M.Sc. Botany Year 2017</u> BOT 421 Plants and Society BOT 422 Bioethics and Bio safety BOT 423 Botanical and Ecological Principles BOT 424 Herbal and Medicinal Plants BOT 425 Plant Products in Human Healthcare	Human Making / Skill Development Course
<u>M.Sc. Botany Year 2018-2019</u> BOT 424 Herbal and Medicinal Plants BOT 427 Organic Farming and Practices BOT 421 Plants and Society BOT 425 Plant Products in Human Healthcare	
<u>M.Sc. Plant Sciences (Botany) Year 2020</u> PLS 407 Commercial Horticultural Crops PLS 408 Mushroom Production PLS 457 Plants and Society PLS 458 Plant Products in Human Healthcare	
<u>M.Sc. Plant Sciences (Botany) Year 2021 (02 Credit)</u> PLS 418 Advances in Cell Biology PLS 419 Principles of Organic and Natural farming PLS 420 Fundamentals of Enzymology PLS 421 Elements of Plant Breeding	Interdisciplinary PG Courses at University Level. (1 st Semester)
<u>M.Sc. Plant Sciences (Botany) Year 2022 (02 Credit)</u> PLS 468 Bio-analytical Techniques in Plant Science PLS 469 Plant Systematics PLS 470 Principles of Ecology and Environment	Interdisciplinary PG Courses at University Level. (2 nd Semester)
<u>M.Sc. Plant Sciences (Botany) Year 2022-23 (02 Credit)</u> PLS 419 Principles of Organic and Natural farming PLS 424 Gardening and Landscaping	Interdisciplinary PG Courses at University Level. (1 st Semester)

7. Courses conducted in collaboration with other Universities and Institutions: No
8. Details of programmes discontinued, if any, with reasons: No
9. Examination System: Annual/ Semester/Choice Based Credit System/ Credit and Grading system/ any other system, specify:
Choice Based Credit System (CBCS)
10. Participation of the department in the curriculum development for courses offered by the Departments/University.

Name of the faculty	Course/Curriculum
Prof. Pardeep Kumar	Development of Course Curriculum for M.Sc under National Education Policy NEP 2020 for the academic Session 2021-2022 The curriculum for the M.Sc and Ph.D. programs has been revised and the same is available on the University website
Dr. Divya V. Nair	
Dr. Munish Sharma	
Dr. Ashun Chaudhary	

11. Has the department periodically updated the syllabus or introduced any syllabus other than the one used by university for PG course at the onset?

Yes, the Department has updated the syllabus regularly by including the topics related with current development in the area of Plant Sciences and in accordance to NEP 2020.

12. Number of teaching posts sanctioned, filled and vacant.

Designation	Sanctioned	Filled			Filled under CAS
		P	A	G	
Professor	1	1	0	0	0
Associate Professor	2	0	0	0	0
Assistant Professor	4	4	0	1	0
Total	7	5*	0	1	0

P=Permanent, A=Adhoc, G=Guest

*One Faculty left in the month of February, 2021

*One Faculty has joined in the month of March, 2022

13. Faculty profile with name, qualification, designation, experience, nature of appointment (confirmed/ probation/Ad-hoc/Guest) Appointed on Sanctioned Post:

Name	Gender	Designation	Qualifications	Teaching/ Research Experience	Nature of appointment
2017-2018					
*Dr. Shalini Chandel	Female	Guest Faculty	Ph.D	-	Guest Faculty

*Dr. Reena Sharma	Female	Guest Faculty	Ph.D	-	Guest Faculty
*Dr. Kanik Katoch	Female	Guest Faculty	Ph.D	-	Guest Faculty
*Dr. Debashish Dey	Male	Guest Faculty	Ph.D	-	Guest Faculty
2018-2019					
*Dr. Shalini Chandel	Female	Guest Faculty	Ph.D	~ 8 months	Guest Faculty
*Dr. Reena Sharma	Female	Guest Faculty	Ph.D	~ 8 months	Guest Faculty
*Dr. Kanik Katoch	Female	Guest Faculty	Ph.D	~ 8 months	Guest Faculty
*Dr. Debashish Dey	Male	Guest Faculty	Ph.D	~ 8 months	Guest Faculty
2019-2020					
*Dr. Shalini Chandel	Female	Guest Faculty	Ph.D	~ 1 year 6 months	Guest Faculty
*Dr. Reena Sharma	Female	Guest Faculty	Ph.D	~ 1 year 6 months	Guest Faculty
*Dr. Kanik Katoch	Female	Guest Faculty	Ph.D	~ 1 year 6 months	Guest Faculty
*Dr. Debashish Dey	Male	Guest Faculty	Ph.D	~ 1 year 6 months	Guest Faculty
2020-2021					
Prof. Pardeep Kumar	Male	Professor	Ph.D	Teaching & Research: ~ 16 years	Confirmed
Dr. Divya V. Nair	Female	Assistant Professor	Ph.D	Teaching: ~ 13 years Research: ~2 years 9 months	Confirmed
Dr. Rishi Thakur	Male	Assistant Professor	Ph.D	Teaching: ~ 5 years	Resigned on February, 2021
Dr. Munish Sharma	Male	Assistant Professor	Ph.D	Teaching: ~ 2 years 3 months Research: ~ 4 years 8 months	Confirmed
Dr. Ashun Chaudhary	Male	Assistant Professor	Ph.D	Teaching: ~5 years Research: ~2 years 6 months	Confirmed
2021-2022					
*Dr. Himadri	Female	Guest Faculty	Ph.D	Teaching: ~ 9 months	Guest Faculty
Dr. Jitender Kumar	Male	Assistant Professor	Ph.D	Teaching: ~ 3 years 5 months	Probation

* Left the University

14. Highest Qualification of the teaching staff:

Highest Qualification	Professor		Associate Professor		Assistant Professor		Total
	Male	Female	Male	Female	Male	Female	
Permanent:							
Ph.D.	1	0	0	0	3	1	5
M.Phil	-	-	-	-	-	-	-
PG	-	-	-	-	-	-	-
Any Other	-	-	-	-	-	-	-
Contract/Resource: NIL							
Ph.D.	-	-	-	-	-	1	1
M.Phil	-	-	-	-	-	-	-
PG	-	-	-	-	-	-	-
Any Other	-	-	-	-	-	-	-
Guest/Visiting: NIL							
Ph.D.	-	-	-	-	-	-	-
M.Phil	-	-	-	-	-	-	-
PG	-	-	-	-	-	-	-
Any Other	-	-	-	-	-	-	-

15. Diversity of Faculty:

Number of Actual Strength (2019-20) onward

Teaching faculty	Number	%
From the Same University	0	0
From Other Universities within the State	3	60
From Other States	2	40
From Outside the Country	0	0

16. Number of faculty who have awarded M.Phil., Ph.D., D.Sc. / D.Lit.: 1

17. List of Visiting Fellows/Teachers, Adjunct and Emeritus Professors : Nil

Name	Designation	Institution

18. Percentage of classes taken in each semester by faculty (programme- wise information):

Name of Faculty	Name of Course	Name of Paper	% Class Taken by
Prof. Pardeep Kumar			
	M.Sc. Botany 4 th Semester, Academic Year Jan-June 2020	M.Sc. Dissertation (BOT 515)	> 85%
	M.Sc. Botany 3 rd Semester, Academic Year July-December 2020	Economic Botany and Medicinal Plants (BOT 577)	> 75%
	M.Sc. Plant Sciences (Botany) 1 st Semester, Academic Year July-December 2020	Protected Cultivation of High Value Crop (PLS 406)	> 75%
	M.Sc. Botany 4 th Semester, Academic Year Jan-June 2021	Horticulture and Forestry (BOT 404)	> 75%
		M.Sc. Dissertation (BOT 515)	> 90%
	M.Sc. Plant Sciences (Botany) 2 nd Semester, Academic Year Jan-June 2021	Plant and Society (PLS 457)	> 78%
		Plant Products in Human Health Care (PLS 458)	> 75%
	M.Sc. Plant Sciences (Botany) 3 rd Semester, Academic Year July-December 2021	Biotic and Abiotic Stress Management (PLS 504)	> 95%
		Seed Technology (PLS 509)	> 75%
	M.Sc. Plant Sciences (Botany) 1 st Semester, Academic Year July-December 2021	Protected cultivation of High Value Crops (PLS 422)	> 80%
		Commercial Horticulture Crops (PLS 425)	> 90%
		IKS	> 75%
	M.Sc. Plant Sciences (Botany) 4 th Semester, Academic Year Jan-June 2022	M.Sc. Dissertation (PLS 599)	> 95%
	Ph.D in Plant Sciences (Botany) 1 st Semester, Academic Year 2020	Research and Publication Ethics (CPE-RPE)	> 95%
		Abiotic Stress Management in Plants (PLS 601)	> 85%
		Greenhouse Technology for High Value Plants (PLS 602)	> 75%
	Ph.D in Plant Sciences (Botany) 1 st Semester, Academic Year 2021	Research and Publication Ethics (CPE-RPE)	> 95%
		Indian Traditional Knowledge and Practices (PLS –ITK)	> 85%
		Abiotic Stress Management in Plants (PLS 601)	> 85%
		Greenhouse Technology for High Value Plants (PLS 602)	> 95%
Dr. Divya V. Nair	M.Sc. Botany 4 th Semester , Academic Year Jan-June 2020	Taxonomy of Angiosperm (BOT 414)	> 85%
		Practical Course on Cytogenetics Molecular Biology, Microbiology (BOT 514)	> 75%
		M.Sc. Dissertation (BOT 515)	> 78%
		Plant Biodiversity and Biosystematics (BOT 527)	> 90%

