

D 73130

(Pages : 2)

Name.....

Reg. No.....

FIRST SEMESTER B.A./B.Sc. DEGREE EXAMINATION, NOVEMBER 2019

(CUCBCSS—UG)

Microbiology

MBG 1B 01—GENERAL MICROBIOLOGY

(2018 Admissions)

Time : Three Hours

Maximum : 80 Marks

Part A

Answer all questions.

Each question carries ½ mark.

1. The structure associated with motility of bacteria is called ———.
2. Outer membrane is present in Gram ——— bacterial cell wall, absent in Gram ——— cell wall.
3. Microscopic observation and drawing of bacteria for the first time were done by ———.
4. The bacteria which live in hot springs or volcanoes are known as ———.
5. The device which focuses light to the objective lenses in a light microscope is termed as ———.
6. Rabies vaccine was developed by ———.
7. Give an example for a filamentous fungus.
8. The high resistance of endospores is attributed to the presence of ——— acid and ——— ions.
9. Viruses possess only one nucleic acid. True/False ?
10. ——— are branching filamentous forms of bacteria.
11. Name a staining technique by which you can assume the presence of capsule.
12. Rideal-Walker test is to check the efficiency of ——— in comparison with phenol.

(12 × ½ = 6 marks)

Part B

Answer all questions.

Each question carries 2 marks.

Comment on the following :

13. Effect of penicillin on bacteria.
14. Scanning electron microscopy.

Turn over

15. Kochs postulates.
16. Flagellar arrangement in bacteria.
17. Glycocalyx.
18. Filtration.
19. Metachromatic granules.
20. Capsid symmetry.
21. History of vaccination.
22. Protoplast and spheroplast.

(10 × 2 = 20 marks)

Part C

*Answer any six questions.
Each question carries 5 marks.*

Write briefly on the following :

23. Ultra structure of bacterial flagella.
24. Chemicals sterilants.
25. Rideal-Walker test.
26. Fluorescent microscope.
27. Archaeobacteria.
28. Structure and functions of bacterial cell membrane.
29. Structure of viruses.
30. Moist heat sterilisation.

(6 × 5 = 30 marks)

Part D

*Answer any three questions.
Each question carries 12 marks.*

31. Describe the difference between prokaryotic cells and eukaryotic cells with suitable examples and diagram.
32. Explain different staining methods used in Microbiology.
33. Explain the major historical developments in the field of Microbiology.

(3 × 12 = 36 marks)