

2016-2017  
RE-EXAM

SEM IV Re-Exam  
 CBGS  
 Microbiology  
 Second Half-2016  
 Q.P. Code : 527802

(3 Hours)

[ Total Marks : 70 ]

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

1. Answer the following :-

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| (a) Name aerobic & anaerobic media used for sterility tests.   | 2 |
| (b) What is the scope of Microbiology in Pharmaceutical industry? Give contributions of Alexander Fleming. | 2 |
| (c) Enlist the chemical indicators used in dry heat and moist heat sterilization methods.                  | 2 |
| (d) Name two RNA viruses.  | 2 |
| (e) Name two infections caused by Mycobacterium species.   | 2 |
| (f) Write the causative agent and diagnostic test for typhoid.   | 2 |
| (g) Define Glycocalyx.   | 1 |
| (h) Explain Resolution limit.  | 1 |
| (i) Define disinfectant. Give one example.   | 1 |

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| 2. (a) Differentiate between light microscopy & Electron microscopy. | 4 |
| (b) Write a note on bacterial spore.                                 | 4 |
| (c) Explain the principle and method of Gram staining.               | 3 |

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| 3. (a) Describe methods of anaerobic cultivation of bacteria.                  | 4 |
| (b) Describe differential and selective culture media with suitable examples.  | 4 |
| (c) Describe chick embryo cultivation of viruses with a neat labelled diagram. | 3 |

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| 4. (a) Explain basic morphological features of fungi. Describe asexual reproduction in fungi. | 4 |
| (b) Describe any one.   | 4 |
| (i) Rickettsial infections (ii) Chlamydial infections   |   |
| (c) Write a note on Turbidometric method of counting bacteria.                                | 3 |

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| 5. (a) Discuss radiation sterilization with respect to method, mode of action and applications. | 4 |
| (b) Explain the effect of temperature, pH and osmotic pressure on growth of the bacteria.       | 4 |
| (c) Describe economic importance of algae.  | 3 |

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| 6. (a) Write a note on mode of action and applications of phenols & phenolic derivatives as disinfectant. | 4 |
| (b) Differentiate between bacteria and viruses.   | 4 |

**OR**

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| Explain lysogenic cycle of viruses.               |   |
| (c) Describe the life cycle of malarial parasite. | 3 |