	M.Sc. Botany 2 nd Semester, Academic Year Jan-June 2020	Embryology of Angiosperms (BOT 416)	> 95%
		Practical Course on Embryology of Angiosperms, Ecology (BOT 417)	> 75%
	M.Sc. Botany 3 rd Semester, Academic Year July-December 2020	Anatomy and Development of Plants (BOT 419)	> 90%
		Practical Course on Anatomy of Plants (BOT 420)	> 85%
		Genomics, Proteomics and Metabolomics (BOT 578)	> 75%
	M.Sc. Plant Sciences (Botany) 1 st Semester, Academic Year July-December 2020	Bryophytes, Pteridophytes and Gymnosperms (PLS 402)	> 78%
		Bryophytes, Pteridophytes and Gymnosperms-Lab (PLS 402 L)	> 90%
		Mushroom Production (PLS 408)	> 90%
	M.Sc. Botany 4 th Semester, Academic Year Jan-June 2021	M.Sc. Dissertation (BOT 515)	> 85%
		Taxonomy of Angiosperm (BOT 414)	> 75%
		Plant Biodiversity and Biosystematics (BOT 527)	> 80%
	M.Sc. Plant Sciences (Botany) 2 nd Semester, Academic Jan-June 2021	Taxonomy of Angiosperm (PLS 452)	> 75%
		Basic and Advanced Bioinformatics (PLS 456)	> 76%
	M.Sc. Plant Sciences (Botany) 3 rd Semester, Academic Year July-December 2021	Advance in Molecular Biology (PLS 501)	> 90%
		Advance in Molecular Biology-Lab (PLS 501 L)	> 95%
		Fundamentals of Plant Breeding and Genetics (PLS 505)	> 75%
	M.Sc. Plant Sciences (Botany) 1 st Semester, Academic Year July-December 2021	Bryophytes, Pteridophytes and Gymnosperms (PLS 416)	> 78%
		Bryophytes, Pteridophytes and Gymnosperms -Lab (PLS 416 (L))	> 76%
	M.Sc. Plant Sciences (Botany) 4 th Semester, Academic Year Jan-June 2022	M.Sc. Dissertation (PLS 599)	> 75%
		Modern Trends in Systematics (PLS 554)	> 90%
		Genomics & Proteomics (PLS 557)	> 75%
Dr. Munish Sharma	M.Sc. Plant Sciences (Botany) 2 nd Semester, Academic Year Jan-June 2022	Advances in Molecular Biology (PLS 467)	> 78%
		Advances in Molecular Biology –Lab (PLS 467(L))	> 95%
		Plant Systematics (PLS 469)	> 95%
	Ph.D in Plant Sciences (Botany) 1 st Semester, Academic Year 2020	Advances in Research Methodology (PLS 600)	> 95%
		“Omic” Approaches - Technologies and Applications (PLS 606)	> 85%
	Ph.D in Plant Sciences (Botany) 1 st Semester, Academic Year 2021	“Omic” Approaches - Technologies and Applications (PLS 606)	> 95%
	M.Sc. Botany 4 th Semester, Academic Year Jan-June 2020	M.Sc. Dissertation (BOT 515)	> 95%
		Ethanobotany (BOT 402)	> 80%
		Plant Biotechnology and Genetics Engineering (BOT 525)	> 78%
	M.Sc. Botany 2 nd Semester, Academic Year Jan-June 2020	Plant & Society (BOT 421)	> 79%

M.Sc. Botany 3 rd Semester, Academic Year July- December 2020	Bio-resource and Biotechnology (BOT 520)	> 77%
	Microbiology and Plant Pathology (BOT 515)	> 75%
M.Sc. Plant Sciences (Botany) 1 st Semester, Academic Year July- December 2020	Principal of Microbiology and Plant Pathology (PLS 403)	> 80%
	Principal of Microbiology and Plant Pathology –Lab (PLS 403L)	> 85%
	Organic and Natural Farming (PLS 404)	> 75%
	Histology and Micro Techniques (PLS 405)	> 90%
M.Sc. Botany 4 th Semester, Academic Year Jan-June 2021	M.Sc. Dissertation (BOT 515)	> 85%
	Ethanobotany (BOT 402)	> 75%
	Plant Biotechnology and Genetic Engineering (BOT 525)	> 85%
M.Sc. Plant Sciences (Botany) 2 nd Semester, Academic Year Jan-June 2021	Plant Biotechnology and Genetic Engineering (PLS 453)	> 90%
	Plant Biotechnology and Genetic Engineering-Lab (PLS 453 L)	> 78%
	Plant and Society (PLS 457)	> 80%
M.Sc. Plant Sciences (Botany) 3 rd Semester, Academic Year July- December 2021	Modern Bio-analytical Techniques (PLS 502)	> 95%
	Artificial Intelligence and Plant Sciences (PLS 506)	> 85%
M.Sc. Plant Sciences (Botany) 1 st Semester, Academic Year July- December 2021	Fundamentals of Plant Anatomy and Micro Techniques (PLS 417)	> 75%
	Principal of Organic and Natural farming (PLS 419)	> 80%
	Fundamentals of Enzymology (PLS 420)	> 75%
	Elements of Plant Breeding (PLS 421)	> 85%
	Biosafety, IPR and Patenting Issues in Plant Sciences (PLS 423)	> 90%
	Gardening and Landscaping (PLS 424)	> 90%
M.Sc. Plant Sciences (Botany) 4 th Semester, Academic Year Jan-June 2022	M.Sc. Dissertation (PLS 599)	> 95%
	Commercially Important Medicinal & Aromatics Plants (PLS 553)	> 85%
M.Sc. Plant Sciences (Botany) 2 nd Semester, Academic Year Jan-June 2022	Microbiology and PhytoPathology (PLS 466)	> 75%
	Microbiology and PhytoPathology – Lab (PLS 466 (L))	> 80%
	Bio-analytical Techniques in Plant Sciences (PLS 468)	> 75%
	Methods of Vegetation Mapping (PLS 472)	> 85%
Ph.D in Plant Sciences (Botany) 1 st Semester, Academic Year 2020	Advances in Research Methodology (PLS 600)	> 95%
	Advanced Plant Biotechnology (PLS 605)	> 85%
Ph.D in Plant Sciences (Botany) 1 st Semester, Academic Year 2021	Advanced Plant Biotechnology (PLS 605)	> 95%

Dr. Ashun Chaudhary	M.Sc. Botany 4 th Semester, Academic Year Jan-June 2020	M.Sc. Dissertation (BOT 515)	> 85%
		Biosafety, IPR and Patenting (BOT 576)	> 75%
		Plant Biodiversity and Biosystematics (BOT 527)	> 76%
	M.Sc. Botany 2 nd Semester, Academic Year Jan-June 2020	Ecology and Environment (BOT 411)	> 80%
		Practical Course on Embryology of Angiosperms, Ecology (BOT 417)	> 85%
		Phytochemistry (BOT 403)	> 90%
		Plant Products in Human Health Care (BOT 425)	> 75%
	M.Sc. Botany 3 rd Semester, Academic Year July-December 2020	Applied and Industrial Microbiology (BOT 565)	> 85%
		Plant Ecology and Evolution (BOT 518)	> 90%
	M.Sc. Plant Sciences (Botany) 1 st Semester, Academic Year July-December 2020	Fundamentals of Phycology and Mycology (PLS 401)	> 75%
		Fundamentals of Phycology and Mycology-Lab (PLS 401 L)	> 85%
		Commercial Horticultural Crops(PLS 407)	> 90%
	M.Sc. Botany 4 th Semester, Academic Year Jan-June 2021	M.Sc. Dissertation (BOT 515)	> 95%
		Practical Course on Cytogenetics, Molecular Biology, Microbiology (BOT 514)	> 75%
		Biosafety, IPR and Patenting (BOT 576)	> 95%
	M.Sc. Plant Sciences (Botany) 2 nd Semester, Academic Year Jan-June 2021	Fundamentals of Plant Physiology and Biochemistry (PLS 451)	> 75%
		Fundamentals of Plant Physiology and Biochemistry-Lab (PLS 451 L)	> 76%
		Advances in Cell Biology (PLS 454)	> 85%
		Pharmacognosy and Phytochemistry (PLS 455)	> 75%
		Plant Products in Human Health Care (PLS 458)	> 80%
	M.Sc. Plant Sciences (Botany) 3 rd Semester, Academic Year July-December 2021	Principles of Ecology and Environment (PLS 503)	> 85%
		Principles of Ecology and Environment-Lab (PLS 503 L)	> 75%
		Community Development (PLS 508)	> 95%
		Seed Technology (PLS 509)	> 75%
	M.Sc. Plant Sciences (Botany) 1 st Semester, Academic Year July-December 2021	Fundamental of Phycology and Mycology (PLS 415)	> 78%
		Fundamental of Phycology and Mycology- Lab (PLS 415(L))	> 75%
		Advances in Cell Biology (PLS 418)	> 85%
		Biosafety, IPR and Patenting Issues in Plant Sciences (PLS 423)	> 80%
	M.Sc. Plant Sciences (Botany) 4 th Semester, Academic Year Jan-June 2022	M.Sc. Dissertation (PLS 599)	> 90%
		Biosafety, IPR and Patenting Issues in Plant Sciences (PLS 552)	> 95%
		Advanced Biochemistry (PLS 555)	> 80%
	M.Sc. Plant Sciences (Botany) 2 nd Semester,	Plant Physiology and Advanced Biochemistry (PLS 465)	> 75%

