



103

MICROBIOLOGY HSSC-I

SECTION – A (Marks 10)

Time allowed: 10 Minutes

Version Number	3	4	2	1
----------------	---	---	---	---

Note: Section – A is compulsory. All parts of this section are to be answered on the separately provided OMR Answer Sheet which 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 Choose the correct answer A / B / C / D by filling the relevant bubble for each question on the OMR Answer Sheet according to the instructions given there. Each part carries one mark.

- 1) Staphylococcus species are:
A. Gram negative bacteria B. Gram positive bacteria
C. Acid fast bacteria D. None of these
- 2) ELISA stands for:
A. Enzyme linked immunosorbent assay B. Enzyme lacking immunosorbent assay
C. Enzyme loaded immunosorbent assay D. None of these
- 3) Staphylococci can be differentiated from streptococci using the following test:
A. Oxidase test B. Catalase test
C. Coagulase test D. Indol test
- 4) Spirochetes are:
A. Non motile organisms B. Dead like organisms
C. Motile organisms D. None of these
- 5) Which of the following bacteria is stained by ZN stain?
A. E. coli B. Staphylococcus
C. Streptococcus D. Nocardia
- 6) Bacteria in size range between:
A. 0.3 – 4.0 μm B. 0.2 – 5.0 μm
C. 0.2 – 2.0 μm D. 0.2 – 7.0 μm
- 7) Iodine can act as:
A. Mordant B. Primary stain
C. Secondary stain D. Decolorizer
- 8) Sterilization by autoclave is carried out under pressure at:
A. 121°C for 25 minutes B. 125°C for 15 minutes
C. 121°C for 20 minutes D. 121°C for 15 minutes
- 9) The media which demonstrates the motility of bacteria is a type of:
A. Solid media B. Nutrient media
C. Semi solid media D. Liquid media
- 10) The peptidoglycan consists of:
A. Monosaccharides and sugar B. Nucleotides and sugars
C. Fatty acids and sugars D. Amino acid and sugars



THE UNIVERSITY OF CHICAGO
LIBRARY

U
C
H
I
C
A
G
O
U
N
I
V
E
R
S
I
T
Y
L
I
B
R
A
R
Y



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

- (i) Write down the caring of microscope.
- (ii) Differentiate between parasitology and mycology.
- (iii) Write down the principle of Gram Stain.
- (iv) What do you mean by bacteriostatic agent?
- (v) Write down the principle of RA factor test.
- (vi) What is a selective media? Give two examples.
- (vii) Write down the basic classification of bacteria based on their morphology.
- (viii) What do you mean by Gram negative bacteria? Name the strains of E coli causing diarrhoea.
- (ix) What is the difference between Gram negative and Gram positive bacteria?
- (x) Name the toxins and enzymes produced by streptococcus species.
- (xi) Write down the "Naglar Reactions".
- (xii) Write down the types of bacteria based on number of flagella.
- (xiii) Write down the pathogenicity of dengue virus.
- (xiv) What do you mean by AFB? Name the types of mycobacterium species.
- (xv) Write down the pathogenicity of salmonella typhi.
- (xvi) What do you mean by HBV and what it causes?
- (xvii) How can the treponema pallidum be indentified by haemagglutination assay?

SECTION – C (Marks 14)

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

(2 x 7 = 14)

- Q. 3** Write down the pathogenicity and lab diagnosis of staphylococcus Aureus.
- Q. 4** What is sterilization? How can sterilization be performed using Hot air Oven?
- Q. 5** What do you mean by antimicrobial resistance? Describe the mechanism of bacterial resistance.



1998-1999

1998-1999

1998-1999

1998-1999

1998-1999

