K17U 2549 Reg. No.: Name : I Semester B.Sc. Degree (CBCSS - Reg./Supple./Improv.) Examination, November 2017 (2014 Admn. Onwards) Core Course in Microbiology 1B01MCB: GENERAL MICROBIOLOGY Time: 3 Hours Max. Marks: 40 SECTION-A Answer all four questions. 1. Who introduced the pure culture technique? 2. Agar is obtained from 3. Give an example for an RNA virus. 4. Most effective wavelength of UV for sterilization is SECTION-B Answer very briefly on any seven questions out of ten. Comment on the following: 5. Father of Microbiology. 6. Simple staining. 7. Shape and arrangement of bacterial cells. 8. Capsid. 9. Media for fungal growth with example. 10. Microbicidal and Microbistatic agents. 11. Semisolid media.

12. Surfactants.

14. Rideal Walker coefficient.

13. CFU.

 $(4 \times 1 = 4)$

 $(7 \times 2 = 14)$

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SECTION-C

Answer any four questions out of six briefly.

 $(4 \times 3 = 12)$

- 15. Koch postulates.
- 16. Lyophilization.
- 17. Explain Endospore structure with a neat diagram.
- 18. Briefly explain the structure of viruses.
- 19. What are the major contributions of Louis Pasteur?
- 20. Comment on moist heat sterilization.

SECTION-D

Answer any two questions out of four.

 $(2 \times 5 = 10)$

- 21. What are the major groups of antibiotics? Explain their mode of action.
- 22. What is a microbial culture media? What are its various types?
- 23. Compare and contrast the ultra structure of prokaryotic and eukaryotic cell with labelled diagrams.
- 24. Explain in detail about microscopy and its different types.