



**MEDICAL LABORATORY
SCIENCE (Elementary
Chemistry & Clinical
Pathology) (085) 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۔ کاٹ کر دوبارہ لکھنے کی اجازت نہیں ہے۔
پنسل کا استعمال ممنوع ہے۔

Version No.				
9	1	0	0	8

0	0	●	●	0
1	●	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	●
●	9	9	9	9

ROLL NUMBER						

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1	1	1	1	1	1	1
2	2	2	2	2	2	2
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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
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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.	The chemistry of carbon containing compound is called:	Organic Chemistry	Inorganic Chemistry	Bio Chemistry	Thermal Chemistry	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2.	Hypokalaemia means decreased level of _____ in blood.	Magnesium	Chloride	Potassium	Calcium	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3.	Which of the following is the product of an acid base reaction?	NaOH	NaCl	HCl	H ₂ O	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4.	Polyuria means	Glucose in urine	Inadequate urine output	Excess urine output	Excess urea in blood	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5.	Which proteins are catalysts?	Hormones	Antibodies	Antigens	Enzymes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6.	Which of the following vitamin help in blood clotting	Vitamin A	Vitamin K	Vitamin C	Minerals	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7.	Gain of electron is termed as:	Reduction	Oxidation	Electrolysis	Combustion	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8.	The average kinetic energy of molecules in a body is termed as:	Temperature	Heat	Weight	Force	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



MEDICAL LABORATORY SCIENCE (Elementary Chemistry & Chemical Pathology) 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)	Describe periodic law and periods in periodic table?	2	OR	Write down the components of blood?	2
(ii)	Define vitamins? Also write down the classification of vitamins?	2	OR	Write down the names of electrolytes found in the body along with its functions?	2
(iii)	Write down the principle of pH meter?	2	OR	What is solubility? Name the factors that affect the solubility?	2
(iv)	What is redox reaction?	2	OR	Define beta oxidation of fatty acids?	2
(v)	Define catalyst?	2	OR	Define enzymes along with its importance?	2
(vi)	Differentiate between dilute and concentrated solutions?	2	OR	What are nucleic acids? Give their types.	2
(vii)	What is the difference between blood and plasma?	2	OR	Write down the composition of blood?	2
(viii)	Write down the principle of centrifugation?	2	OR	Why uric acid test is performed?	2
(ix)	Which cholesterol is considered GOOD and BAD? Also write the reason	2	OR	What type of protein blood sample is used for total protein test and why?	2
(x)	What are the factors that effect centrifugation?	2	OR	Write down the principle of measurement of alkaline phosphatase?	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 electrolytes?	6	OR	Write down the clinical significance of glucose, protein and blood in urine?	6
Q. 4	Write a detailed note on the estimation of sodium and potassium in serum by flame photometer?	6	OR	Write a detailed note on the collection of blood sample?	6