

K22U 3427

Reg. No. :

Name :

I Semester B.Sc. Degree (C.B.C.S.S. – O.B.E. – Regular/Supplementary/ Improvement) Examination, November 2022 (2019 Admission Onwards) COMPLEMENTARY ELECTIVE COURSE IN MICROBIOLOGY (For Biochemistry/Biotechnology/Life Sciences (Zoology) and Computational Biology) 1C01MCB : Basic Microbiology – 1

Time : 3 Hours

Max. Marks : 32

PART – A

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

- 1. Resolving power.
- 2. Bacterial ribosomes.
- 3. Lag phase.
- 4. Symport.
- 5. LPCB.

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

PART - B

- 6. Koch's postulates.
- 7. AFS.
- 8. Theory of Biogenesis.
- 9. Differentiate passive diffusion from facilitated diffusion.

- ANNUF

10. Simple staining.

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PART - C

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

- 11. Bacterial Flagella.
- 12. Contributions of Louis Pasteur to Microbiology.
- 13. Fluorescent Microscopy.
- 14. Nutritional types of microorganisms.
- 15. Define bacterial endospore. With a diagram explain the ultra-structure and its functions.

PART – D

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

- 16. Describe the differences between prokaryotic and eukaryotic cell structure with suitable diagrams.
- 17. Explain the major historical developments in Microbiology.
- 18. Describe the various methods of chemical sterilization.
- 19. Mechanism of nutrient transport in bacterial cell.

