

Roll No. _____

SIVS-197 A-17
B.Sc. IVth Semester Degree Examination
BIOTECHNOLOGY (OPTIONAL)
(Microbiology)
Paper : 4.5

Time : 3 Hours

Maximum Marks : 80

Instructions to Candidates

- 1) Answer all the Questions
- 2) Draw diagrams wherever necessary.

I. Answer the following in one word or in one sentence each :

(15 × 1 = 15)

- 1) Halogen.
- 2) Immunocytes.
- 3) Flagella.
- 4) Log phase.
- 5) WIDAL test.
- 6) Mesosomes.
- 7) Pathogens.
- 8) Differential media.
- 9) Measles.
- 10) Endotoxins.
- 11) Sporozoites.
- 12) Alexander Fleming.
- 13) Synchronous cultures.
- 14) Streak inoculation
- 15) Expand HTST.

II Answer any **five** of the following :

(5 × 5 = 25)

- 16) Write a note on contributions of Edward Jenner.
- 17) Describe sterilization by radiations.
- 18) Write about structural staining.
- 19) Brief about nutritional requirements of microorganisms.
- 20) Write the factors influencing activity of antimicrobial agents.
- 21) Life cycle of malarial parasite.
- 22) Preservation methods of cultures.

III Answer any **four** of the following.

(10 × 4 = 40)

- 23) Define growth and explain bacterial growth curve.
- 24) Explain the chemical methods of sterilization.
- 25) Explain nature of microbial cell surface.
- 26) Write about pathogenicity, lab diagnosis and treatment of syphilis.
- 27) Write a note on
 - a) SEM
 - b) TEM
- 28) Discuss about different types of microbial culture media.

