



**MBF-1603220001010500** Seat No. \_\_\_\_\_

**B. Sc. (Sem. I) (CBCS) Examination**

**November / December – 2016**

**BI - 105 : Basics in Microbiology**

**(New Course)**

Time :  $2\frac{1}{2}$  Hours]

[Total Marks : 70

- Instructions :**
- (1) All questions are compulsory.
  - (2) Figures on right side indicates marks.
  - (3) Draw the figure wherever necessary.
  - (4) Write answers of all the questions in main answer sheet.

- 1**
- (a) Objective questions : **4**
- (1) \_\_\_\_\_ discovered pasteurization.
  - (2) Scientific binomial nomenclature includes \_\_\_\_\_ and \_\_\_\_\_.
  - (3) Acellular microbes are known as \_\_\_\_\_.
  - (4) Rod shaped bacteria are called \_\_\_\_\_.
- (b) Answer in brief (Any one) **2**
- (1) Define fungi ?
  - (2) What is Microbiology ?
- (c) Answer in detail (Any one) **3**
- (1) What is intuitive method of classification ?
  - (2) What are taxonomic ranks ?
- (d) Write a note on (Any one) **5**
- (1) Give an account on Microscopy and its types.
  - (2) Explain characters used for taxonomic classification of any microorganism.
- 2**
- (a) Objective questions : **4**
- (1) First phase of growth curve is \_\_\_\_\_.
  - (2) EMB agar is a type of \_\_\_\_\_.
  - (3)  $t/n =$  \_\_\_\_\_.
  - (4) Lyophilisation is used for \_\_\_\_\_.

- (b) Answer in brief (Any one) 2  
 (1) Enlist chemicals sterilizers.  
 (2) What are pathogens ?
- (c) Answer in detail (Any one) 3  
 (1) How to cultivate anaerobes ?  
 (2) Explain selective media.
- (d) Write a note on (Any one) 5  
 (1) Explain Microbial growth in detail.  
 (2) Explain principle and functioning of Autoclave.
- 3** (a) Objective questions : 4  
 (1) MDR stands for \_\_\_\_\_.  
 (2) \_\_\_\_\_ causes Hepatitis.  
 (3) Botulin is a \_\_\_\_ toxin.  
 (4) Penicillin contains \_\_\_\_\_ ring structure.
- (b) Answer in brief (Any one) 2  
 (1) Define antibiotic.  
 (2) What is Leprosy ?
- (c) Answer in detail (Any one) 3  
 (1) Explain mode of action of Streptomycin.  
 (2) How microbial toxin affects the human body ? Explain with example.
- (d) Write a note on (Any one) 5  
 (1) Write a short note on MDR protein classification.  
 (2) Give an account on Polio.
- 4** (a) Objective questions : 4  
 (1) SCP stands for \_\_\_\_\_.  
 (2) Bacillus thurengiensis is used as \_\_\_\_\_.  
 (3) Azotobacter is used as one of the \_\_\_\_\_.  
 (4) HTST stands for \_\_\_\_\_.
- (b) Answer in brief (Any one) 2  
 (1) Enlist fermented food items.  
 (2) Define Biopesticide.
- (c) Answer in detail (Any one) 3  
 (1) What is the significance of Microbial secondary metabolites ?  
 (2) What is the importance of microorganisms in industry ?

- (d) Write a note on (Any one) 5
- (1) Write details of Cheese presentation.
  - (2) Write a note on Bioremediation.
- 5 (a) Objective questions : 4
- (1) Viruses infecting bacteria are known as \_\_\_\_\_.
  - (2) Typhoid causes due to \_\_\_\_\_.
  - (3) Antibiotic streptomycin is produced by \_\_\_\_\_.
  - (4) Penicillium produces \_\_\_\_\_.
- (b) Answer in brief (Any one) 2
- (1) What is traveller's diarrhea ?
  - (2) Define yeast.
- (c) Answer in detail (Any one) 3
- (1) Give an account on Helicobacter.
  - (2) Write the significance of Streptomyces spp.
- (d) Write a note on (Any one) 5
- (1) Write a note on E.coli.
  - (2) Give an account on influenza virus.
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