SECTION - C (2 ×20 = 40)

Answer ALL questions.
Each answer should not exceed 1,200 words.
All questions carry equal marks.

15. (a) Give a detailed account of the classification of bacteria according to Bergeys mannual (9^{th} ed.).

(OR)

(b) Write in detail about etiology, symptoms, causative agent and dissemination of blast of paddy.

16. (a) Illustrate the principles of TEM. Add a note on its applications.

(OR)

(b) What is centrifugation ? Explain in detail the various types of centrifugation.

Register Number :

Name of the Candidate :

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M.Sc. DEGREE EXAMINATION, 2009

(BOTANY)

(FIRST YEAR)

(PAPER - II)

120. MICROBIOLOGY, PLANT PATHOLOGY AND BIOLOGICAL TECHNIQUES

December] [Time : 3 Hours

Maximum : 100 Marks

SECTION - A (8 × 3 = 24)

Answer ALL questions.
Each answer should not exceed FIFTY words.
All questions carry equal marks.

1. Plasmid.

2. Mycoplasma.

3. Koch's postulate.

4. Citrus canker.

5. Microtomy.

6. pH meter.

7. DNA structure in bacteria.

8. Grams staining

SECTION - B (6 ×6 = 36)

Answer ALL questions.

All questions carry equal marks.

9. (a) Describe the ultrastructure of bacteria with a diagram.

(OR)

(b) Explain the process of transformation.

10. (a) Write an account of the morphology of viruses.

(OR)

(b) What are the various types of sterilization techniques ?

11. (a) Write about the symptoms, causal organism and dissemination of Tikka disease of groundnut.

(OR)

(b) Discuss of the symptoms, causal organism and dissemination of tobacco mosaic.

12. (a) What do you know about quarantine practice and legislation ?

(OR)

(b) Write about the principle and applications of light microscope.

13. (a) Enumerate the methods involved in preparation of permanent slides.

(OR)

(b) Explain micrometry.

14. (a) Give an account of flow cytometry.

(OR)

(b) Write on the working principle and application of HPLC.

Turn Over