

SECTION - C (2 × 20 = 40)*Answer ALL questions.*

15. (a) Describe centrifugation. Give a detailed account on various types of centrifuges.

(OR)

(b) Define electrophoresis. Explain the SDS PAGE and give its applications.

16. (a) Give an account on etiology, symptoms, causative agents and dissemination of blast of paddy and red rot of sugar cane.

(OR)

(b) Give the principles and applications of TEM.

Register Number :

Name of the Candidate :

5 7 1 4**M.Sc. DEGREE EXAMINATION, 2008**

(BOTANY)

(FIRST YEAR)

(PAPER - II)

**120. MICROBIOLOGY, PLANT
PATHOLOGY AND BIOLOGICAL
TECHNIQUES**

(Revised Regulations)

December]

[Time : 3 Hours

Maximum : 100 Marks

SECTION - A (8 × 3 = 24)*Answer ALL questions.*

1. Anaerobic respiration.
2. Chemosynthetic bacteria.
3. Mutualism.
4. Citrus canker.

Turn over

5. Ultra microtome.

6. Protein stains.

7. PH meter.

8. Flow cytometer.

SECTION - B (6 × 6 = 36)

Answer All questions.

9. (a) Draw and describe the ultra structure of bacterial cell.

(OR)

(b) Explain the process of photosynthesis in photosynthetic bacteria.

10. (a) Give a general account on mycoplasma.

(OR)

(b) Explain grams staining with suitable example.

11. (a) Describe the various agronomical practices.

(OR)

(b) Give the etiology, symptoms, causative agents of blight of paddy.

12. (a) Write short notes on :

(i) Rocking microtomy.

(ii) Rotary microtomy.

(OR)

(b) Describe fluorescence microscope with its application.

13. (a) Explain the principle and uses of HPLC.

(OR)

(b) Mention the application of SEM.

14. (a) Describe the transmission of viruses.

(OR)

(b) Explain the steps involved in the preparation of permanent slides.

Turn over