

(For those admitted in June 2023 and later)

PROGRAMME AND BRANCH: B.Sc., BOTANY

SEM	CATEGORY	COMPONENT	COURSE CODE	COURSE TITLE
III	PART - III	CORE - 5	U23BO303	PLANT DIVERSITY III - BRYOPHYTES AND PTERIDOPHYTES

Date & Session: 07.11.2025/AN

Time : 3 hours

Maximum: 75 Marks

Course Outcome	Bloom's K-level	Q. No.	<u>SECTION – A (10 X 1 = 10 Marks)</u> Answer <u>ALL</u> Questions.
CO1	K1	1.	The thalloid plant body is found in_____. a) Angiosperm c) Pteridophytes b) Gymnosperms d) Bryophytes
CO1	K2	2.	A characteristic feature of bryophytes is_____. a) A small sporophyte phase, which is dependent on the gametophyte b) Sporophytes stay for a longer duration c) A dominant and spore-producing gametophyte d) A dominant and parasitic sporophyte
CO2	K1	3.	<i>Marchantia</i> is mostly comes under the_____. a) Dioecious c) Both A and B b) Monecious d) None of the above
CO2	K2	4.	In <i>Funaria</i> , the sporophytic phase is well-developed, comprising. a) Seta, foot and capsule c) Spore sac b) Only capsule d) Foot and capsule
CO3	K1	5.	In Pteridophytes, the dominant generation is_____. a) Gametophytic c) Diploid b) Haploid d) Triploid
CO3	K2	6.	Phloem is without _____ in pteridophytes _____. a) Companion cells c) Bast fibres b) Sieve cells d) Phloem parenchyma
CO4	K1	7.	<i>Adiantum</i> is also known as _____. a) Walking fern c) Holly fern b) Button fern d) Boston Fern
CO4	K2	8.	Lycopodium is _____. a) Heterosporous c) Water firm b) Homosporous d) Both Band C
CO5	K1	9.	----- is the most primitive type of protostele. a) Haplostele c) Plectostele b) Actinosteale d) Mixed Protostele
CO5	K2	10.	What is the modification of the protostele? a) Siphonosteale c) Actinosteale b) Plectostele d) None of the above

Course Outcome	Bloom's K-level	Q. No.	SECTION – B (5 X 5 = 25 Marks) Answer <u>ALL</u> Questions choosing either (a) or (b)
CO1	K3	11a.	Discover the general characters of bryophytes. (OR)
CO1	K3	11b.	Write short notes on medicinal and horticultural importance of bryophytes.
CO2	K3	12a.	Prepare the vegetative structural characters of <i>Marchantia</i> with diagram. (OR)
CO2	K3	12b.	Expand the details of sexual reproduction of <i>Anthoceros</i> with diagram.
CO3	K4	13a.	Examine the morphological characters of pteridophytes. (OR)
CO3	K4	13b.	Differentiate Apogamy from Apospory.
CO4	K4	14a.	Illustrate the stem anatomy of <i>Psilotum</i> . (OR)
CO4	K4	14b.	Investigate the vegetative structure of <i>Lycopodium</i> with diagram.
CO5	K5	15a.	Review the biofertilizer and medicinal importance of pteridophytes. (OR)
CO5	K5	15b.	Evaluate the stelar evolution theory. Add its importance.

Course Outcome	Bloom's K-level	Q. No.	SECTION – C (5 X 8 = 40 Marks) Answer <u>ALL</u> Questions choosing either (a) or (b)
CO1	K3	16a.	Write a detailed account on classification of bryophytes. (OR)
CO1	K3	16b.	Invent the reproduction of bryophytes with diagram.
CO2	K4	17a.	Point out the <i>Funaria</i> capsule with diagram. (OR)
CO2	K4	17b.	Explore the general characters of <i>Anthocerotopsida</i> .
CO3	K4	18a.	Discover the classification of pteridophytes. (OR)
CO3	K4	18b.	Analyze the concept of Heterspory in pteridophytes. And add its importance to plant kingdom.
CO4	K5	19a.	Criticize the anatomy of rhizome in <i>Adiantum</i> . (OR)
CO4	K5	19b.	Inspect the stem anatomy of <i>Equisetum</i> .
CO5	K5	20a.	Expostulate the different types of steles in pteridophytes. (OR)
CO5	K5	20b.	Review the economic importance of pteridophytes with reference to ecological, horticulture, pollution.