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Answer Sheet No.	
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ELEMENTARY CHEMISTRY AND CHEMICAL PATHOLOGY HSSC-I

SECTION - A (Marks 10)

NOTE:	lt s	Section-A is compulsory. All parts of this section are to be answered on the question paper itsel It should be completed in the first 10 minutes and handed over to the Centre Superintenden Deleting/overwriting is not allowed. Do not use lead pencil.									
Չ. 1	Circle the correct option i.e. A / B / C / D. Each part carries one mark.										
	(i)	Whic	h of the following is a weak base?								
		A.	NaOH	B.	КОН						
		C.	NH_4OH	D.	None of these						
	(ii) Which of the following is a covalent crystal?										
		Α.	Ice	B.	Rock Salt						
		C.	Dry Ice	D.	Quartz						
	(iii)	Which is the product in the given reaction, $Na_2CO_3 + 2HCl \longrightarrow$									
		A.	Sodium Chloride and Water								
		B.	Water and Carbon dioxide								
		C.	Sodium carbonate, Carbon dioxide a	nd Water	r						
		D.	Sodium chloride, Carbon dioxide and	Water							
	(iv)	A sal	t derived from a strong base and weak a	cid will g	give a salt, which is						
		A.	Acidic	B.	Basic						
		C.	Neutral	D.	Volatile						
	(v)	The	mineral present in large amount in the bo	dy than	the others is						
		A.	Iron	В.	Sodium						
		C.	Calcium	D.	Potassium						
	(vi)	Whic	h proteins are catalyst?								
		A.	Hormones	B.	Antibodies						
		C.	Enzymes	D.	None of these						
	(vii)	Norm	nal blood clotting requires	_							
		A.	Inactivation of heparin	B.	Inactivation of plasmin						
		C.	An adequate amount of Vitamin K	D.	An adequate amount of Vitamin C						
	(viii)	A/G i	ratio in liver disease								
		A.	Increases	B.	Normal						
		C.	Both A and B	D.	Decreases						
	(ix)	Polycythemia is an increase in blood haemoglobin above normal levels is due to									
		the c	ver production of								
		Α.	White blood cells	В.	Red blood cells						
		C.	Platelets	D.	Both A and B						
	(x)		tatic cancer is diagnosed by		AN 15 A A A A A						
		Α.	Amylase	В.	Alkaline phosphatase						
		C.	Acid phosphatase	D.	Lactate dehydrogenase						
		For	Examiner's use only:	<u></u>							
				Tota	ıl Marks:						

Marks Obtained:



ELEMENTARY CHEMISTRY AND CHEMICAL PATHOLOGY HSSC-I %

Time allowed: 2:20 Hours

Total Marks Sections B and C: 40

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.

 $(13 \times 2 = 26)$

- Define Isomerism. How do D and L Glucose differ from each other? (i)
- Name the essential fatty acids. Also write their importance in human body. (ii)
- (iii) How many litres of water is present in the human body?
- What is the difference between Metals and Non-metals? (iv)
- Define Urine. Name its four abnormal constituents. (v)
- Name the elements in the 7th group of Periodic table. (vi)
- Write down the conversion formula from Centigrade to Fahrenheit. (vii)
- Give the normal value of Chloride in blood and CSF? (viii)
- Define Molal and Molar solutions. (ix)
- Define Monosaccharide and give any two examples. (x)
- Define Thalasemia and give its types. (xi)
- (xii) Name the Aminoacid which synthesizes Niacin.
- (xiii) Name main classes of enzyme classification.
- (xiv) Write down the chemical formulae of the following:
 - a. Glycine
 - b. Sulphuric Acid
 - Ammonium Chloride
 - d. Fructose
- Write down the formula for Creatinine clearance. (xv)
- Define Albuminuria and its importance in urine. (xvi)
- (iivx) Why is LFTs peformed?

SECTION - C (Marks 14)

Note: Attempt any TWO questions. All questions carry equal marks. $(2 \times 7 = 14)$

- Q. 3 Give one method for estimation of each of the following in blood and urine:
 - 24 hours Urinary Protein
 - b Calcium
- Q. 4 Define Enzyme and Co-enzyme with suitable examples. Write down the various factors which affect enzyme activity.
- Q. 5 Explain the procedure and normal value of ALP.