18103067 (Pages : 2) Reg. No.....

Name.....

B.Sc. DEGREE (C.B.C.S.) EXAMINATION, JUNE 2018

Second Semester

Complementary Course—MB2CMT02—Microbiology—FUNDAMENTALS OF MICROBIOLOGY—II

(For Biotechnology M III Programme)

[2017 Admissions only]

Time : Three Hours Maximum : 60 Marks

Part A

Answer any **ten** *questions.*
Each question carries 1 *mark.*

1. Explain TCA cycle.
2. Note on Lithotrophs.
3. What is transduction ?
4. Comment on aerobic respiration.
5. What is antibiotics ?
6. Write four applications of microbes.
7. What is plasmid ?
8. Explain batch culture.
9. What is infection ?
10. Note on enrichment media.
11. Explain Lowenstein-Jensen media.
12. Define conjugation.

(10 × 1 = 10 marks)

Part B

Answer any **six** *questions.*
Each question carries 5 *marks.*

13. Explain briefly about the factors affecting growth of bacteria.
14. Explain Applications of antibiotics. Describe about antibiotic sensitivity test.
15. Describe briefly about the mechanism of during resistance in bacteria.
16. Write note on bacterial genetics.

Turn over

17. What is fermentation ? How it will helpful in food industry ?
18. Explain Glyoxalate cycle.
19. What is growth curve ? Describe factors affecting growth of bacteria.
20. Describe alcoholic fermentation. How it will help in industrial microbiology ?
21. What is culture ? Note on different cultural medias for bacterial growth.

(6 × 5 = 30 marks)

Part C

Answer any **two** *questions.*
Each question carries 10 *marks.*

22. Write in detail about aerobic respiration.

    Elaborate on generalised and specialized transduction.

23. Explain principles and applications of culture methods in microbiology.

    Explain various sterilisation and disinfection methods used in bacterial cultures.

24. Elaborate briefly on microbial metabolism.
25. Explain various methods in genetic exchange in bacterial growth.

(2 × 10 = 20 marks)