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Total No. of Questions : 09

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

MICROBIOLOGY

Subject Code : BTBT303-18

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

- 1. Write briefly :**

- Koch's postulates
- Biogenesis v/s abiogenesis
- Lyophilization
- Synchronous growth
- Endospore
- Flagella
- Diauxic growth
- Mycoplasma
- Tuberculosis
- Tyndallization

SECTION-B

2. List out differences between prokaryotes and eukaryotes? Give suitable examples.
3. What are obligate parasites and obligate anaerobes? Explain by giving examples.
4. Explain batch, fed-batch and continuous fermentation with suitable examples and applications?
5. What is conjugation, transformation and transduction? How interrupted mating is used in gene mapping?
6. What is microbial growth, generation time and growth rate? What are direct and indirect methods of measurement of growth?

SECTION-C

7. What are different cheap sources of carbon and nitrogen for industrial fermentations? Discuss their composition uses and economic value.
8. List five major diseases caused by microorganisms in humans and their causative agents and how they are controlled?
9. What is numerical taxonomy? What is similarity index? Which molecular technique is used in identification of bacteria?

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.