

B.Sc. (Part-I) Semester-II Examination
MICROBIOLOGY
(Microbiology, Biochemistry, Biostatistics and Computers)

Time : Three Hours]

[Maximum Marks : 80

Note :- (1) All questions are compulsory.

(2) Draw well labelled diagrams wherever necessary.

1. (A) Fill in the blanks :

(i) Amino Acids are joined to each other by _____.

(ii) Autoclave is used for _____.

(iii) Monitor is _____ device.

(iv) A group of study elements is called _____.

2

(B) Choose the correct option :

(i) Penicillin is an _____.

(a) Biofertilizer

(b) Antibiotic

(c) Vaccine

(d) Output devices

(ii) Mean, mode and median are _____.

(a) Chi-square values

(b) Biopesticides

(c) Central tendency

(d) Log values

(iii) T4 phage is an example of _____.

(a) Bacteria

(b) Virus

(c) Rickettsia

(d) Lipid

(iv) Starch is _____.

(a) Protein

(b) DNA

(c) Carbohydrate

(d) Fungi

2

- (C) Answer in **ONE** sentence :
- (i) What is CPU ?
 - (ii) Give one example of non-symbiotic biofertilizers.
 - (iii) Define "Disinfection".
 - (iv) Name any two methods of cultivation of viruses. 4
2. Describe in detail structure and morphology of viruses. 12
- OR**
- Describe lytic cycle. How it differs from lysogeny ? 12
3. (A) What is Penicillin ? Give its mode of action. 4
- (B) Describe the process of microbial control using radiation. 4
- (C) Define the terms-sterilization and antiseptic with example. 4
- OR**
- (D) Describe in brief control of micro-organisms by high temperature. 4
- (E) What is action of halogens on bacteria ? 4
- (F) Describe the process of microbial control using osmotic pressure. 4
4. (A) What is biopesticide ? Give any two examples. 4
- (B) Define vaccines with suitable examples. 4
- (C) Describe bioleaching in brief . 4
- OR**
- (D) Describe in brief biofertilizers and its types. 4
- (E) What do you mean by Biodegradation ? Give the role of bacteria in this process. 4
- (F) Describe the applied aspects of micro-organisms in industry. 4
5. Describe in detail structure of DNA. 12
- OR**
- Describe in detail classification of Carbohydrates. 12

6. (A) Describe Chi-square test in brief with suitable example. 4
(B) Describe the applications of biostatistics. 4
(C) Describe in brief biological data presentation. 4

OR

- (D) Describe mean and give its properties. 4
(E) What is mode ? Explain with example. 4
(F) Describe in brief tabulation of data. 4
7. (A) Describe in brief primary memory in computer. 4
(B) Give the applications of internet. 4
(C) What is software ? 4

OR

- (D) Describe in brief input devices of computer. 4
(E) Describe in brief the process of document editing in MS-Word. 4
(F) What is e-mail ? Give its uses. 4

