

# **Kurukshetra University, Kurukshetra**

(Established by the State Legislature Act-XII of 1956)  
("A++" Grade, NAAC Accredited)



## **Scheme of Examination for Post Graduate Programme**

**M.Sc. BOTANY**

as per NEP 2020  
Curriculum and Credit Framework for Postgraduate Programme

With Multiple Entry-Exit, Internship and CBCS-LOCF  
With effect from the session 2024-25 (in phased manner)

**DEPARTMENT OF BOTANY  
FACULTY OF LIFE SCIENCES**

**KURUKSHETRA UNIVERSITY, KURUKSHETRA -136119**

**HARYANA, INDIA**

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Chairman  
Department of Botany  
Kurukshetra University  
KURUKSHETRA-136119

## Programme Learning Outcomes (PLOs)

### For PG Programme in Botany as per NEP-2020

PLOs	Master Degree in Botany After the completion of Master degree in Botany the student will be able to:
PLO-1: Knowledge and Understanding	Demonstrate the fundamental and advanced knowledge of the subject and understanding of recent developments and issues, including methods and techniques, related to the <b>Botany</b> .
PLO-2: General Skills	Acquire the general skills required for performing and accomplishing the tasks as expected to be done by a skilled professional in the fields of <b>Botany</b> .
PLO-3: Technical/Professional Skills	Demonstrate the learning of advanced cognitive technical/professional skills required for completing the specialized tasks related to the profession and for conducting and analyzing the relevant research tasks in different domains of the <b>Botany</b> .
PLO-4: Communication Skills	Effectively communicate the attained skills of the <b>Botany</b> in well-structured and productive manner to the society at large.
PLO-5: Application of Knowledge and Skills	Apply the acquired knowledge and skills to the problems in the subject area, and to identify and analyze the issues where the attained knowledge and skills can be applied by carrying out research investigations to formulate evidence-based solutions to complex and unpredictable problems associated with the field of <b>Botany</b> or otherwise.
PLO-6: Critical Thinking and Research Aptitude	Attain the capability of critical thinking in intra/inter-disciplinary areas of the <b>Botany</b> enabling to formulate, synthesize, and articulate issues for designing of research proposals, testing hypotheses, and drawing inferences based on the analysis.
PLO-7: Constitutional, Humanistic, Moral Values and Ethics	Know constitutional, humanistic, moral and ethical values, and intellectual property rights to become a scholar/professional with ingrained values in expanding knowledge for the society, and to avoid unethical practices such as fabrication, falsification or misrepresentation of data or committing plagiarism.
PLO-8: Capabilities/Qualities and Mindset	To exercise personal responsibility for the outputs of own work as well as of group/team and for managing complex and challenging work(s) that requires new/strategic approaches.
PLO-9: Employability and Job-Ready Skills	Attain the knowledge and skills required for increasing employment potential, adapting to the future work and responding to the rapidly changing demands of the employers/industry/society with time.

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Scheme of Examination for Postgraduate Programme Botany  
as per NEP 2020 Curriculum and Credit Framework for Postgraduate Programmes  
(CBCS LOCF) with effect from the session 2024-25 (in phased manner)

**Framework-2**  
**Scheme-P**

Semester	Course Type	Course Code	Nomenclature of course	Theory (T)/ Practical (P)	Credits		Contact hours per week L: Lecture P: Practical T: Tutorial				Internal Assessment Marks	End Term Examination Marks	Total Marks	Examination hours
						Total	L	T	P	Total				
1	CC-1	M24-BOT-101	Algae & Fungi	T	4	26	4	0	0	4	30	70	100	3
	CC-2	M24-BOT-102	Bryophytes & Pteridophytes	T	4		4	0	0	4	30	70	100	3
	CC-3	M24-BOT-103	Cytogenetics & Plant Breeding	T	4		4	0	0	4	30	70	100	3
	CC-4	M24-BOT-104	Ecology	T	4		4	0	0	4	30	70	100	3
	PC-1	M24-BOT-105	Practical based on M24-BOT-101 & M24-BOT-102	P	4		0	0	8	8	30	70	100	6

	PC-2	M24-BOT-106	Practical based on M24-BOT-103 & M24-BOT-104	P	4		0 0 8 8	30	70	100	6
SEMINAR	M24-BOT-107	Seminar	S	2		0 0 0 2	0	50	50	50	1
CC-5	M24-BOT-201	Microbiology & Biostatistics	T	4	26	4 0 0 4	30	70	100	100	3
CC-6	M24-BOT-202	Natural Resources & Biodiversity Management	T	4		4 0 0 4	30	70	100	100	3
CC-7	M24-BOT-203	Gymnosperms & Ethnobotany	T	4		4 0 0 4	30	70	100	100	3
CC-8	M24-BOT-204	Molecular Genetics	T	4		4 0 0 4	30	70	100	100	3
PC-3	M24-BOT-205	Practical based on M24-BOT-201 & M24-BOT-203	P	4		0 0 8 8	30	70	100	100	6
PC-4	M24-BOT-206	Practical based on M24-BOT-202 & M24-BOT-204	P	4		0 0 8 8	30	70	100	100	6
CHM	M24-CHM-201	Constitutional, Human and Moral Values and IPR	T	2		2 0 0 2	15	35	50	50	3