	Academic Year Jan-June 2022	Plant Physiology and Advanced Biochemistry –Lab (PLS 465 (L))	> 85%
		Principal of Ecology and Environment (PLS 470)	> 90%
	Ph.D in Plant Sciences (Botany) 1 st Semester, Academic Year 2020	Advances in Research Methodology (PLS 600)	> 95%
		Advanced Plant Biochemistry (PLS 603)	> 85%
		Recent Techniques in Plant Sciences (PLS 604)	> 95%
	Ph.D in Plant Sciences (Botany) 1 st Semester, Academic Year 2021	Advanced Plant Biochemistry (PLS 603)	> 95%
Dr. Rishi Thakur	M.Sc. Botany 4 th Semester, Academic Year Jan-June 2020	Practical Course on Cytogenetics Molecular Biology, Microbiology (BOT 514)	> 75%
		M.Sc. Dissertation (BOT 515)	> 80%
	M.Sc. Botany 2 nd Semester, Academic Year Jan-June 2020	Plant Physiology and Biochemistry (BOT 415)	> 75%
		Practical Course on Plant Physiology and Biochemistry (BOT 418)	> 77%
		Cell Biology (BOT 575)	> 95%
		Phytochemistry (BOT 403)	> 85%
	M.Sc. Botany 3 rd Semester, Academic Year July-December 2020	Plant Physiology BOT 121	> 77%
		Applied and Industrial Microbiology (BOT 565)	> 80%
Dr. Himadri	M.Sc. Plant Sciences (Botany) 3 rd Semester, Academic Year July-December 2021	Biotic and Abiotic Stress Management (PLS 504)	> 85%
		Historical Perspectives of Economic Plants of India (PLS 507)	> 77%
		Field Methods for Vegetation Mapping (PLS 510)	> 75%
	M.Sc. Plant Sciences (Botany) 1 st Semester, Academic Year July-December 2021	Elements of Plant Breeding (PLS 421)	> 80%
		Protected cultivation of High Value Crops (PLS 422)	> 90%
		Commercial Horticulture Crops (PLS 425)	> 85%
		IKS	> 80%
	M.Sc. Plant Sciences (Botany) 4 th Semester, Academic Year Jan-June 2022	Herbal Healthcare & Nutraceuticals (PLS 558)	> 77%
	M.Sc. Plant Sciences (Botany) 2 nd Semester, Academic Year Jan-June 2022	Principal of Ecology and Environment (PLS 470)	> 80%
		Community Development (PLS 471)	> 85%
		Fundamentals of Seed Technology (PLS 473)	> 80%
		Historical Perspectives of Economics Plants of India (PLS 474)	> 85%
	Ph.D in Plant Sciences (Botany) 1 st Semester, Academic Year 2021	Indian Traditional Knowledge and Practices (PLS –ITK)	> 95%
Dr. Jitender Kumar	M.Sc. Plant Sciences (Botany) 4 th Semester, Academic Year	Research Methodology and Biostatistics (PLS 551)	> 82%
		M.Sc. Dissertation (PLS 599)	> 95%
		Plant diseases & Protection (PLS 556)	> 80%

	Ph.D in Plant Sciences (Botany) 1 st Semester, Academic Year 2021	Advances in Research Methodology (PLS 600)	> 95%
		Recent Techniques in Plant Sciences (PLS 604)	> 85%

19. Programme-wise Student-Teacher Ratio:

S. No.	Name of the Programme / Course	Sanctioned Student Intake	Teacher-Student Ratio (Formula- Students: teachers)
1	M.Sc. Botany 2017-18	31(30)=30(1 Left)	4 (Adhoc Faculty) 7.5:1
2	M.Sc. Botany 2018-19	32(30+30)=60(2 Left)	4 (Adhoc Faculty) 15:1
3	M.Sc. Botany 2019-20	32(30+30)=60(2 Left)	4 (Regular Faculty) 15:1
4	M.Sc./Ph.D Plant Science (Botany) 2020-21	33(30+31+7)=68(2 Left)	4 (Regular Faculty) 13.6:1
5	M.Sc./Ph.D Plant Science (Botany) 2021-22	40(38+31+7+11)=87(1 Left)	6 (Regular Faculty) 14.5:2

20. Number of academic support staff (technical) and administrative staff sanctioned, filled and vacant:

Sr. No.	Posts	Sanctioned posts	Filled		Total
			Permanent	Contractual	
1	Laboratory Assistant		1	0	1
2	Laboratory Attendant		1	0	1
3	Ministerial Staff		0	0	0
4.	Others		0	0	0

21. Thrust areas of research as identified by the department:

- Economic Botany, Vegetable Grafting and plant Protection, Hydroponics
- Natural Plant Chemistry and Toxicological evaluations
- Plant Molecular Biology, Genetic responsibilities of stress tolerance in crop plants, Medicinal Plant physiology
- Plant Biotechnology- Micro-propagation and Plant Metabolic Engineering

22. Information about research grants, projects completed and ongoing during last year:

a) From National funding agencies (like UGC, CSIR, DST, DBT, DST-FIST; CSIR, UGC-SAP/CAS, DAE, DBT, BRNS, ICSSR, AICTE, etc):

Sr. No.	Name of the Principle Investigator (Co-investigator)	Title of the Project	Funding Agency, Duration & date of sanction	Amount (in Lakh)	Status of Project (Submitted/ Ongoing)	Remarks if any (Publication/ Award/ Patent)
1.	Prof. Pardeep Kumar (PI) Dr. Ashun Chaudhary (Co-PI)	Himalayan Universities Consortium	Niti Ayaog	16,87,000.00	Completed	-
2	Dr. Divya V. Nair (PI)	Genetic Diversity Assessment and Molecular Authentication of Endemic Himalayan Medicinal Plant Species <i>Trillium govanianum</i> (Wall. ex D. Don) kunth. Using DNA Barcode.	UGC	10,00,000.00	Ongoing	-
3	Dr. Divya V. Nair (PI)	Molecular authentication of Rauvolfia species from Southern Western Ghats of India using DNA barcoding	DST-SERB	~ 30,00,000.00	Ongoing	-
4	Dr. Ashun Chaudhary (Co-PI)	Chemoprofiling and pharmacological investigation of " <i>Desmodium gangeticum</i> "	EMR-CSIR	~ 30 Lakh	Submitted	-
5	Prof Pardeep Kumar (PI) Dr. Munish Sharma (Co-PI) Dr. Ashun Chaudhary (Co-PI)	Establishment of 'Swami satyanand Stokes Herbal garden' at Central University of Himachal Pradesh	NMPB	~ 1crore 42 lakh	Submitted	-
6	Dr Munish Sharma (Co-	Anti-neoplastic nature of	DST Core	93,78,400.00	Submitted	-

	PI)	<i>Bergenia ciliata</i> against breast cancer cell lines	Grant			
7	Dr Munish Sharma (Co-PI)	Co-relation between serum trace element and genetic variation associated with Polycystic Ovarian Disease in females	DST Supra	82,45,608.00	Submitted	-
8	Dr Munish Sharma (Co-PI)	Metagenomics of high altitude fish gut microbiome for potential health benefits and sustainable aquaculture	DBT	63,21,480.00	Submitted	-
9	Dr. Divya V. Nair (PI)	Species Diversity Assessment and Metabolic Profiling of Ground Layer Angiosperms (Herbs/Grasses) from Cold Deserts of Western Himalayas	DST	55,07,832.00	Submitted	-
10	Dr. Jitender Kumar (PI)	<i>In vitro</i> micropropagation and phytochemical investigation of chemical constituents found in orchids of Astavarga group	DST-SERB	49,68,024.00	Submitted	-

