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Total No. of Pages : 02

Total No. of Questions : 18

B.Tech. (BT) (2018 Batch) (Sem.-3)

MICROBIOLOGY

Subject Code : BTBT-303-18

M.Code : 76947

Time : 3 Hrs.

Max. Marks : 60

INSTRUCTIONS TO CANDIDATES :

1. SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
2. SECTION-B contains FIVE questions carrying FIVE marks each and students have to attempt any FOUR questions.
3. SECTION-C contains THREE questions carrying TEN marks each and students have to attempt any TWO questions.

SECTION-A**Write briefly :**

1. Prions
2. Flagella
3. Conjugation
4. Endospore and exospore
5. Peptidoglycan
6. Active transport
7. Molasses
8. Extremophiles
9. Agar agar
10. Mesosomes



**SECTION-B**

11. Differentiate between the cell wall of Gram positive and Gram negative bacteria? Explain with suitable examples.
12. Explain various techniques used for isolating pure culture from mixed culture? What are selective media and differential media?
13. What are autotrophs and what are their different physical and chemical growth requirements for culturing? Explain with suitable examples and give various sources of nutrients.
14. Discuss and explain bacterial recombination in detail? What are its applications?
15. Define microbial growth? What are different methods to determine growth in unicellular and multicellular micro-organisms? Explain with examples.

SECTION-C

16. What physical and chemical methods are used to control the growth of microbes? Why their control is necessary?
17. What is strain improvement and why it is necessary? How it can be achieved?
18. Explain different methods for preservation of micro-organisms? What are germplasm banks and why preservation of microbes is necessary?

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.

