

Roll No.

--	--	--	--	--	--

Answer Sheet No.

Sig. of Candidate.

Sig. of Invigilator.

MICROBIOLOGY HSSC-I

SECTION – A (Marks 10)

Time allowed: 10 Minutes

NOTE:- Section-A is compulsory. All parts of this section are to be answered on the question paper itself. It should be completed in the first 10 minutes and handed over to the Centre Superintendent. Deleting/overwriting is not allowed. Do not use lead pencil.

Q. 1 Circle the correct option i.e. A / B / C / D. Each part carries one mark.

- (i) Who is considered the father of Microbiology?
A. Robert Koch B. Louis Pasteur
C. Antony van Leeuwenhoek D. Edward Jenner
- (ii) Chinese letter arrangement is characteristic of which bacteria?
A. Mycobacterium tuberculosis B. Bacillus anthracis
C. Corynebacterium diphtheriae D. Clostridium tetani
- (iii) Peptidoglycan is major constituent of cell wall of which microorganism?
A. Gram positive bacteria B. Gram negative bacteria
C. Fungi D. Protozoa
- (iv) Which of the following is an efficient method of incineration?
A. Destroying contaminated material B. Sterilizing point of forceps
C. Sterilizing scalpel blades and needles D. Sterilizing all-glass Syringes
- (v) By which of the following methods is tetanus transmitted?
A. Inoculation B. Inhalation C. Ingestion D. Contact with patients
- (vi) Which of the following infections is acquired from animals?
A. Plague B. Diphtheria C. Meningitis D. Poliomyelitis
- (vii) Which of the following bacteria is **NOT** capsulated?
A. Haemophilus influenzae B. Streptococcus pneumoniae
C. Neisseria meningitidis D. Corynebacterium diphtheriae
- (viii) What is the usual dose of purified protein derivative in Mantoux test?
A. 5 IU B. 50 IU C. 100 IU D. 150 IU
- (ix) What is the name of distribution of flagella all around the body of bacteria?
A. Monotrichous B. Lophotrichous C. Amphitrichous D. Peritrichous
- (x) In which medium a substance is added to a solid medium which inhibits the growth of unwanted bacteria and permits the growth of wanted bacteria?
A. Selective medium B. Enriched medium
C. Enrichment medium D. Differential medium

For Examiner's use only:

Total Marks:

10

Marks Obtained:

MICROBIOLOGY HSSC-I

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

- (i) Define Bacterial capsule.
- (ii) Name the various methods for the classification of bacteria.
- (iii) Write down Ziehl-Neelsen staining procedure.
- (iv) Define Magnification of microscope.
- (v) Write a short note on Coagulase test.
- (vi) Write down Koch's postulates.
- (vii) Define general characteristics of viruses.
- (viii) Which diseases are caused by *Streptococcus pyogenes*?
- (ix) What is Schick test?
- (x) Write down the morphology and staining behaviour of *Clostridium tetani*.
- (xi) Define the various modes of action of antimicrobial agents on bacteria.
- (xii) Define Pasteurization.
- (xiii) What is Selective media?
- (xiv) Define Quellung reaction.
- (xv) Write down the basis of classification of β haemolytic streptococci.
- (xvi) Differentiate between Disinfection and Antisepsis.
- (xvii) Define various ways for the transmission of staphylococcus infection.

SECTION – C (Marks 14)

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

(2 x 7 = 14)

- Q. 3** What is Sterilization? Write down the moist heat method for sterilization.
- Q. 4** How do bacteria acquire anti microbial resistance?
- Q. 5** Explain the Pathogenesis of Dengue virus.