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**SIVS 194A-2K14**

**B.Sc. IVth Semester Degree Examination**

**Biotechnology**

**(Microbiology)**

**Paper - 4.5**

Time : 3 Hours

Maximum Marks : 80

**Instruction to Candidates:**

- 1) Answer all the questions
- 2) Draw the diagrams wherever necessary

**L Answer the following in one or two sentences each (15x1=15)**

- 1) Leeuwenhoek
- 2) Interference
- 3) Hot air oven
- 4) UV-sterilization
- 5) Gram +ve bacteria
- 6) Surface 'O' antigen
- 7) Streak inoculation
- 8) Staphylococcus pneumonia
- 9) Syphilis
- 10) Hepatitis-A

- 11) Amoebiasis
- 12) Robert koch
- 13) Crystal violet stain
- 14) Bright field microscope
- 15) Wet sterilisation

**II** Write short note on any **five** of the following **(5x5=25)**

- 16) Working principle of SEM
- 17) Basic principle of Gram's staining
- 18) Methods of simple staining
- 19) Types of complex culture media
- 20) Nutritional requirements of microbes
- 21) Methods of preservation of cultures
- 22) Factors effecting on growth of bacteria

**III** Write explanatory note on any **four** of the following **(4x10=40)**

- 23) Explain causes, symptoms & preventive measures of AIDS
  - 24) What are antibacterial agents Add preventive measures
  - 25) Explain the life cycle of clostridium tetani
  - 26) Give an account on malarial disease
  - 27) Explain the structure of prokaryotic cell with neat labelled diagram
  - 28) Give an account on various types of chemical sterilisation.
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