

D.K.M. COLLEGE FOR WOMEN (AUTONOMOUS), VELLORE-1
SEMESTER EXAMINATIONS
NOVEMBER – 2017
ALLIED : MICROBIOLOGY

15CAMB3B

Time : 3 Hrs

Max. Marks : 75

SECTION-A (10 x 2 = 20)

Answer ALL questions.

1. Define cell theory.
2. Define Sterilization.
3. Write the principle of Gram staining.
4. Leifson's stain and 1 % Methylene blue is used for a particular staining. Identify what staining this is. Write the principle of the staining technique.
5. What are micro and macronutrients?
6. List out four examples of selective and differential media.
7. Define Eubacteria and Archaeobacterium.
8. Define numerical taxonomy.
9. What is a protozoan?
10. What are the symptoms of the disease caused by Rhabdovirus?

SECTION-B (5 x 5 = 25)

Answer any FIVE of the following questions.

11. Explain the structure of the bacterial cell wall with neat diagram.
12. Write the components of Transmission Electron Microscope and explain in detail about its working principle.
13. Write a short note on physical method of sterilization.
14. Explain the factors which influence the microbial growth.
15. Write a note on the nutrient requirements for growth of bacteria.
16. Write in brief about taxonomy and its classification.
17. Write the causative agent, symptoms and prevention of cholera.
18. Explain Germ Theory of diseases with examples.

SECTION-C (3 x 10 = 30)

Answer ALL questions.

19. (a) Explain in detail Spontaneous generation theory.
(Or)
(b) Describe in detail a light microscope explaining its components and working principle.
20. (a) How will you perform a growth curve? Explain how to interpret the results?
(Or)
(b) How will you develop a pure culture? Explain the criteria to be followed for the maintenance and preservation of cultures.
21. (a) Explain in detail about HIV infection.
(Or)
(b) Explain in detail about the taxonomic classification of bacteria.