

MICROBIOLOGY
SEM-IV - 2015-16

QP Code : 21737

[3 Hours]

[Total Marks: 70]

- N.B. :** (1) All questions are compulsory.
 (2) Draw a neat labelled diagram wherever necessary.

1. Answer the following:—

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| (a) Define sanitization with example. | 1 |
| (b) Explain decimal reduction time with its application. | 1 |
| (c) Write the biological indicator used for autoclave. | 1 |
| (d) Give the importance of positive control used in sterility testing. | 1 |
| (e) Name the causative agent for typhoid fever. | 1 |
| (f) Write the diagnostic test for leprosy. | 1 |
| (g) Define enriched media with suitable examples. | 1 |
| (h) Name two Chlamydial infections with the causative agents. | 2 |
| (i) Write Pasteur's contribution in the field of Microbiology. | 2 |
| (j) Name any two motile bacilli. | 2 |
| (k) Define limit of resolution and give its significance. | 2 |
| 2. (a) Write a note on transmission electron microscopy and its applications. | 4 |
| (b) Discuss filtration with respect to method, mode of action and applications. | 4 |
| (c) Write a note on preservation of bacteria. | 3 |
| 3. (a) Define disinfectant and write ideal properties of a disinfectant. | 4 |
| (b) Explain morphological characteristics of a virus. | 4 |
| (c) Distinguish between (any one):— | 3 |
| (i) Bacteria and Rickettsia. | |
| (ii) Compound microscope and electron microscope. | |
| 4. (a) Write a note on asexual reproduction in fungi. | |
| (b) Enlist methods of measurement of bacteria. Describe viable count method. | 4 |
| | 4 |
| OR | |
| (b) Describe growth phases of bacteria. | |
| (c) Describe rickettsial infections. | |
| | 3 |

[TURN OVER

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5. (a) Explain the mechanism and applications of moist heat sterilization. 4
(b) Write a note on cultivation of anaerobes. 4
(c) Give economic importance of algae. 3
6. (a) Describe with diagram lytic cycle of bacteriophage. 4
- OR**
- Write a note on Oncogenic viruses.
- (b) Explain identification of bacteria on the basis of morphological and cultural characteristics. 4
- (c) Explain differential staining with suitable example. 3
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