

**SECOND SEMESTER U.G. DEGREE (SUPPLEMENTARY) EXAMINATION  
DECEMBER 2012**

(CCSS)

B.Sc. Biotechnology (Core II)

BT 2B 01—GENERAL MICROBIOLOGY

Time : Three Hours

Maximum : 30 Weightage

I. Objective type questions. Answer *all* questions :

A. Select the correct answer :

1. Who introduced antiseptics ?  
(a) Joseph Lister. (b) Robert Koch.  
(c) Edward Jenner. (d) Loeuwenhoek.
2. The prokaryotic ribosome is made of :  
(a) 50S and 30S subunits. (b) 50S and 20S subunits.  
(c) 60S and 40S subunits. (d) 60S and 30S subunits.
3. The chemical nature of capsule is :  
(a) Lipid. (b) Polysaccharide.  
(c) Protein. (d) Fatty acid.
4. The bacterial endospore contain :  
(a) Lipopolysaccharide. (b) Mycolic acid.  
(c) Dipicolinic acid. (d) None of the above.

B. Fill in the blanks :

5. Serum can be sterilized by \_\_\_\_\_ method.
6. An enriched and differential medium is \_\_\_\_\_
7. Diffusion involving carrier protein is called \_\_\_\_\_
8. The cell wall of gram-negative bacteria contains \_\_\_\_\_

C. Name the following :

9. The micro-organisms that grow at high hydrostatic pressure.
10. Bacteriophage can follow both lytic and lysogenic cycle.
11. The causative agent of typhoid fever.
12. A common media used for isolation of fungi.

(12 x 1/4 = 3 weightage)

Turn over

II. Short answer type questions. Answer all *nine* questions :

13. Active transport.
14. Fermentation.
15. AIDS.
16. **CFU**.
17. Chemotherapy.
18. Tyndallization.
19. Peptidoglycan.
20. Conidiophore.
21. Generation time.

(9 x 1 = 9 weigh

III. Short essay or paragraph questions. Answer any *five* questions

22. Pure culture techniques.
23. HIV.
24. Bacterial growth curve.
25. Structure of bacteriophage.
26. Factors effecting microbial growth.
27. Immunization.
28. Reproduction of fungi.

(5 x 2 = 10 weigh

IV. Essay questions. Answer any *two* out of three :

29. Explain pentose phosphate path way and its significance.
30. Discuss different types of sterilization.
31. Describe morphological characters of bacteria and fungi.

(2 x 4 = 8 weigh