

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 : 2
- (i) The full form of LHT system is _____.
 - (ii) Proteins are the polymers of _____.
 - (iii) Measurement of characteristics is called as _____.
 - (iv) The long form of RAM is _____.
- (B) Choose correct option : 2
- (i) Sulphur containing amino acids _____
 - (a) Cysteine (b) Aspartic acid
 - (c) Tyrosine (d) Tryptophan.
 - (ii) Ionising radiation removes _____.
 - (a) Protons (b) Electrons
 - (c) Waves (d) Ions.
 - (iii) URL means
 - (a) Uniform resource locator (b) Uniform Reservoir locator
 - (c) Universal Resource locator (d) None of these.
 - (iv) BCG is
 - (a) Mixed Vaccine (b) Live Vaccine
 - (c) Killed Vaccine (d) None of these
- (C) Answer in one sentence : 4
- (i) Define Biopesticides.
 - (ii) Who discovered DNA structure?
 - (iii) Define interferon
 - (iv) Define Median.
2. Describe Lytic cycle. How it differs from lysogeny? 12

OR

Give the LHT system of classification of viruses. Describe symmetry of viruses. 12

3. (a) Describe in brief moist heat sterilization. 4
- (b) Describe in brief Fumigation. 4
- (c) Write in detail principle and working of autoclave. 4

OR

- (d) Differentiate between sterilization and disinfection. 4
- (e) What is the role of radiation in microbial control? 4
- (f) Describe in brief Gaseous sterilization. 4
- 4. (a) Explain in brief biodegradation. 4
- (b) Describe in brief biofertilizers. 4
- (c) Enlist the name of four micro-organisms involved in pharmaceutical industries along with their microbial products. 4

OR

- (d) Describe in brief biopesticides. 4
- (e) What is vaccine? Explain with suitable example role of microorganism in production of vaccine. 4
- (f) Explain in detail bioleaching. 4
- 5. (a) Write any six properties of DNA. 4
- (b) Explain primary str. of protein. 4
- (c) Describe the structure of t-RNA 4

OR

- (d) Explain in brief polysaccharide. 4
- (c) Differentiate between DNA and RNA. 4
- (f) With suitable example explain phospholipids. 4
- 6. Explain in detail measures of central tendency. 12

OR

- Describe in detail graphical presentation of data. 12
- 7. (a) Write any six uses of Internet. 4
- (b) Explain primary memory of computer. 4
- (c) Explain input devices with examples. 4

OR

- (d) Write any six applications of computers. 4
- (e) Explain secondary memory of computer. 4
- (f) Explain output devices with examples. 4