

**Programme Project Report (PPR)**  
**MSCBOT (M.Sc. Botany)**  
**Department of Botany**  
**Uttarakhand Open University**

The content of the Programme Project Report are as:-

**Name of Programme: M.Sc. Botany**

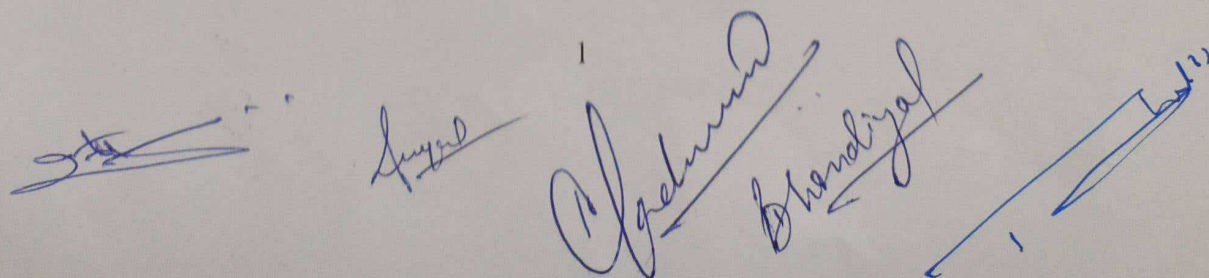
**(a) Programme mission and objectives:** Uttarakhand state comprises of geographically constrained areas. A large number of learners cannot avail higher education due to the aforesaid geographical constraints. The learners can avail higher education through ODL (Open and Distance Learning) mode. The mission of the programme is to provide higher education to the learners in a way which is easily accessible. The programme on Botany is a programme that focuses on the plants. Through a series of academic courses, laboratory exercises and project/dissertation activities, students will be able to learn about the plants. Focus on the patterns and processes that enable anticipating understanding of plants and their environments at local, regional, and global scales, leading to strengths in the areas of ecology, evolution, and systematics.

Our vision is to conduct innovative research, teaching and outreach on the patterns and processes of life with a focus on plants and their environments.

**(b) Relevance of the program with HEIs Mission and Goals:** One of the mission of higher education particularly Open and Distance Learning Institutions is to provide greater opportunities of access to Higher Education with equity to all the eligible persons and in particular to the vulnerable sections. Another mission of the Higher education Institutions is to initiate policies and programmes for strengthening research and innovations, and encourage institutions - public or private to engage in stretching the frontiers of knowledge.

**(c) Nature of prospective target group of learners:** Those learners who wish to opt career in Botany for Government organizations, Teachers, in Laboratories etc will be the target group of

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learners, also those learners who left their study due to some reasons. In addition to this, faculties are required to teach Botany at Under Graduate and Post Graduate level in conventional Universities and professional/ technical Universities or Colleges.

**(d) Appropriateness of programme to be conducted in Open and Distance Learning mode to acquire specific skills and competence:** The access to knowledge on the subject is not accessible easily to those aspirants who reside in far remote areas and those who belong to weaker and marginal sections of the society. Therefore, initiating such programme in Open and Distance Learning (ODL) mode will help aspirants particularly residing in far-flung areas and those who belong to weaker sections, to acquire skill and knowledge on the subject area.

**(e) Instructional design:**

**i) Curriculum design:** Before designing the programmes and courses in Botany, attempts were made to draw upon the literature produced by other academic and professional institutions in India and abroad. Due attention has been paid in balancing the theoretical knowledge with laboratory study, field survey/ studies, and Project work. The programme curriculum is given below:

**Programme Curriculum:**

**Name of the Programme :** Master of Science Botany (M.Sc. Botany)

**Programme Code:** MSCBOT-23

**Programme Mode:** Semester

**Eligibility:** Graduation in concern subject

**Duration Min:** 2 Years; **Max:** 5 Years

**Self Learning Material (SLM):** English

**Programme Fee:** Fee per semester: - 9500/

Total fee M.Sc. Programme = 38300 /

**Total Credit:** 72

**M.Sc. Programme Structure**

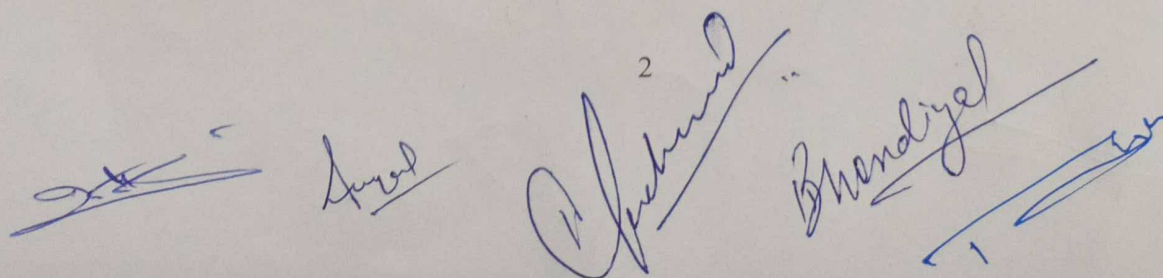
**Name of the Programme:** Master of Science in Botany

**Programme Code:** MSCBOT

**Total Credits:** 72

**Programme Structure (Semester wise)**

**First Semester**





S.N	Course Name	Course code	Marks			Credits	Minimum counselling hours
			Theory	Assignment	Total		
1.	Fungi, Lichen, Viruses and Bacteria	MSCBOT-501	70	30	100	3	9
2.	Algae and Bryophytes	MSCBOT-502	70	30	100	3	9
3.	Pteridophytes, Gymnosperms and Palaeobotany	MSCBOT-503	70	30	100	3	9
4.	Taxonomy of Flowering Plants (Angiosperms)	MSCBOT-504	70	30	100	3	9
5.	Laboratory Practical-I	MSCBOT-505L			200	6	18
			Total Credits			18	54

