

2022

M.Sc.

4th Semester Examination

BOTANY

PAPER—495B

(Practical)

Full Marks : 50

Time : 4 Hours

The figures in the right-hand margin indicate full marks.

Candidates are required to give their answers in their own words as far as practicable.

Illustrate the answers wherever necessary.

Answer all questions.

Special Paper 495B : Cytogenetics, Molecular Biology & Biotechnology

1. Answer any two questions. 2×15

(a) *Workout the cytological preparation with the Supplied Specimen A to show four different stages with suitable illustration and description*

(Turn Over)

- to comment on it. 5+5+5
- (b) *Workout* the cytological preparation with the Supplied Specimen B to *show two different meiotic stages* and *describe them with suitable labelled illustrations.* 5+5+5
- (c) Make *cytological preparation* with the Supplied Specimen C and *find out any two kinds of cytological abnormalities. draw with label and describe* them illustrating the nature of anomaly. 5+5+5
- (d) Perform the karyotypic analysis of the Supplied Specimen D and comment on it. 10+5
- (e) Elute DNA from the Supplied Specimen E and estimate colorimetrically / with the use of spectrophotometer. 15
2. Answer any *one* question. 1×10
- (a) Perform Regression Analysis of the supplied data and draw inference of the problem.
- (b) Perform Analysis of Variance with the supplied data and comment on the status of the given problem.
3. Laboratory Note Book. 5
4. Viva-voce. 5