

SIVS 198 A-2K13

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 the diagrams wherever necessary

L Answer the following in one word or one sentence each.

(15×1= 15)

- 1) Resolving power
- 2) Incineration
- 3) Sterilization
- 4) Membrane filters
- 5) Peptidoglycan
- 6) Spore
- 7) Complex media
- 8) Log phase of growth
- 9) Thermophile
- 10) AIDS
- 11) Facultative anaerobes
- 12) Lyophilization
- 13) Pasteurization
- 14) Pour plating
- 15) Phenol coefficient test

II. Write short note on any **five of the following: (5×5= 25)**

- 16) Write about simple staining method
- 17) Write a note on factors affecting growth of microbes.
- 18) Write about phase contrast microscopy
- 19) What are the contributions of Alexander Flemming
- 20) Write about methods of bacterial count
- 21) Write a note on measles
- 22) Write about gonorrhoea.

III. Write explanatory note on any **four of the following: (4×10 = 40)**

- 23) Explain scanning electron microscopy and add its applications.
- 24) Give an account on physical methods of sterilization
- 25) Describe the structure of yeast cell with neat labeled diagram.
- 26) Describe the grams staining technique for classification of bacteria.
- 27) Give an account on nutritional requirements of microorganisms
- 28) Explain malaria with respect to transmission, causes, preventive measures and symptoms.