Note: Please enclose a copy of Report Summary, Utilization Certificate and relevant documents

b) From International funding agencies: Nil

Sr. No.	Name of the Principal Investigator (Co-investigator)	Title of the Project	Funding Agency, Duration & date of sanction	Amount (in Lakh)	Status of Project (Submitted/ Ongoing)	Remarks if any (Publication/ Award/ Patent)

Note: Please enclose a copy of Report Summary, Utilization Certificate and relevant documents

c) From Corporate Houses/Industries: Nil

Sr. No.	Name of the Principal Investigator (Co-investigator)	Title of the Project	Funding Agency, Duration & date of sanction	Amount (in Lakh)	Status of Project (Submitted/ Ongoing)	Remarks if any (Publication/ Award/ Patent)

Note: Please enclose a copy of Report Summery, Utilization Certificate and relevant documents

23. Funds received at University level through Corpus fund/Seed Money: Nil

Sr. No.	Name of the Principle Investigator (Co-investigator)	Title of the Project	Funding Agency, Duration & date of sanction	Amount (in INR)	Status of Project (Submitted/ Ongoing)	Remarks if any (Publication/ Award/ Patent)

Note: Please enclose a copy of Report Summery, Utilization Certificate and relevant documents

24. Research facilities available in the department and recognition received, if any?

Since the Department is new, all efforts have been made consistently for the up gradation of well-equipped research laboratories and facilities.

25. Special research laboratories sponsored by/created by industry or corporate bodies: Nil

26. Details of patents filed & granted and income generated: Nil

27. Consultancy services provided, name of the teacher/s and income generated: Nil

Sr. No.	Year	Name of the teacher	Nature of consultancy	Funds generated (In Rs)

28. Publications:

Sr. No.	Papers published in UGC listed journals	Papers published in peer reviewed journals (Not in UGC-LIST)	Monographs, Books, Chapters in books		Citations	h-index*	Impact factor range/Average Impact factor*
			With ISBN no.	Without ISBN no.			
1.Prof. Pardeep Kumar	0	4	0	0	h-index: 4 (on the basis of Google Scholar)		
2.Dr. Divya V. Nair	0	0	1	0	https://scholar.google.com/citations?hl=en&user=tGMx-mcAAAAJ h-index: 6 (on the basis of Google Scholar)		
3.Dr.Munish Sharma	1	3	1	0	https://scholar.google.com/citations?user=9INmsGMAAAAJ&hl=en h-index: 6 (on the basis of Google Scholar)		
4.Dr. Ashun Chaudhary	11	0	1	0	https://scholar.google.co.in/citations?user=vDzwPsMAAAAJ&hl=en h-index: 11 (on the basis of Google Scholar)		
5. Dr. Jitender Kumar	0	0	0	0	https://scholar.google.com/citations?user=r2bTnFcAAAAJ&hl=en h index: 3 (on the basis of Google Scholar)		

29. # Details of teachers invited as resource persons for Refresher courses, Orientation courses, Seminars, Workshops, Conferences at state, national and international levels.

Name of Faculty	Resource Person for (Refresher courses, Orientation courses, Seminars, Workshops, Conferences)	Levels (National/ International/ State/University/College)
Prof. Pardeep Kumar	Invited talk on the topic entitled 'Protected Cultivation- A technological upgrade' organized by Dev Samaj College for Women, Ferozpur (Punjab) on 28-01-2021	National
	Invited talk on the topic entitled 'Grafting techniques in vegetable crops' organized by KVK, Sundernagar on 06-03-2020	National
	Invited Radio Talk on the topic entitled 'Kaddu vargiya sabjion ki unnat aur vaigyanik kheti' organized by All India	National

	Radio, Dharamshala on 18-03-2020	
	Invited talk on the topic entitled 'Vegetable Grafting' organized by CSKHPKV, Palampur on 03-09-2020	University
	Invited TV Talk on DD Kisan on the topic entitled 'Sabjion mein grafting technique' organized by DD Kisan, New Delhi on 16-11-2020	National
	Invited talk on the topic entitled ' Contract Farming ' organized by Agrivision, Himachal Pradesh on 16-12-2020	National
	Invited talk on the topic entitled 'Role of Youth in Nations Reconstruction' organized by Eternal University on 12-01-2021	National
	Invited TV Talk on DD Kisan on the topic entitled 'Sabjion ki sanrkshit kheti' organized by DD Kisan, New Delhi on 12-01-2021	National
Dr. Divya V. Nair	Invited talk on the topic entitled 'Career in Science' organized by Nirmala College, Moovaattupuzha, Kerala on May 2020	College
	Invited talk on the topic entitled 'Is Science a Good Career Choice' organized by St. Xaviers College , Aluva, Kerala on August 2020	College
	Invited talk on the topic entitled 'Authentication of Medicinal Plants-Techniques and Advancements' organized by Assumption College, Changanasserry, Kerala on August 2020	College
	Invited talk on the topic entitled 'Metabarcoding: Past, present and future perspectives' organized by St. Dominic College, Kanjirappally, Kerala on January 2021	College
Dr. Munish Sharma	Invited as Resource person and presented a paper entitled as 'Green Technology - An Effective way for Healthy and Clean Environment' in a seminar on "Azadi ka Amrit Mahasotav." Organised by NSS Club of Government College of Engineering and Technology Jammu on 5th May 2021	College

30. Details of teachers participated in Refresher courses, Orientation courses, Seminars, Workshops, Conferences at national and international levels. (participant, presented paper, chaired the session)

Name of Faculty	Participation in (Refresher courses, Orientation courses, Seminars, Workshops, Conferences)	Levels (National/ International/ State/University/College)
Dr. Divya V. Nair	FDP on Emerging Trends in Plant Science (1 st March 2021) Organized by Department of Botany, Vivekananda College, Madurai	National
	Two Days online workshop on Patent Drafting and Processing With Importance of Trademark and Copy right (May,2020) Organized by Journal of Advanced Engineering Research and powered by hexacube India	National
	6-days long INYAS –CuPB lecture Workshop (31st May -5th June 2020) Organized by Indian National Young Academy of Sciences and Department of Botany, Central University of Punjab, Bathinda, India	National
	3-days long DAVCB-CUPB-INYAS lecture workshop on Zero Waste (16th June -18th June 2020) Organized by DAV College, Bathinda, Central University of Punjab, Bathinda, and Indian National Young Academy of Sciences, New Delhi	National
	Online Lecture on “Women in Science, Education and Research” on topic “From a Biology Researcher to an Academic Administrator” at School of Life Science, Central University of Himachal Pradesh (February,2021)	University
Dr. Munish Sharma	4-Week Induction/Orientation Programme for "Faculty in Universities/Colleges/Institutes of Higher Education" (10 th December 2020 – 08 th January 2021) Organized by Teaching Learning Centre, Ramanujan College University of Delhi under the aegis of Ministry of Education Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching	National
	Webinar on Recent Advances in Biotechnology (27 th April , 2020)	International

	Organized by Department of Biotechnology, Panjab University (PU), Chandigarh India	
	Webinar on 'Role of Applied Biology in Current Scenario' (22 nd May 2020) Organized by JhunJhunwala P. G. College, Ayodhya	National
	Live Webinar on "Higher Education Post COVID-19 (23 rd May, 2020) Organized by Rungta (R1) Group of Institutions, Raipur	National
	Symposium on "Role of Plants as Medicine and Immunity booster with special reference to COVID-19 pandemic (Online) (26 th -27 th May, 2020) Organized by Sri Guru Tegh Bahadur Khalsa College, Jabalpur (M.P)	International
	National Webinar on General Awareness: Physiological and Biochemical Aspects of COVID-19 (30 th May, 2020) Organized by JhunJhunwala P. G. College, Ayodhya (Online)	National
	Webinar on "Positive impact of Lockdown on Environment in India under NAHEP-IDP (5 th June 2020) Organized by Rajmata Vijayaraje Scindia Krishi Vishwa Vidyalaya, Gwalior (M.P)	National
	Webinar on "Traditional Agriculture: Self-reliant Bharat" (20 th - 21 th June, 2020) Organized by Kshitij Foundation and Agrivision	National
	Webinar On "Rare Fungal Spores as Trace Evidence and Intelligence in Forensic Investigations" (25 th July, 2020) Organized by Satish Pradhan Dnyanasadhana College, Thane (Arts, Science and Commerce) IQAC and Department of Botany in collaboration with Mycological Society of India (Mumbai Unit)	International
	Webinar on " Next Generation Sequencing for deciphering Host-Pathogen interactions" (4 th – 5 th Feb., 2021) Organized by Indian PhytoPathological Society in collaboration with Bionivid Technology Pvt. Ltd	National

Dr. Ashun Chaudhary	Faculty Induction Programme – 04 (02 nd – 29 th March 2021) Organized by HRDC- GNDU, Guru Nanak Dev University, Amritsar	National
	Online Conference on “COVID-19 Biotechnology: A way Forward” (30 th April 2020) Organized by Department of Biosciences, School of Basic Sciences, Manipal University, Jaipur	International
	Online workshop on “Book & Article Publishing and Springer link Platform Demonstration” (22 nd April 2020) Organized by School of Education, Guru Nanak Dev University, Amritsar	National

31. Details of teachers presented paper Seminars, Workshops, Conferences at national and international levels (participant, presented paper, chaired the session) in an academic year.

