

1022

M 7845

Reg. No. :

Name :

I Semester B.Sc. Degree (CCSS – Regular) Examination, November 2014
(2014 Admn.)

CORE COURSE IN MICROBIOLOGY
1B01 MCB : General Microbiology

Time: 3 Hours

Max. Marks : 40

SECTION – A

Answer all questions :

1. Staining techniques were introduced by Robert Koch
2. S. pneumoniae is a capsulated gram positive diplococci.
(Pneumococcus)
3. Double stranded extrachromosomal circular DNA in procaryotes are called plasmids
4. Selenite F broth is an example for Enrichment / liquid media. (4x1=4)

SECTION – B

Answer very briefly on any seven of the following :

Comment on the following :

5. Resolving power.
6. Bacterial capsules are demonstrated by negative staining method. Why ?
7. Locomotory structures present in Protozoans.
8. Differentiate procaryotic and eucaryotic ribosomes.
9. Cold sterilization.
10. Applications of Lawn culture method.

P.T.O.

M 7845



11. Cryoprotectants.
12. Name any two media used for animal cell culture.
13. Define antibiotics. Give two examples.
14. Mechanisms of resistance of endospores.

(7×2=14)

SECTION - C

Answer **any four** of the following :

15. Describe Koch's postulates.
16. Describe acid fast staining. Name one acid fast bacteria.
17. Write a note on phase contrast microscope. Mention its disadvantages.
18. Differentiate procaryotic and eucaryotic cells.
19. Write a note on different morphological forms of viruses.
20. Distinguish sterilization and disinfection. What are the features of an ideal disinfectant ?

(4×3=12)

SECTION - D

Answer **any two** of the following :

21. Why moist heat is more efficient than dry heat for sterilization ? Write a note on different methods of moist heat sterilization.
22. With the help of a diagram describe the ultra structure of plasma membrane.
23. Write a note on culture preservation methods.
24. Describe the ultrastructure of bacterial flagella. Discuss the differences between eucaryotic and procaryotic flagella.

(2×5=10)