

35013

M.Sc. DEGREE EXAMINATION, NOVEMBER 2016.

THIRD SEMESTER

Botany

Paper III — TOOLS AND TECHNIQUES IN PLANT SCIENCES

Time : Three hours

Maximum : 75 marks

(No additional sheet will be supplied)

PART A — (5 × 3 = 15 marks)

Answer any FIVE questions.

Each question carries 3 marks.

Each answer should not exceed 1 page.

1. FISH techniques
2. STEM.
3. SDS-PAGE
4. Isoelectric focusing
5. MALDI-TOF
6. Surface Plasmon Resonance
7. Levels of Significance
8. χ^2 -test

PART B — (4 × 15 = 60 marks)

Answer ALL questions.

Each question carries 15 marks.

Each answer should not exceed 6 pages.

9. Write a note on detection of molecules using ELISA, RIA and Immunoprecipitation.

Or

10. Mention the image processing methods in microscopy.

11. Give an account of principles of 2D electrophoresis.

Or

12. How you can recover the DNA from Agarose gel?

13. Describe the biophysical methods for molecular analysis.

Or

14. Discuss the radio labeling techniques used in plant sample.

15. Explain the statistical methods used in plant sciences.

Or

16. Comment on parametric and nonparametric statistics.