Name of Faculty	Participation in (Refresher courses, Orientation courses, Seminars, Workshops, Conferences)	Levels (National/ International/ State/University/College)
As detailed at S. No 30		

32. Participation of teachers in various academic activities as members of committees at University level, State level, National level, International level bodies. (give details)

Name of Faculty	Nature of Participation (Activity)	Levels (National/ International/ State/University/College)
Prof. Pardeep Kumar	Court Member, HP University, Shimla	State
	Court Member, NEHU, Shillong	State
	Member, Academic Council Committee, Sardar Vallabhbhai Patel Cluster University, Mandi	State
	Member, Advisory Committee, CSKHPV Palampur	State
	Chairman, Board of Studies, Department of Plant Science, CUHP	University
	Dean, Academics	University
	Chairman, School Board, School of Life Sciences, CUHP	University
	Member, Academic Council, CUHP	University
	Member, Executive Council, CUHP	University
	Founder President and Life Member, Himalayan Life Science Society	University
	Member, Students Grievances Redressal Committee (Physics and Computational Biology)	University
	Nodal Officer, Himalayan Universities Consortium	University
	Nodal Officer, Unnat Bharat Abhiyan	University
	Liasion Officer, SC/ST/PWD Cell	University
	Member, University Anti Ragging Committee	University
	Chairman, Institutions Innovation Council	University

	Chairman, Institutional Biosafety Committee	University
	Chairman, University Level High Power Committee	University
	Dean , Students Welfare	University
	Member	University
	Nominee Person (Member), Interview Committee, Department of Animal Sciences	University
	Chairman, Concerned/Allied Disciplines/Specialization for Determination Committee	University
	Chairman, University Dehra Library , Books Purchase	University
	Chairman, Bhartiya Knowledge System (IKS)	University
	Chairman, CAS	University
Dr. Divya V. Nair	Member, Department Standing Committee School of life Sciences	University
	Faculty - In charge, Training and placement cell	University
	Department Admission Committee	University
	Member, NEP implementation committee of the department	University
	Faculty in Charge, Vaidya Suseshan Club	University
	Member, Department Research Committee	University
	MSc admission committee 2021-22	University
	Ph.D. selection personal interview committee 2021	University
	Member, Physical verification committee	University
	Member, IQAC, School of life sciences	University
	Department Purchase Committee	University
	Member, Research and Development Cell, School of life sciences	University
	Decoration Committee, Plantation Event" in Swami Satyanand Stokes Vanaspati Udhyan at CUHP, Botanical Site, Jandrangal (Near, Chamunda Mata Mandir)	University
	Executive Committee Member, Himalayan Life Science Society	University
Dr. Munish Sharma	Member, Physical Verification Committee, CCB, February 2020	University
	Member, Educational Tour for M.Sc Botany Students, February 2020	University
	Member, Screening Committee for Ph.D. application, DoPLS, March 2020	University
	Organizing Committee Member for "Plantation Event" at Swami Satyanand Stokes Vanaspati Udhyan, Central University of Himachal Pradesh, Botanical Site, Jandrangal (Near Chamunda Mata Mandir), Dharamshala, September, 2020	University
	Departmental Representative for University level Internal Quality Assurance Cell (IQAC), October 2020	University
	Member, Departmental Academic Integrity Panel (DAIP), December 2020	University
	Member, Department Level Technical/Purchase Committee, Feb 2021	University
	Tender Opening Committee member constituted for the opening of quotations/tenders for the Supply of Instruments/Equipments required in the Laboratory of the Department of Animal Sciences, School of Life Sciences, March and October 2021	University
	Subject Expert (Head Nominee) for Research Advisory Committee, CBB, August 2021	University
	Paper setter for M.Sc Plant Science (Botany)for CUHP	University

	Entrance Test , August 2021	
	Member, Emotional Well-Being Committee, Shahpur Camus, August 2021	University
	Member, Special Guidance Centre, CUHP, August 2021	University
	Member Secretary for Implementation of National Education policy (NEP 2020) at Departmental level, Sept. 2021	University
	University Observer for University Level Entrance Examination at Jammu Centre for the session 2021-22, Sept. 2021	University
	Member for preparing outline of Multiple Entry: Multiple Exit system as per Guidelines of NEP 2020, Sept 2021	University
	Paper Setter for Himachal Pradesh Kendriya Vishwavidyalaya Shodh Patrata Pariksha (HPKVSP-2021), Sept. 2021	University
	Invigilator for HPKVSP-2021 at Shahpur Parisar, Sept. 2021	University
	Admission Committee Member (Dean's Nominee) for Department of Plant Science Session 2021-22, Sept. 2021	University
	Committee Member for Journal of Himalayan Life Science Launch programme at DoPLS, October 2021	University
	Committee Member (Category V) for preparation of AQAR for SSR (Session 2020-21) October 2021	University
	Member, Department Research committee, Nov. 2021	University
	Paper Setter for Ph.D. Entrance Test-2021 Nov 2021	University
	Deputy Superintendent, Ph.D. Entrance Test-2021 at Shahpur Parisar, Nov 2021	University
	Faculty Incharge for Alumni Cell, Department of plant Science Nov 2021	University
	Committee Member for signing MoU with Indian Red Cross Society, Nov 2021	University
	Member, Educational Tour for PG and RD Students to Botanical Garden, December 2021	University
	Departmental Standing Committee Member for Personal Interview of Ph.D. December 2021	University
	Internal Member, Institutional Biosafety Committee (IBSC), January 2022	University
	Deputy Superintendent for conduct of End Term Examination-2022 (Semester 1 st students), Feb 2022	University
	Technical Committee Member for instrumentation in Department of Environmental Sciences, CUHP Feb 2022	University
	Special Invitee for 2 nd Board of Studies of the Department of Plant Sciences, School of Life Sciences, Central University of Himachal Pradesh	University
	Stage Management Committee Member for National University Games Event, Feb 2022	University
Dr. Ashun Chaudhary	Member of Ph.D Screening Committee academic session 2020 (17/03/2020)	University
	Member, Personal Interview Committee for online Interview (12/06/2020) in admission to Ph.D Programme (academic session 2020) in the Department of Plant Science (OBC Category Representative)	University
	Member, Personal Interview Committee for online Interview (12/06/2020) in admission to Ph.D Programme (academic session 2020) in the Department of Animal Science (OBC Category Representative)	University
	Member, Personal Interview Committee for online	University

Interview (12/06/2020) in admission to Ph.D Programme (academic session 2020) in the Centre for Computational Biology and Bioinformatics (OBC Category Representative)	
Member, Plantation Event (29/09/2020) in Swami Satyanand Stokes Vanaspati Udhyan at CUHP, Botanical Garden, Jandrangal, Plant Material Committee	University
Observer, for Central University of Himachal Pradesh Entrance Examination for session 2020, Chamba Centre (08/10/2020)	University
Member, for Committee to check the equivalence of the Courses of M. Phil programme of students to Ph.D Programme of various Departments/Centre in the School of Life Sciences (23/10/2020) for exemption of Course work for academic session 2020	University
Observer, for Central Teacher Eligibility Test 31/01/2021 (CTET-2021) for Hamirpur centre (Himachal Pradesh)	University
Member, Department Level Purchase committee (02/02/2021)	University
Member, Technical specification Equipments/Instruments/items Department Level Purchase committee (02/02/2021)	University
Laboratory-Incharge, Department of Plant Sciences from 11/03/2021	University
Member, Interview Committee for Himalayan Consortium Project (07/05/2021) by Niti Aayog in five theme (OBC Category Representative)	University
Member, Selection and Screening Committee for Interview of Resource Person Centre for Computational Biology and Bioinformatics on 08/07/2021 (OBC Category Representative)	University
Member, Physical Verification Committee (01/08/2021) for Department of Plant Science	University
Member, Selection and Screening Committee for Interview of Resource Person Centre for Department of Animal Science on 08/07/2021 (OBC Category Representative)	University
Member, NEP implementation committee of the department of Plant science from 01/09/2021	University
Member, Indian Traditional Knowledge & Practices for NEP-2020 implementation committee of the department of Plant science from 03/09/2021	University
Invigilator, for Entrance Examination (CUHPET-2021), afternoon session CUHP, Shahpur Parisar, Shahpur (09/09/2021)	University
Invigilator, for Entrance Examination (CUHPET-2021), Evening session CUHP, Shahpur Parisar, Shahpur (09/09/2021)	University
Invigilator, for Entrance Examination (HPKVSP-2021), Morning session CUHP, Shahpur Parisar, Shahpur (30/09/2021)	University
Dean Nominee, Admission Committee (17/09/2021) for PG Students academic session 2021-2022 in the Department of Animal Science	University
Member, Admission Committee (20/09/2021) for PG Students academic session 2021-2022 in the Department of Plant Science	University

