



SS – 378

I Semester B.Sc. Examination, Nov./Dec. 2018
(CBCS – F/R) (Semester Scheme)
MICROBIOLOGY – I
Basic Microbiology

Time : 3 Hours

Max. Marks : 70

- Instructions :** 1) Answer *all* the Sections.
2) Draw diagrams *wherever* necessary.

SECTION – A

I. Write brief notes on the following :

(5×2=10)

- 1) Penicillin binding protein
- 2) Silica gel
- 3) Mycology
- 4) Indirect staining
- 5) Tyndallization.

SECTION – B

II. Answer **any four** of the following :

(4×5=20)

- 6) Write a note on laminar air flow.
- 7) Explain to be dilution method.
- 8) Explain principle and application of centrifugation.
- 9) Give an account of contributions of Anton van Leeuwenhoek.
- 10) Explain mode of action and antimicrobial spectrum of bacitracin.

SECTION – C

III. Answer **any three** of the following :

(3×10=30)

- 11) Define nature of dyes and explain Gram's staining technique.
- 12) Explain in detail antimicrobial testing methods.



- 13) Write a note on working principle, construction and applications of SEM.
- 14) Explain recent advances in Microbiology and add a note on its scope.
- 15) Give an account of antiviral and synthetic drugs.

SECTION - D

IV. Answer in **one line** only :

(10x1=10)

- 16) MRSA
- 17) Phase shift
- 18) Vaccination
- 19) Zeihl-Neelsen
- 20) TLC
- 21) Svedberg Unit
- 22) Numerical aperture
- 23) Bactericidal agents
- 24) Gamma rays
- 25) Autoclave.

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