### Second Semester

S.N	Course Name	Course code	Marks			Credits	Minimum counselling hours
			Theory	Assignment	Total		
1.	Cell Biology of Plants	MSCBOT-506	70	30	100	3	9
2.	Cytogenetics and Plant Breeding	MSCBOT-507	70	30	100	3	9
3.	Plant Development	MSCBOT-508	70	30	100	3	9
4.	Plant Reproduction	MSCBOT-509	70	30	100	3	9
5.	Laboratory Practical-II	MSCBOT-510L			200	6	18
			Total Credits			18	54

### Third Semester

S.N	Course Name	Course code	Marks			Credits	Minimum counselling hours
			Theory	Assignment	Total		

1.	Plant Physiology and Biochemistry	MSCBOT-601	70	30	100	3	9
2.	Plant Ecology	MSCBOT-602	70	30	100	3	9
3.	Plant Resource Utilization and Conservation	MSCBOT-603	70	30	100	3	9
4.	Molecular Biology and Biotechnology of Plants	MSCBOT-604	70	30	100	3	9
5.	Laboratory Practical-III	MSCBOT-605L			200	6	18
<b>Total Credits</b>						<b>18</b>	<b>54</b>

#### Fourth Semester

S.N	Course Name	Course code	Marks			Credits	Minimum counselling hours
			Theory	Assignment	Total		
1.	Biostatistics	MSCBOT-606	70	30	100	3	9
2.	Elective Course*	Given Below	70	30	100	3	9
3.	Laboratory Practical-IV	MSCBOT-609L			100	3	9
4.	Dissertation	MSCBOT-610			Grade	9	27
<b>Total Credits</b>						<b>18</b>	<b>54</b>

**Note:** 1-\*Students have to opt "One Elective Course" from the two given below Elective Courses (MSCBOT-607 or MSCBOT-608) in the fourth semester. Student will have to do a Dissertation. Marks shall not be awarded to the student on the Dissertation, instead of marks Grade A, B, C or D shall be given after assessment of the Dissertation.

#### **\*Elective Courses**

1-Forest Ecology (MSCBOT-607)

2- Ethnobotany (MSCBOT-608)

**Note:** Elective courses (M.Sc. IV Semester) which have to start in future are given below:

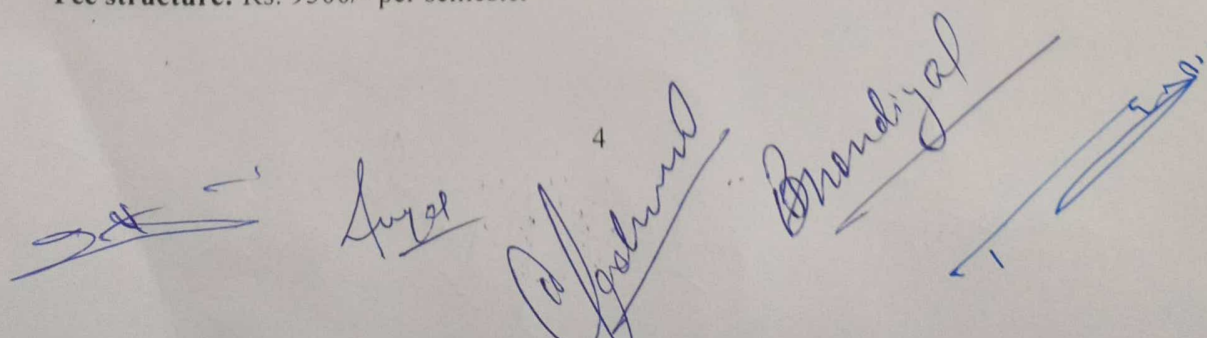
#### **f) Procedure for admission, curriculum transaction and evaluation**

**Admission:** Twice in a year

**Eligibility:** Bachelor of Science with Botany as one of the subject at UG level.

**Fee structure:** Rs. 9500/- per semester

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**Evaluation norms:** A learner will be evaluated through continuous evaluation (Assignments) and term end evaluation (Term end examination) at the end of semester. Continuous evaluation will carry 30% weightage whereas term end evaluation will carry 70% weightage.

**g) Requirement of the laboratory support and Library Resources:** In order to carry out laboratory exercises, laboratory is compulsory requirement of the programme and in order to meet this requirement, the laboratory facilities of study centres will be utilized. She/he will be provided laboratory manual as per the need of the programme. Similarly for library, a learner may utilize the resources available at the designated study centre.

**i) Cost estimates for development of the programme**

Activities	Units / Pages	Amount (Rs.)
<b>A. Masters Level Programme</b>		
1. Unit Writing (@ Rs. 6000/ unit)	215 Units	1290000.00
2. Typing (@ Rs.20/ per page)	5375 Pages (Per unit approx. 25 pages)	107500.00
3. Editing (@ Rs.3000/ unit)	215 units	645000.00
3. Postal Expenses (Approx.)	-	5000.00
	<b>Total</b>	<b>2047500.00</b>

**i) Quality assurance mechanism and expected programme outcomes:** The programme will help in the development of professionally skilled, in general, and in corporate sector, in particular.

The programme will be implemented through only those Government Degree Colleges/ Universities / Institutions which have facilities for conducting laboratory counseling. In addition to this University will organize Laboratory workshop in designated places once (year/semester) for additional back up to the students so that competent and skilled human resource is produced. Further, the Programme and SLM developed will be continuously upgraded and necessarily be revised after a period of 5 years.

**Programme outcomes:**

- Bridge the flow of information between civil society, professionals, corporates, and policy and decision-makers