Member, Quality Control Committee for Language, Formatting and Pics font (01/10/2021) for Journal of Himalayan Life Science.	University
Additional Warden, Meher Chand Mahajan Boys Hostel, CUHP, Kangra from 21/10/2021	University
Member, Department Research Committee (DRC) for Medium of Instruction, Examination, Evaluation and Grading System for the Award of Doctor Philosophy (11/11/2021)	University
Invigilator, for Entrance Examination (Ph.D Entrance Test-2021, 28/11/2021), Morning session CUHP, Shahpur Parisar, Shahpur	University
Polling officer, for conduct of Students Council Election (03/12/2021) for Academic Session 2021-22, In the School of Life Sciences	University
Faculty In-charge, For Guidance & Counselling Cell, Department of Plant Sciences for Two Years from 30/11/2021	University
Invigilator, for End term Examination (Monsoon semester-2021), Morning session CUHP, Shahpur Parisar, Shahpur (15/02/2022)	University

33. Percentage of participation of full-time teachers in various bodies of the Universities/ Other Colleges, (eg. BoS and Academic Council during the last year)

100%

34. Details of teachers appointed/nominated on Editorial Boards at university, state, national and international levels.

Sr. No.	Name of the teacher	Name of Editorial Boards	Level of board	Name of Institution
1	Prof. Pardeep Kumar	Journal of Himalayan Life Science Society	School/University	CUHP
2	Dr. Divya V. Nair	Journal of Himalayan Life Science Society	School/University	CUHP
3	Dr. Munish Sharma	Journal of Himalayan Life Science Society	School/University	CUHP
4	Dr. Ashun Chaudhary	Journal of Himalayan Life Science Society	School/University	CUHP

35. Awards/Prizes and recognitions received by teachers at University, State, National and International level: Nil

Sr. No.	Name of the teacher	Nature of Award	Level of Award	Money received if any (In Rs)

36. Awards and Prizes received by students at University, State, National and International level: Nil

Sr. No.	Name of the Student	Name of the activity	Nature of Award	Level of Award	Money received if any (In Rs)

37. Details of Seminars/ Conferences/Workshops organized by department at University, State, National and International level and the source of funding with details:

Name of Conference/ Seminars / Workshops	Funding agency and funds received		No. of Participants		University/State/ National/ International	Dates
	Internal	External	Internal	External		
Online webinar on "Genome-wide changes under Microgravity"	-	-	Online		International	May, 2020
Online Conference on "Environmental pollutants and Cancer"	-	-	Online		National	May, 2020
Online International webinar on "Innovation in crop improvement under changing climatic conditions"	-	-	Online		International	June, 2020
Online Webinar on "Women in Science, Education and Research" on topic "From a Biology Researcher to an Academic Administrator"	-	-	89	1	National	February, 2021

38. Student profile programme-wise at UG and PG (2017-21)

UG/PG	Applications Received	No. of students Admitted	Sanctioned Seats	Male*	Female	Total
PG 2017	285	30	30	3	27	30
PG 2018	1083	32	32	9	23	32 (2 Left)
PG 2019	869	32	33	6	26	32 (2 Left)
PG 2020	605	33	33	7	26	33 (2 Left)
PG 2021	732	32	33	6	31	37 (1 Left)
	13 (Self Financing Seats)	5	5			

*For Add-on/Value Added/Short term Course

39. Diversity of Students : (Year-wise)

Name of the Programme	Course	Year	Total number	% of students from the same state	% of students from other State	% of students from other countries
UG		I	0	0	0	0
		II	0	0	0	0
		III	0	0	0	0
PG		2017	31 (1 Left)	100%	0	0
		2018	30+32 = 62(2 Left)	97	3	0
		2019	32+32=64(2 Left)	92	8	0
		2020	30+33=63(2 Left)	90	10	0
		2021	31+40=68(2 Left)	91	9	0

40. Year-wise results of students at UG and PG:

UG/PG	Year	Appeared	Passed	Pass %	Grade %			
					O/O+	A/A+	B	C
PG	2017-18	30 (1 st Sem.)	30	100%	2	28	0	0

PG	2018-19	30 (2 nd Sem.)	30	100%	0	30	0	0
		30 + 30 (3 rd and 1 st Sem.)	60	100%	9	51	0	0
PG	2019-20	30 + 30 (4 th and 2 nd Sem.)	60	100%	12	48	0	0
		30 + 30 (3 rd and 1 st Sem.)	60	100%	9	51	0	0
PG	2020-21	30 + 30 (4 th and 2 nd Sem.)	60	100%	29	31	0	0
		30 + 31 (3 rd and 1 st Sem.)	61	100%	32	29	0	0
PG	2021-22	30 + 31 (4 th and 2 nd Sem.)	61	100%	59	2	0	0
		31 + 37 (3 rd and 1 st Sem.)	68	100%	37	31	0	0
PG	2022-23	31 + 37 (2 nd and 4 th Sem.)	31+37*	100%	26	5	0	0
			*2 nd semester result not declared					

41. Student progression/ placement record: Number/ percentage of students proceeded for higher studies Number/percentage of students placed:

Year	% proceeded for higher studies			% of students placed
	UG to PG	PG to Ph.D./ M.Phil	Professional	
UG	-	-	-	-
PG	-	5	-	-

42. Number of students awarded M.Phil., Ph.D., Degree (in case of any faculty is Co-supervisor): 1

Year	M.Phil	Ph.D.	Title of the Research	Parent University	Male	Female	Total
2019	-	1	Evaluation of rootstocks for biotic stress management in tomato under protected conditions	CSK-HPKV	-	1	1

43. Number of students cleared Civil Services and Defense Services examinations, NET, SET, GATE and other competitive examinations? Give Category wise data.

Year	UPSC/other State PSCs	NET/SET	GATE	Other Exams	Total
2020-21	-	NET (6) SET (1)	1	Bank PO (1)	9

44. Dropout rate in UG and PG (average for the last two batches)

UG = NA

PG = 6 %

45. Present details of departmental infrastructural & other facilities with regard to

- a) Central Library Books and Journals, etc, relevant to Department: ~ 250
- b) Departmental Library (books, journals etc.) : -
- c) Computers and Internet facilities for staff : 05
- d) Total number of class rooms : 01
- e) Class rooms with ICT facility : 01
- f) Students' laboratory : 01
- g) Research laboratories : 01
- h) Smart class room : -
- i) Any other facility LCDs : -

46. List of faculty members doing post-doctoral Research: Nil

Sr. No.	Name of the Faculty	Institute	Research Topic
1			
2			
3			
5			

47. Number of students getting financial assistance from the university/state / central government / NGOs/ Trusts/ Other sources

Sr. No.	Name of the Student	Source of Funding	Nature of Financial assistance	Level of Financial assistance	Money received (In Rs)
1	Sujata Kumari	Freeship 2018-19	Full freeship	University Level	15,200.00
2	Tara Devi	Freeship 2018-19	Full freeship	University Level	15,200.00
3	Priyanka	Freeship 2018-19	Full freeship	University Level	15,200.00
4	Sunanda	Freeship 2018-19	Full freeship	University Level	15,200.00
5	Vishal Kumar	Freeship 2018-19	Full freeship	University Level	15,200.00

