

M. Sc. DEGREE EXAMINATION, NOVEMBER 2008
BIOTECHNOLOGY
FIRST SEMESTER

COURSE : CORE
PAPER : MICROBIOLOGY
TIME : 3 HOURS

MAX. MARKS: 100

SECTION – A

Answer all questions:

20 x 1 = 20

1. Write down Koch's postulates.
2. Mention any two features of Archaeobacteria.
3. What is generation time? Give an example.
4. Distinguish between Prions and Viroids.
5. Name the instrument used in a) Fractional sterilization b) Dry heat method
6. What are mixotrophs?
7. What is Credes method?
8. Distinguish between disinfectant and antiseptic.
9. Define the term nitrification. Name one nitrifying bacterium.
10. What is rhizosphere? Mention its significance.
11. What is starter culture? Which bacterium is used as starter culture in yoghurt.
12. Define the term trickling filter.
13. Name the causal organisms of cholera. Mention its most important symptom.
14. Write down any symptoms of rabies.
15. What are ringworm infections? Name any one fungus involved.
16. Which organism caused amoebiasis? To which group does it belong to?
17. Mention the source of streptomycin. What is its mode of action?
18. What are gasohol?
19. What are biosurfactants?
20. Write down any two points on biosafety.

SECTION – B**ANSWER ANY FOUR QUESTIONS EACH ANSWER NOT EXCEEDING 800****WORDS :****4 X 10 = 40**

21. Give an account of bacterial conjugation.
22. Discuss the commercial production of Vinegar.
23. Explain the events which take place during sulphur cycle.
24. Write about cause, symptoms and control of any one Protozoan infections of man.
25. Discuss the importance of biopolymers.
26. Expand the following with a footnote each:
 - i) BMDB
 - ii) HEPA
 - iii) BOD
 - iv) BCG
 - v) SCP

SECTION – C**ANSWER ANY TWO QUESTIONS EACH ANSWER NOT EXCEEDING 1500****WORDS :****2 X 20 = 40**

27. How are viruses classified? Add a note on their cultivation.
28. Give an account of physical methods of control of microbes.
29. Discuss the steps involved in sewage treatment.
30. Write notes on:
 - i) Causal organism, symptoms and control of Tetanus.
 - ii) Industrial production of ethanol.
