K16U 2506 Reg. No.: I Semester B.Sc. Degree (C.C.S.S. - Reg./Supple./Improv.) Examination, November 2016 CORE COURSE IN MICROBIOLOGY 1B01MCB : General Microbiology (2014 Admn. Onwards) Time: 3 Hours Total Marks: 40 SECTION - A Answer all questions: 1. The concept of spontaneous generation was disproved by the experiments 2. Name one spirochaete. 3. The polyphosphate reserve material found in bacteria are called 4. Murashige-Skoog's Media is used in _____ $(4 \times 1 = 4)$ SECTION-B Answer very briefly on any seven of the following: Comment on the following: microbiology laboratories. 5. Principle of dark field microscope. 6. Major contributions of Robert Koch to microbiology. 7. Robertson's cooked meat media. 8. Bactericidal and Bacteriostatic agents. 9. Mesosomes. 10. Chick-Martin Test.

K16U 2506

- 11. β-lactam antibiotics.
- 12. Colony forming units.
- 13. Lyophilization.
- 14. Negative staining.

 $(7 \times 2 = 14)$

SECTION - C

Answer any four of the following:

- 15. Write a note on gaseous sterilizing agents.
- 16. Discuss the methods used for isolation of pure cultures.
- 17. Describe the ultrastructure of bacterial flagella.
- 18. Discuss various factors influenzing sterilization by heat.
- 19. Enumerate the morphological features of fungal thallus.
- 20. Write a note on transmission electron microscope.

 $(4 \times 3 = 12)$

SECTION - D

Answer any two of the following:

- 21. What are disinfectants? Write a note on common disinfectants used in microbiology laboratories.
- 22. Discuss differentiating features of procaryotic and eucaryotic cells. Write a note on eucaryotic micro organisms.
- 23. What is the principle of staining? Write a note on staining techniques used in microbiology laboratories.
- 24. What are the nutritional requirements for bacterial growth? Discuss common ingredients used for the preparation of bacteriological media. (2x5=10)