Reg. No. : ....

Name : ....

I Semester B.Sc. Degree (C.B.C.S.S.–O.B.E. – Regular/Supplementary/ Improvement) Examination, November 2021
(2019 Admission Onwards)
COMPLEMENTARY ELECTIVE COURSE IN MICROBIOLOGY
(For Biochemistry/Biotechnology/Life Sciences (Zoology) and Computational Biology)
1C01MCB : Basic Microbiology – I

Time : 3 Hours   Max. Marks : 32

PART – A

Short Answer. Answer **all** questions. **Each** question carries **1** mark.   **(5×1=5)**

1. Ernst Abbe equation.

2. Simple staining.

3. Mesosomes.

4. Spheroplast.

5. Growth factors.

PART – B

Short Essay. Answer **any 4** questions. **Each** question carries **2** marks.   **(4×2=8)**

6. Swan neck experiment.

7. Principle and procedure of Gram staining.

8. What are trace elements ?

9. ABC transporters.

10. Comment on the iron intake by bacteria.

PART – C

Essay. Answer **any 3** questions. **Each** question carries **3** marks. (3×3=9)

11. Contributions of Robert Koch to the field of Microbiology.

12. Briefly describe the working principle of fluorescent microscopy with diagram.

13. Dark field microscopy.

14. Structure of flagella with diagram.

15. Purpose and process of sporulation in bacteria.

PART – D

Long Essay. Answer **any 2** questions. **Each** question carries **5** marks. (2×5=10)

16. Write an essay on chemical methods of sterilisation.

17. Explain in detail the Electron Microscopy technique.

18. Describe the Gram positive and negative cell wall in detail.

19. Explain the role of various macro elements required for bacterial growth.

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