



GAN-032005

Seat No. _____

B. Sc. (Sem. II) Examination

March / April – 2019

BSC - 205 : Microbiology

(Taxonomy and Bacteriology)

Time : 3 Hours]

[Total Marks : 70

Instructions :

1. All questions carry equal marks.
2. Draw a neat and labeled diagram when required.
3. Write the question numbers clearly

1. WRITE A BRIEF NOTE ON ANY TWO **14**

1. Numerical taxonomy.
2. Five kingdom classification of organisms
3. G:C ratio
4. Compare and contrast characters of eubacteria and archeabacteria.

2. WRITE ON ANY TWO **14**

1. Write a note on morphological diversity of bacteria.
2. Describe the structure and importance of 'peptidoglycan'.
3. Describe the types motility in bacteria.
4. Describe the ultrastructure of endospore of bacteria.

3. ANSWER ANY TWO **14**

1. Describe the importance of trace bioelements required by microbes for growth.
2. Describe the various types of selective and differential culture media.
3. Discuss the various modes of bacterial reproduction
4. Write a brief note on effect of temperature, and oxygen on the growth of bacteria.

4. WRITE A SHORT NOTE ON ANY TWO: **14**

1. Conditions affecting effectiveness of antimicrobial agents.
2. Gaseous agent used to control microbes.
3. Radiation as an agent to control microbial population.
4. Preservation of cultures.

5. ANSWER IN ONE OR TWO SENTENCES **14**

1. Define taxonomy.
2. Write two names of cell wall less bacteria
3. What is sporoplast?

4. Give full names of 'ATCC'.
 5. Give two names of capsulated bacteria.
 6. What is plasmid?
 7. Give two names of autotrophic bacteria.
 8. What is the importance of peptone in culture media?
 9. What are xerophiles?
 10. Define passive transport of nutrients.
 11. What is synchronization of growth?
 12. What is the generation time definition?
 13. Define sterilization.
 14. What is the pasteurization?
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