

B.Sc. (CBCS Pattern) Semester-I
MIC-01 - Microbiology Paper-I - Fundamentals of Microbiology

P. Pages : 2

Time : Three Hours



GUG/S/25/11558

Max. Marks : 50

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- Notes : 1. All questions are compulsory and carry equal marks.
2. Draw well labelled diagrams wherever necessary.

1. Describe in detail about experiment proving biogenesis? 10

OR

- i) Give the account of scope of microbiology? **2½**
- ii) Describe in detail branches of microbiology? **2½**
- iii) Discuss contribution of Louis Pasteur? **2½**
- iv) Describe Koch postulates? **2½**

2. Discuss in detail Gram positive bacterial cell wall? 10

OR

- v) Describe fluid mosaic model? **2½**
- vi) Discuss 70S ribosome? **2½**
- vii) Differentiates between eukaryotic and prokaryotic cell? **2½**
- viii) Draw well labelled diagram & Endospore. **2½**

3. Describe in details bacterial taxonomy by Whittaker? 10

OR

- i) Give the account of general concept of taxonomy? **2½**
- ii) Discuss Haeckel classification of taxonomy? **2½**
- iii) Discuss numerical taxonomy? **2½**
- iv) Describe basic idea of r-RNA homology. **2½**

4. Describe in detail Lytic cycle of T4-phage? 10

OR

- v) Give the account of cultivation of animal viruses? **2½**

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| vi) Discuss the group of archaebacteria? | 2½ |
| vii) General properties of virus. | 2½ |
| viii) Describe methods of molds reproduction? | 2½ |

5. Write in very short - any ten.

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| i) Who is the father of microbiology? | 1 |
| ii) Name one oil eating bacteria? | 1 |
| iii) What is tyndallisation? | 1 |
| iv) What is plasmid? | 1 |
| v) What is capsule? | 1 |
| vi) What is endospore? | 1 |
| vii) What is genus? | 1 |
| viii) Write on DNA homology? | 1 |
| ix) What is Monera? | 1 |
| x) Write two name of DNA virus? | 1 |
| xi) What is LHT system? | 1 |
| xii) What is icosahedral symmetry? | 1 |
