



MICROBIOLOGY HSSC-I

88

Time allowed: 2:20 Hours

Total Marks Sections B and C: 40

NOTE: Answer any thirteen parts from Section 'B' and any two questions from Section 'C' on the separately provided answer book. Use supplementary answer sheet i.e. Sheet-B if required. Write your answers neatly and legibly.

SECTION – B (Marks 26)

Q. 2 Answer any THIRTEEN parts. The answer to each part should not exceed 2 to 4 lines. (13 x 2 = 26)

- (i) How will you calculate the magnification of compound microscope?
- (ii) What do you mean by sterilization of an object in terms of Microbiology?
- (iii) Which precautions should be taken while using an autoclave?
- (iv) Which factors influence the action of chemical germicides?
- (v) Define enriched media.
- (vi) What are the methods used for the sterilization of culture media?
- (vii) Define antigenic structure of pneumococci.
- (viii) Name the toxins and enzymes produced by *N. gonorrhoeae*.
- (ix) Write down Nagler's Reaction.
- (x) Write down the morphology and staining behaviour of *C. diphtheriae*.
- (xi) Define minimum bactericidal concentration.
- (xii) Define facultative anaerobe.
- (xiii) Define interferon.
- (xiv) Enumerate the routes of transmission of human viruses.
- (xv) Write down the methods of classification of bacteria.
- (xvi) Write down habitat, morphology and staining behaviour of *N. meningitidis*.
- (xvii) Write down Mantoux Reaction.

SECTION – C (Marks 14)

Note: Attempt any TWO questions. All questions carry equal marks.

(2 x 7 = 14)

Q. 3 Write down in detail the methods for moist heat sterilization.

Q. 4 Describe antimicrobial resistance.

Q. 5 Describe the ways of transmission, pathogenicity and laboratory diagnosis of *M. tuberculosis*.

