



**MEDICAL  
LABORATORY SCIENCE  
(Micro Biology) (083)  
HSSC-I**

**Curriculum 2022-23  
SECTION – A (Marks 08)**

Time allowed: 15 Minutes

Section – A is compulsory. All parts of this section are to be answered on this page and handed over to the Centre Superintendent.

Deleting/overwriting is not allowed.

Do not use lead pencil.

حصہ اول لازمی ہے۔ اس کے جوابات اسی صفحہ پر دے کر ناظم مرکز کے حوالے کریں۔ کٹ کر دوبارہ لکھنے کی اجازت نہیں ہے۔ نیڈ پینسل کا استعمال ممنوع ہے۔

Version No.				
9	1	0	1	0

ROLL NUMBER						

0	0	●	0	●
1	●	1	●	1
2	2	2	2	2
3	3	3	3	3
4	4	4	4	4
5	5	5	5	5
6	6	6	6	6
7	7	7	7	7
8	8	8	8	8
●	9	9	9	9

0	0	0	0	0	0	0
1	1	1	1	1	1	1
2	2	2	2	2	2	2
3	3	3	3	3	3	3
4	4	4	4	4	4	4
5	5	5	5	5	5	5
6	6	6	6	6	6	6
7	7	7	7	7	7	7
8	8	8	8	8	8	8
9	9	9	9	9	9	9

Answer Sheet No. \_\_\_\_\_ Candidate's Sign. \_\_\_\_\_ Invigilator's Sign. \_\_\_\_\_

Fill the relevant bubble against each question:

	Question	A	B	C	D	A	B	C	D
1.	Which of the following is the recommended heat, temperature and ib9time period for the moist heat sterilization process conducted in an autoclave?	180° C for 5 minutes	121° C for 15 minutes	126° C for 3 minutes	160° C for 45 minutes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2.	Thiosulfate- citrate –Bile sucrose Agar (TCBS agar) is a selective medium for isolation of:	Mycobacterium Tuberculosis	Salmonella typhi	Streptococcus pneumonia	Vibrio cholerae	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3.	Which of the following test is used to differentiate streptococcus spp from staphylococcus spp?	Coagulase test	Catalase test	Urease test	Indole test	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4.	What is the primary purpose of oxidase test?	To identify gram positive bacteria	To differentiate bacteria based on their ability to produce urease	To detect the presence of cytochrome c oxidase	To determine the oxygen requirement of bacteria	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5.	Which of the following is an example of Gram- Negative cocci?	Neisseria	Vibrio cholera	Salmonella	Shigella	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6.	Which of the following is the genome of the viruses?	DNA	RNA	DNA or RNA	DNA and RNA	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7.	Which of the following media is used to differentiate Lactose fermenting bacteria from non-Lactose fermenting bacteria?	Differential media	Transport media	Simple media	Selective media	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8.	First antibiotic was discovered by Alexander Fleming from _____?	Bacteria- E.Coli	Fungus- Penicillium	Virus -Polio	None of these	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



# MEDICAL LABORATORY SCIENCE (Micro Biology) (083) HSSC-I

Time allowed: 2:15 Hours

Total Marks Section B & C: 32

Note: Answer all parts from Section 'B' and all questions from Section 'C' on the provided Sheet.

Write your answers on the allotted /given spaces

## SECTION – B (Marks 20)

Q. 2	Attempt the following questions.	(10 × 2 = 20)			
(i)	Write down the classification of bacteria on the basis of oxygen requirement	2	OR	Define mycology and virology?	2
(ii)	Write a short note on the principle of gram staining?	2	OR	Enlist the names of stains used in gram staining?	2
(iii)	Classify culture media on the basis of composition?	2	OR	Write down the classification of antibiotics on the basis of spectrum of activity?	2
(iv)	Differentiate between sterilization and disinfection?	2	OR	Define culture media and its importance.	2
(v)	Write a short note on Montoux test?	2	OR	Write down the difference between the cell wall of gram positive and negative bacteria?	2
(vi)	Write down any 2 general characteristics of viruses?	2	OR	Define stains? Also write down the classification of stain?	2
(vii)	Write down the principle of catalase test?	2	OR	Enlist the phases of bacterial growth with the help of graph?	2
(viii)	Draw a diagram of virus?	2	OR	Why differential media is used in labs for the growth of bacteria?	2
(ix)	Write a short note on dengue virus?	2	OR	Draw a labeled diagram of bacteria?	2
(x)	Enlist the names of lenses used in microscope?	2	OR	What do you know about meningitis?	2

## SECTION – C (Marks 12)

Note: Attempt all questions. Marks of each question are given along with each question. (6 × 2 = 12)

Q. 3	Write a detailed note on the preparation of culture media?	6	OR	Write a detailed note on the characteristics and classification of viruses?	6
Q. 4	Write a detailed note on H.pylori under the following headings Characteristics, transmission, pathogenesis, lab diagnosis and clinical findings?	6	OR	Write a detailed note on hepatitis virus?	6