6	Vishal Thakur	Freeship 2018-19	Full freeship	University Level	15,200.00
7	Akriti Sharma	Freeship 2018-19	Full freeship	University Level	15,200.00
8	Smriti Sharma	Freeship 2018-19	Full freeship	University Level	15,200.00
9	Mala Chaudhary	Freeship 2018-19	Full freeship	University Level	15,200.00
10	Diksha Dhiman	Freeship 2018-19	Full freeship	University Level	15,200.00
11	Nisha Devi	Freeship 2018-19	Full freeship	University Level	15,200.00
12	UshaKumari	Freeship 2018-19	Full freeship	University Level	15,200.00
13	Priksha Devi	Freeship 2019-20	Full Freeship	University Level	15,200.00
14	Vishal Kumar	Freeship 2019-20	Full Freeship	University Level	15,200.00
15	Charul Thakur	Freeship 2019-20	Full Freeship	University Level	15,200.00
16	Pallavi	Freeship 2019-20	Full Freeship	University Level	15,200.00
17	Kajal Choudhary	Freeship 2019-20	Full Freeship	University Level	15,200.00
18	Niveksha	Freeship 2019-20	Full Freeship	University Level	15,200.00
19	Rahul	Freeship 2019-20	Full Freeship	University Level	15,200.00
20	Sunanda	Freeship 2019-20	Full Freeship	University Level	15,200.00
21	Vishal Thakur	Freeship 2019-20	Full Freeship	University Level	15,200.00
22	Sujata Kumari	Freeship 2019-20	Full Freeship	University Level	15,200.00
23	Priya Thakur	Freeship 2019-20	Half Freeship	University Level	7,600.00
24	Shivani	Freeship 2019-20	Half Freeship	University Level	7,600.00
25	Bajrang Kashyap	Freeship 2019-20	Half Freeship	University Level	7,600.00
26	Priyanka	Freeship 2019-20	Half Freeship	University Level	7,600.00
27	Poonam	Freeship 2020-21	Full Freeship	University Level	15,200.00
28	Amita Singh	Freeship 2020-21	Full Freeship	University Level	15,200.00
29	Dipankar Verma	Freeship 2020-21	Full Freeship	University Level	15,200.00
30	Kajal Choudhary	Freeship 2020-21	Full Freeship	University Level	15,200.00
31	Niveksha	Freeship 2020-21	Full Freeship	University Level	15,200.00
32	Pallavi	Freeship 2020-21	Full Freeship	University Level	15,200.00
33	Pariksha Devi	Freeship 2020-21	Full Freeship	University Level	15,200.00
34	Reeya Pathania	Freeship 2020-21	Full Freeship	University Level	15,200.00
35	Udaypal	Freeship 2020-21	Full Freeship	University Level	15,200.00
36	Charul Thakur	Freeship 2020-21	Half Freeship	University Level	7,600.00
37	Kusuma Devi	Freeship 2020-21	Half Freeship	University Level	7,600.00
38	Shivani	Freeship 2020-21	Half Freeship	University Level	7,600.00
39	Monika Verma	Freeship 2020-21	Half Freeship	University Level	7,600.00
40	Simran	Freeship 2020-21	Half Freeship	University Level	7,600.00
41	Sushma Kumari	Freeship 2020-21	Half Freeship	University Level	7,600.00

48. Curricular Aspects:

a) Does the faculty take initiative in curriculum development process? YES

Sr. No.	Name of the Faculty	Type of curriculum development
1	Prof. Pardeep Kumar	Development of Course Curriculum for M.Sc and Ph.D. under National Education Policy NEP 2020
2	Dr. Divya V. Nair	
3	Dr. Munish Sharma	
4	Dr. Ashun Chaudhary	

b) Is curriculum suitable to make students globally competitive in the subject? If yes, substantiate.

Yes, the subjects and labs what the students are studying and doing are much related to the global competitions.

c) Does the department offer program with sufficient no. of electives options.

Yes, in each Semester, students are welcome to prefer elective subjects of their area of interest as a choice.

d) While framing curriculum, is feed-back taken from stakeholder's viz. Students/Alumni/Parents/Employers considered?

Yes

e) What is the frequency of curriculum revision? (3/4/5 years or more or less)

1 to 2 years depends on the current developments in the area of plant sciences and feedback from different stakeholders.

f) Does the curriculum have emerging thrust areas, including interdisciplinary areas? (If yes, elaborate).

Yes

<u>M.Sc. Plant Science (Botany)Year 2021 (Under NEP-2020)</u>	<p>Elective specialization (04 credits) PLS 515 Fundamentals of "Omics" Technologies PLS 516 Ethnobotany and Ethnopharmacology PLS 517 Plant Biotechnology and Genetic Engineering PLS 518 Underutilized Economic plants PLS 565 Herbal medicines in Human Health Care PLS 566 <i>In Vitro</i> Plant Biology PLS 567 Plant Stress Biology PLS 568 Grafting techniques in Plants</p> <p>INTERDISCIPLINARY COURSES (02 Credits) PLS 418 Advances in Cell Biology PLS 419 Principles of Organic and Natural farming PLS 420 Fundamentals of Enzymology PLS 421 Elements of Plant Breeding PLS 424 Gardening and Landscaping PLS 468 Bio-Analytical Techniques in Plant Science PLS 469 Plant Systematics PLS 470 Principles of Ecology and Environment</p>
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49. Teaching-Learning, Evaluation:

- Number of teachers preparing & following Academic Teaching plan

S. No.	Name of the Faculty	Curriculum plan submitted (Yes/No)
1	Prof. Pardeep Kumar	All the Faculty members prepared the academic teaching plan before every semester. Accordingly, the courses have
2	Dr. Divya V. Nair	

3	Dr. Munish Sharma	been allotted to respective faculty members during that semester.
4	Dr. Ashun Chaudhary	
5	Dr. Jitender Kumar	

• **The details of teachers who use the following teaching methods:**

- **Interactive lecture method using blackboard, Group discussions, Problem solving, Seminars. 100%**
- **Use ICT methods to support lectures. 100%**

S. No.	Name of the Faculty	Method of teaching
1	Prof. Pardeep Kumar	PPT Presentation, LCD Projector, Downloading of e-resources
2	Dr. Divya V. Nair	
3	Dr. Munish Sharma	
4	Dr. Ashun Chaudhary	
5	Dr. Jitender Kumar	

• **Does the Department have Peer review processes? If yes, are the suggestions effectively used to improve the teaching quality?**

Yes, through constant interaction of Head of the department with the faculty and students.

• **Does the department have any mechanism to ensure that entire syllabus is completed? Enclose relevant documents.**

Yes

• **Do you offer Bridge/Remedial courses? If yes, Give details.**

Yes, the Department offers Tutorial and Remedial classes for the slow learners during every semester.

• **What is the method for conducting internal evaluation?**

There is complete transparency in the internal assessment. At the beginning of the semester, faculty members inform the students about the various components in the assessment/evaluation process during the semester. Internal evaluation has been conducted by following means: 1) Assignments, 2) Attendance and 3) Student participation/presentations

50. Teacher Performance:

○ **Whether the performance of the teacher assessed by the students? If yes, are the feedback reports analysed and suggestions communicated to teachers?**

Yes, the suggestions are communicated to teachers by Head of the department by conducting meeting in person

- Number of teachers getting a) Very Good: 5 b) Good: 0 c) Average: 0 remarks from students.
- Whether suggestion boxes are kept in the department to get suggestions from students on infrastructural facilities available in the department? Yes
- Are the suggestions received from students used for improvement of facilities? Yes
- Do teachers submit Self-Appraisal Reports? Are these reports appraised by TIC and forwarded to the Principal Office with comments? Yes
Yes. In addition, all faculty members also submit annual progress report
- What is the Departmental average API ____? How many teachers have API > Average API
NIL
- What is the individual faculty wise h index?

S. No.	Name of the Faculty	h index
1	Prof. Pardeep Kumar	4 (on the basis of Google Scholar)
2	Dr. Divya V. Nair	6 (on the basis of Google Scholar)
3	Dr. Munish Sharma	6 (on the basis of Google Scholar)
4	Dr. Ashun Chaudhary	11 (on the basis of Google Scholar)
5	Dr. Jitender Kumar	3 (on the basis of Google Scholar)

- Give details of “beyond syllabus scholarly activities” of the department.
 - Coaching to students for the preparation of UGC-CSIR NET
 - Exposure visit to the different academic and research institutions
 - Field visit of the students to inculcate the practical based learning skills
 - Career choosing skills through lectures and seminars.

