

D 52017

Name.....

Reg. No.....

FIRST SEMESTER M.Sc. DEGREE EXAMINATION, JANUARY 2009

Microbiology (Main)

MB 1.1.T—GENERAL BIOCHEMISTRY

(2005 admissions)

Maximum : 80 Marks

Time : Three Hours

Section A

*Write short notes on all questions.
Each question carries 2 marks.*

- | | |
|-------------------------|----------------------------|
| 1. Epimers. | 2. Hyaluronic acid. |
| 3. Pyridoxal phosphate. | 4. Sulfo lipids. |
| 5. Lipid bilayer. | 6. zDNA. |
| 7. Tetra iodothyromine. | 8. Glucocorticoids. |
| 9. Serotonine. | 10. Cholesterol. |
| 11. Vitamin C. | 12. Gas chromatography. |
| 13. PAGE. | 14. pH. |
| 15. Prostacyclins. | 16. Aromatic amino acids. |
| 17. r RNA. | 18. β -sheet |
| 19. Waxes. | 20. Geiger-Muller counter. |

(20 x 2 = 40 marks)

Section B

*Write notes on any **five** questions.
Each question carries 8 marks.*

21. Storage polysacchrides.
22. Glycoproteins.
23. Chemical properties of proteins.
24. Osmosis.
25. Membrane proteins.
26. Dialysis.
27. Fluorimetry.

(5 x 8 = 40 marks)

D 52019

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**FIRST SEMESTER M.Sc. DEGREE EXAMINATION
JANUARY 2009**

Microbiology

MB L3T – ENVIRONMENTAL AND SANITATION MICROBIOLOGY

(2005 admissions)

Time : Three Hours

Maximum : 80 Marks

Section A

*Write about I answer **all** the questions in **2** or **3** sentences.*

- | | |
|-------------------------------------|------------------------|
| 1. Competitive exclusion principle. | 2. Cometabolism. |
| 3. VAM. | 4. Rhizosphere. |
| 5. Biological weapons. | 6. Air Ozonisation. |
| 7. Air sanitation in metro tunnels. | 8. Sulphate reduction. |
| 9. Biosensors. | 10. BOD. |
| 11. Faecal streptococci. | 12. Xenobiotics. |
| 13. Microbial biofilm formation. | 14. Vermicomposting. |
| 15. Tarball pollution. | 16. Imhoff Tank. |
| 17. Rapid sand filter. | 18. Oxidation pond. |
| 19. Greenhouse gases. | 20. Aeroallergens. |

(20 x 2 = 40 marks)

Section B

*Write notes on / discuss any **five** of the following.*

1. Factors affecting the type and extent of air microflora.
2. Biodegradation of petroleum wastes.
3. Discuss different methods of treatment of industrial effluents.
4. Illustrate the membrane filter technique for air sampling.
5. Enumerate the factors affecting composting.
6. Phosphorus cycle.
7. Quantitation techniques for water microflora.

(5 x 8 = 40 marks)