

Anjuman Islam Janjira Degree College of Science Murud-Janjira, Raigad-402401 Affiliated to University of Mumbai	
Class: -S.Y.B.Sc	Subject: Functional Botany I (Major)
Semester: - III	Course code:
Exam Event: - Winter 2025 (SH)	Marks: 30
Date: - 13/10/2025	Duration: 1 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



Q.1 Answer the following:

- (A) Describe the stages of meiosis with suitable diagrams. **08**
- (B) Explain the semi-conservative model of DNA replication as demonstrated by the Meselson-Stahl experiment. **07**

Q.2 Answer the following:

- (A) Explain Watson and Crick's double helix model of DNA with a well-labeled diagram. **08**
- (B) Describe the process of transcription with the help of a neat diagram. **07**

Q.3 Answer the following:

- (A) Design a flowchart depicting the major steps in RNA processing. **08**
- (B) Explain plant breeding, its objectives, and its importance. **07**

Q.4 Answer the following:

- (A) Define Biostatistics. Explain its concept and the calculation of Standard Error. **08**
- (B) Describe chromosomal aberrations such as deletion, duplication, inversion, and translocation with diagrams. **07**

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