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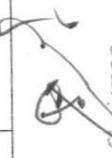


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	Internship	M24-INT-200	An internship course of 4 Credits of 4-6 weeks duration during summer vacation after II <sup>nd</sup> semester is to be completed by every student. Internship can be either for enhancing the employability or for developing the research aptitude.						50	50	100	
3	CC-9	M24-BOT-301	Plant Physiology & Biochemistry	T	4	26	4 0 0 4	30	70	100	3	
	CC-10	M24-BOT-302	Plant Anatomy & Reproduction	T	4		4 0 0 4	30	70	100	3	
	DEC-1	M24-BOT-303	Plant Biotechnology	T	4		4 0 0 4	30	70	100	3	
		M24-BOT-304	Plant Cell and Signalling	T	4		4 0 0 4	30	70	100	3	
		M24-BOT-305	Applied Mycology	T	4		4 0 0 4	30	70	100	3	
		M24-BOT-306	Plant Growth Regulators	T	4		4 0 0 4	30	70	100	3	
		M24-BOT-307	Restoration Ecology	T	4		4 0 0 4	30	70	100	3	
	DEC-2	M24-BOT-308	Biochemical & Biophysical Techniques	T	4		4 0 0 4	30	70	100	3	

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	M24-BOT-309	Plant Informatics	T	4	4	0	0	4	30	70	100	3
	M24-BOT-310	Palaeobotany & Palynology	T	4	4	0	0	4	30	70	100	3
PC-5	M24-BOT-311	Practical based on M24-BOT-301 & M24-BOT-302	P	4	0	0	8	8	30	70	100	6
PC-6	M24-BOT-312	Practical based on M24-BOT-303/304/305/306 & M24-BOT-307/308/309/310	P	4	0	0	8	8	30	70	100	6
OEC	M24-OEC-304	Plants & Humans	T	2	2	0	0	2	15	35	50	3
	CC-11	Physiology of Plant Growth & Development	T	4	26	4	0	0	4	30	70	100
	CC-12	Plant Taxonomy & Economic Botany	T	4	4	0	0	4	30	70	100	3
4	M24-BOT-403	Phytochemistry & Pharmacognosy	T	4	4	0	0	4	30	70	100	3
DEC-3	M24-BOT-404	Plant Diseases	T	4	4	0	0	4	30	70	100	3

  
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	M24-BOT-405	Plant Tissue Culture & Crop Improvement	T	4	4	0	0	4	30	70	100	3
	M24-BOT-406	Physiology of Stress in Plants	T	4	4	0	0	4	30	70	100	3
	M24-BOT-407	Biodiversity Conservation	T	4	4	0	0	4	30	70	100	3
	M24-BOT-408	Advanced PhycoLOGY	T	4	4	0	0	4	30	70	100	3
DEC-4	M24-BOT-409	Plant Photobiology	T	4	4	0	0	4	30	70	100	3
	M24-BOT-410	Seed Science & Technology	T	4	4	0	0	4	30	70	100	3
PC-7	M24-BOT-411	Practical based on M24-BOT-401 & M24-BOT-402	P	4	0	0	8	8	30	70	100	6
PC-8	M24-BOT-412	Practical based on M24-BOT-403/404/405/406 & M24-BOT-407/408/409/410	P	4	0	0	8	8	30	70	100	6
EEC	M24-BOT-413	Processing of Fruits and Vegetables	T	2	1	0	2	3	15	35	50	3(T)+3(P)

  
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**Scheme of Semester IV when a student opts for Dissertation or Project Work**

CC-11	M24-BOT-401	Physiology of Plant Growth & Development	T	4	26	4	0	0	4	30	70	100	3
DEC-3	M24-BOT-403	Phytochemistry & Pharmacognosy	T	4	4	0	0	4	30	70	100	100	3
M24-BOT-404	Plant Diseases	T	4	4	0	0	4	30	70	70	100	100	3
M24-BOT-405	Plant Tissue Culture & Crop Improvement	T	4	4	0	0	4	30	70	70	100	100	3
M24-BOT-406	Physiology of Stress in Plants	T	4	4	0	0	4	30	70	70	100	100	3
DEC-4	M24-BOT-407	Biodiversity Conservation	T	4	4	0	0	4	30	70	70	100	3
	M24-BOT-408	Advanced Phycology	T	4	4	0	0	4	30	70	70	100	3
M24-BOT-409	Plant Photobiology	T	4	4	0	0	4	30	70	70	100	100	3
M24-BOT-410	Seed Science & Technology	T	4	4	0	0	4	30	70	70	100	100	3

  
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	EEC	M24-BOT-413	Processing of Fruits and Vegetables	T	2		1	0	2	3	15	35	50	3(T)+3(P)
Dissertation/ Project work		M24-BOT-414	Dissertation/Project work	D		12	0	0	0	12	0	300	300	--



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