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

Time NOTE:	allowed: 10 Minutes  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)	·							
		A.	Suspension	В.	Syrups				
		C.	Solutions	D.	None of these				
	(ii)	Whic	ch of the following is common	name of $(NH_2)_2CO$ .					
		A.	Vin <b>eg</b> ar	В.	Urea				
		C.	Ammonia	D.	Bakin <b>g sod</b> a				
	(iii)	Volu	me can be measured by:		•				
		A.	Electrical balance	В.	Densiometer	•			
		C.	Graduated cylinder	D.	Funnel				
	(iv)	The	name of temperature scale ra	nging from 32° to 21	2" is:				
		A.	Centigrade	В.	Kelvin				
		C.	Fahrenheit	D.	None of these				
	(v)	Salt	in water is what type of solution	on:					
		A.	Solid in liquid	В.	Liquid in solid				
		C.	Liquid in liquid	D.	Solid in solid				
	(vi)	The	number of moles of solute dis	solved per litre of sol	lution is called as:				
		A.	Molality	В.	Normality				
		C.	Formality	D.	Molarity				
	(vii)	рН о	f a neutral solution is:						
		A.	0	B.	14				
		C.	7	D.	10				
	(viii)	Gain	of $O_2$ in a chemical reaction i	is called as:					
		A.	Reduction	В.	Hydration				
		C.	Hydrolysis	D.	Oxidation				
	(ix)	Which of the following metal ions are present in haemoglobin?							
		A.	Mg	В.	Fe				
		C.	Ca	D.	Na				
	(x)	Suga	r is excreted in urine in condit	tion:					
		A.	Myasthenia gravis	В.	Osteoarthritis				
		C.	Diabetes mellitus	D.	Anaemia				
		For E	Examiner's use only:	· · · · · · · · · · · · · · · · · · ·					
				Totai	Marks:	10			
				Marks	Obtained:				



## ELEMENTARY CHEMISTRY AND CHEMICAL PATHOLOGY HSSC-I

Time allowed: 2:20 Hours

Total Marks Sections B and C: 40

TE: 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) Enumerate divisions of chemistry.
  - (ii) Write periodic table briefly.
  - (iii) What are symbols of Gold, Silver, Tungsten and Iron?
  - (iv) Define metals and non-metals with example.
  - (v) How solutions are formed?
  - (vi) What is Handersen-Hasselbach equation?
  - (vii) Enumerate any four indicators.
  - (viii) What is evaporation?
  - (ix) Define endothermic and exothermic reactions.
  - (x) What is pH meter?
  - (xi) How chemical pathology is related to other branches of pathology?
  - (xii) Classify proteins.
  - (xiii) Name types of Vitamin B complex.
  - (xiv) What is clinical significance of ALT?
  - (xv) Write down normal values of triglycerides in blood.
  - (xvi) What is distribution of electrolytes in body fluids?
  - (xvii) Enumerate transaminases.

## SECTION - C (Marks 14)

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

 $(2 \times 7 = 14)$ 

- Q. 3 Define vitamins. Explain fat soluble vitamins in detail.
- Q. 4 Explain clinical significance of glucose in blood. What are its normal values?
- Q. 5 a. Define oxidation and reduction with examples.
  - b. What is significance of quantitative analysis of albumin in urine?