UN – 184

I Semester B.Sc. Examination, November/December 2015
(Semester Scheme)
(CBCS – 2014-15 and Onwards) (F/R)
MICROBIOLOGY – I
Basic Microbiology and Control of Microorganisms
70 (R) – 2011-12 and Onwards
60 (R) – Prior to 2011-12

Time : 3 Hours

Max. Marks : 70 (F)/60 (R)/CBCS

Instructions : 1) *Candidates of **2011** onwards should answer **all** the Sections.*
2) *Candidates prior to **2011** should **A**, **B** and **C** Sections **only**.*
3) *Draw diagrams **wherever** necessary.*
4) ***70** marks for students of **2011-12** and onwards/**CBCS** (Credit Based Semester Scheme).*
5) ***60** marks for Repeater Students Prior to **2011-12**.*

SECTION – A

I. Write brief notes on the following : **(5×2=10)**

1) Acidic stains
2) Sedimentation
3) Freeze etching
4) Gamma rays
5) Semisynthetic Antibiotics.

SECTION – B

II. Answer **any four** of the following : **(4×5=20)**

6) Explain magnification and numerical aperture.
7) Explain the contributions of Louis Pasteur.
8) Explain the source and mode of action of Nystatin.
9) Define sterilization. Explain sterilization by quaternary ammonium compounds.
10) Write in brief the scope of microbiology.

P.T.O.

SECTION – C

III. Answer **any three** of the following : **(3×10=30)**

11) Explain the working principles of dark field microscopy in comparison with bright field microscope.

12) Explain in detail sterilization by filtration.

13) Describe the mode of action of chloramphenicol and vancomycin.

14) Explain the contributions of Anton Von Leuwenhock and Lazaro Spallanzani to microbiology.

15) Describe cell wall staining and endospore staining in bacteria.

SECTION – D

IV. Answer in **one** line **only** : **(10×1=10)**

16) rpm

17) Aseptic inoculation

18) Bacteriostatic

19) Sulfonamides

20) Wonder drug

21) Stanley Miller

22) Electron gun

23) Saffranin

24) Inoculation loop

25) Carliolic acid.
