

Anjuman Islam Janjira Degree College of Science
Murud-Janjira, Raigad-402401
Affiliated to University of Mumbai

Class: - S.Y. B.Sc.(G. S)	Subject: - Integrated Approaches in Plant Sciences I
Semester: - III	Course code: -
Exam Event: - Winter 2025 (SH)	Marks: -30
Date: - 14/10/2025	Duration: - 1:00 Hours

NB:

1. Attempt **any 2** questions **out of 4** questions
2. All Questions carry equal marks.
3. Draw neat and labelled diagrams wherever necessary.



Q1 Answer the following:

15

- A. Discuss interesting facts about algae, highlighting their biological, and ecological significance.
- B. Describe the ultrastructure of the nucleus and explain its functions in the eukaryotic cell.

Q2 Answer the following:

15

- A. Give an account of the vegetative structure and asexual reproduction in *Vaucheria*.
- B. What is aneuploidy? Discuss its causes, types, and significance in plants.

Q3 Answer the following:

15

- A. Describe the process of transcription Initiation in eukaryotes with neat, labelled diagrams.
- B. Explain the thallus structure of liverworts with a suitable example.

Q4 Answer the following:

15

- A. Find the standard error for the sample data: 10, 20, 30, 40, and 45.
- B. Discuss the terrestrial habitat of pteridophytes. Give examples of shade-loving species and their ecological role.