51. List the distinguished alumni of the department (maximum 10):

S. No.	Name of the Alumina	Current Status/Position
Session 2017-19	Kishori Lal (CUHP17BOT09)	Pursuing Ph.D. at BHU
	Sheetal (CUHP17BOT19)	Pursuing Ph.D. at HPU
	Shilpa (CUHP17BOT21)	Pursuing Ph.D. at CUHP

	Vandana Rani (CUHP17BOT30)	Govt. Employee
Session 2018-20	Akshay Rana (CUHP18BOT01)	Bank PO, Himachal Pradesh Gramin Bank
	Divya Bharti (CUHP18BOT06)	Pursuing B.Ed.
	Munish Sharma (CUHP18BOT16)	Pursuing Ph.D. at CUHP
	Sonam Yangzom (CUHP18BOT28)	Pursuing B.Ed.
Session 2019-21	Charul Thakur (CUHP19BOT06)	Pursuing Ph.D. at CUHP
	Kajal Choudhary (CUHP19BOT11)	Pursuing Ph.D. at CUHP
	Shelza (CUHP19BOT26)	Pursuing Ph.D. at CUHP

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

S. No.	Name of the Programme	Name of external expert	Designation and Institute
1	Seminar on “Native Wild Ornaments of Himalayas” (07/03/2022)	Dr. M.R. Dhiman	Principal Scientist, Indian Agricultural Research institute- Katrain- Kullu (HP)
2	Seminar on “Disease Management in Rice and Wheat” (08/03/2022)	Dr.Sachin Upmanyu	Senior Scientist, Rice and Wheat Research Centre- Malan, Distt.- Kangra (HP).
3	Seminar on “ Wild Edible of North Western Himalayan Region” (09/03/2022)	Dr. Tara Sen Thakur	Assistant Professor, Department of Botany Sardar Vallabhbhai Patel Cluster University-Mandi (HP).
4	Seminar on “Advances in Hybrid Seed Production of Vegetable Crops” (10/03/2022)	Dr. Santosh Kumari	Senior Scientist, College of Horticulture and Forestry, Neri Hamirpur, Himachal Pradesh, - 177001
5	Seminar on “Potential of Underutilized Crops of Himachal Pradesh” (13/06/2022)	Dr. Neelam Bhardwaj	Associate Professor, Plant Breeding and Genetics, Rice and Wheat Research Station Malan, CSK HOKV Palampur, H.P

6	Seminar on “Sustainable Management of Biological Resources” (14/06/2022)	Dr. Suresh Kumar	Associate Professor, Department of Bio- Sciences, HPU, Shimla, H.P
7	Seminar on “Rewards of Fungi to the Mankind and Environment” (17/06/2022)	Dr. Amit Kumar	Assistant Professor, Department of Bio- Sciencess, HPU, Shimla , H.P
8	Seminar on “Advances in Green House Technology” (5/07/2022)	Dr. Parveen Sharma	Professor, Department of Vegetable Science and Floriculture, COA, CSK HPKV, Palampur, H.P

53. How does the department ensure that programme objectives are constantly met and learning outcomes are monitored?

Effective methods have been adopted in the Department for the evaluation and assessment of course/programme outcomes. Presentations and lessons have been prepared by the students regularly. Assignments have been given to students time to time so that they get acquainted with the basic botanical aspects. Program Assessment Student feedback has been obtained at the time of their final semester. Concerned faculty used to advise the relevancy of courses in the required curriculum.

54. Highlight the Special facilities (if, any) of the Department.

1. Certificate course in Mushroom production

2. Establishment of Botanical Garden at Jadrangal, Dharamshala

The Department of Plant Science has established ‘**Swami Satyanand Stokes Botanical Garden**’ Central University of Himachal Pradesh at Jadrangal (Near Chamunda Mata Mandir), Dharamshala as a new eco-friendly venture and to promote plantation of native, ecologically significant plant species and to make students understand plant biodiversity and its conservation. The garden is named after Swami Satyanand Stokes (Samuel Evans Stokes), who is credited with introducing apple cultivation in the state in 1916.

The Inauguration of ‘**Botanical Garden**’ was done on 29-09-2020 by Honourable Vice Chancellor, CUHP along with the faculty members and students. Initially around 200 saplings of important medicinal vegetation were planted in the garden. Students, Faculty members and non-teaching staff of the department voluntarily contributed in the endeavor. This new endeavor will be very beneficial to the students of the department of plant science who are interested in plant diversity studies for their curriculum-based project work.



55. Highlight the unique features of the department.

1. Faculty Strength

The Department of Plant Science includes highly motivated team of faculty members. All faculty members are highly qualified (all are Ph. D, some are Post Doc too). All teachers believe in lifelong learning and emphasis on integrating teaching and research. Besides teaching, the faculty members are also involved in different projects funded by various funding agencies like DST, UGC and NITI Aayog. Advanced technologies and techniques are used to deliver lectures and to hold practical's.

The Faculty members motivates the students to learn plant sciences and apply their knowledge in corporate sector like green audit and use of plants for mitigating climate change, city farming, organic farming etc

<http://cuhimachal.ac.in/ViewShortProfile.aspx?deptid=38&divid=2>

2. Good student progression

56. State the Innovative practices adopted in the department.

1. Activity based learning

The Department of Plant science has focussed on the activity based learning in which the students acquire the knowledge and understand the plant diversity through participation in the field tours. The students have been asked to explore the different species of herbs, shrubs and trees and name them so that other can easily identify the important plant diversity. The students have encouraged to collect the sample of foliage or other parts of the trees/plants for later identification and preparation of herbarium

2. Innovative teaching practices

The Department of Plant Science has implemented effective skills with regard to both teaching and learning in order to provide quality education to the learners.

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

1. Plantation drive at Botanical Garden established at Jadrangal, CUHP Dharamshala.
2. Field visit to nearby area of CUHP, Academic Block, Shahpur.
3. Educational trip (Shahpur, Dharamshala, Palampur, and Rajasthan)
4. Documentation of Traditional Knowledge
5. Interaction with Farmers

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

a. Strengths:

- Well experienced faculty
- Most Preferred branch among students for good career pursuits.
- Good number of best rankers are opting the branch.
- Management ever ready to provide required infrastructural and any other required support to the department.
- Ongoing projects funded by different Funding agencies like UGC, DST

b. Weaknesses:

- Inadequate space in laboratory for the conduct of practical classes and research work
- Teaching and Non-Teaching staff not adequate
- Lack of equipments and instruments to conduct practical classes
- Departmental Library facility is not adequate.

c. Opportunities:

- Best practices (Imparting Practical Skills, Encouraging Research Culture among faculty) and Remedial Classes

d. Challenges:

- Need more upgraded Labs.
- R & D and Consultancy associated activities need to be improved.
- Collaborative programs and sponsored projects to be improved.
- 100% Placement

59. Future plans of the department:

a. Long term plans

- To Establish research laboratories with the help of private companies
- To shape the department as a Centre-of-Excellence.
- To host international seminars and conferences.

b. Mid term plans

- To improve academic results
- To improve communication skills among students

c. Short term plans

- To strive and improve student pass percentage and placement.
- To groom students to become global leaders in Engineering & Technology.
- To motivate the students to do more of industry related projects and provide them necessary support.

Declaration by the Head of the Department/In-charge

The information given in this report are verified and true to the best of my knowledge and I am aware that the above information provided by the department will be validated by the AAA committee during the visit.

Date:


Head of the Department/In-charge

Supplement to the Academic audit

1. Does the department prepare/maintain academic calendar? Enclose the copy. No
2. Is Faculty-wise Academic Plan maintained at department level?
Yes, the courses has been allotted to each faculty member.
3. Is Departmental Meeting verified, Minutes recorded and maintained? Yes
4. Are Classes being held regularly; as per designated time-slot; and full period is utilized as per the timetable Yes
5. Department ensure that long gaps are not given in Students Timetable: Yes
6. Proper justice is done to the whole syllabus; Course completion report is kept Yes
7. Does the department conduct Field Visit/Excursion trips? Please provide the detailed report.
Yes
8. Does the department have developed any mechanism of Student Mentoring? If yes Please provide the list of mentor and mentee and relevant point if any to be mentioned here. NA
9. Departmental Activities Report is maintained; Duties are assigned properly. Yes
10. Departmental activities are distributed equally in both semesters Yes
11. What is the process of Evaluation of Students' performance?
Mid-Term Examination, Presentations, Class Room Seminars.
12. Does any record of Non-performing Students is maintained?

S. No.	Name and roll no. of the student	Course	Paper

13. Whether Attendance is recorded/ done? Yes

Name of faculty	Attendance done online (Y/N)
Prof. Pardeep kumar	Y
Dr. Divya V. Nair	Y

Dr. Munish Sharma	Y
Dr. Ashun Chaudhary	Y
Dr. Himadri	Y
Dr. Jitender Kumar	Y

14. Does department maintain record of short of Attendance? Yes
15. Does department have Mini Library and is properly maintained? Yes (School Level)
16. Are Record of circulation of books/material/syllabus, Guidelines etc. preserved? Yes
17. Stock register/Issue Register and other record maintained in Department? Yes
18. Does Departmental prepare any study material/data that which can be submitted to the Institutional Repository? If yes, please give the details. No
19. Brief introduction of department (history, relevance, research highlights, career opportunities etc.) is updated on college website. No
20. Student's achievements maintained at department? Yes
21. Department prepare/release any Newsletter/Journals (If applicable) (provide soft copy). Yes
22. Contribution of the department to Corporate Life of the College (Only Convener/Coordinator/Adviser). Yes
23. Participation of department in Institutional Social responsibilities. Yes
24. Does department have any Industrial/Research institution Collaboration/Linkage. Yes
25. Visibility Check

Visibility Check		Yes/No/ Not Applicable	Faculty member Responsible
A	Wall Magazine	Yes	Dr. Ashun Chaudhary
B	Department Display Board	Yes	Dr. Munish Sharma
C	College Website	No	
D	e-Resources	Yes	Dr. Jitender Kumar