

**M. SC. (MEDICAL BIOTECHNOLOGY) SEM-I (CHOICE BASED
CREDIT SYSTEM) : SUMMER - 2018
SUBJECT : MEDICAL MICROBIOLOGY**

Day: *Wednesday*
Date: *11-04-2018*

Time: **02.00 PM TO 05.00 PM**
Max. Marks: 60

S-2018-1163

N.B.:

- 1) **Q. No. 1 and Q. No. 5 are COMPULSORY.** Out of the remaining questions attempt **ANY TWO** questions from each section.
- 2) Answers to both the sections should be written in **SEPARATE** answer books.
- 3) Figures to the right indicate **FULL** marks.

SECTION-I

- Q.1** Answer **ANY TWO** of the following: [10]
- a) Describe nutritional requirements of bacterial cell and explain growth factors of bacteria.
 - b) Describe principle of fluorescent microscope with the help of ray diagram and give its uses.
 - c) Draw a well labelled diagram of typical bacterial cell and describe surface appendages.
- Q.2** Answer the following: [10]
- a) Describe principle of moist heat sterilization and explain its working, control and uses of autoclave.
 - b) Explain the enriched and enrichment media with definition and uses.
- Q.3** Describe the following: [10]
- a) Zoonotic infections.
 - b) Enzymatic tests for identification of bacteria.
- Q.4** Write short notes on the following: [10]
- a) Write contribution of Robert Koch.
 - b) Biomedical waste disposal

SECTION-II

- Q.5** Answer **ANY TWO** of the following: [10]
- a) Define the term immunity. Give its classification with suitable examples.
 - b) Write principle of ELISA and its uses.
 - c) Cultivation of viruses.
- Q.6** Answer the following: [10]
- a) Morphological classification of fungi with examples.
 - b) Diagnostic methods for parasitic infections.
- Q.7** Write short notes on the following: [10]
- a) Artificial types of passive immunity with examples.
 - b) Process of CSF for isolation of pathogens.
- Q.8** Answer the following: [10]
- a) Universal safety precautions.
 - b) Write processing of urine sample for isolation of pathogens.

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