Dept. of microbiology

K15U 0591

Reg. No. : ....

Name : ....

I Semester B.Sc. Degree (CCSS-Reg./Supple./Improv.)
Examination, November 2015
(2014 Admn. Onwards)
CORE COURSE IN MICROBIOLOGY
1B01 MCB : General Microbiology

Time : 3 Hours   Max. Marks : 40

Instruction : As given in question paper.

SECTION – A

Answer **all** questions :

1. 'Swan neck' experiment was conducted by ____*Pasteur*____

2. Spirochaetes are demonstrated in smears by ____*Neg / Impreg*____ staining method.

3. Polypeptide capsule is observed in ____*Anthrax*____ bacillus.

4. A small, red or orange body often present near the anterior end of motile algae is called _____*eye spot*   (4×1=4)

SECTION – B

Answer very briefly on **any seven** of the following.

Comment on the following :

5. Name two culture media for fungi. *SDA, PDA, RBA*

6. Principle of oil-immersion objective.

7. Differentiate slime layer and capsule.

8. Define complex media. Give one example.

9. Define callus.

P.T.O.

10. Distinguish antiseptics and disinfectants.

11. What are the major contributions of Robert Koch to microbiology ?

12. Basic dyes are commonly used for staining. Why ?

13. How eukaryotic ribosomes differ from prokaryotic ribosomes ?

14. What are the applications of stroke culture method ?

(7×2=14)

SECTION – C

Answer **any four** of the following :

Write notes on :

15. Bacteria proof filters.

16. Working principle of fluorescence microscope.

17. Flagellar arrangements in bacteria.

18. Sterilization by radiation.

19. Cytoplasmic inclusions in prokaryotes.

20. Mode of action of disinfectants.

(4×3=12)

SECTION – D

Answer **any two** of the following :

21. With the help of a suitable diagram describe the structure of typical protozoan cell.

22. Define culture media. Write a note on different types of culture media used for bacterial cultivation.

23. Define antibiotic. Discuss different types of antibiotics and their mode of action.

24. Compare and contrast the cell wall structure of Gram positive and Gram negative bacterial cells. Discuss differentiation of bacterial cells by Gram's staining.

(2×5=10)