Name of Student	Class	Subject	Board	Chapter
	9 th	Chemistry	FB	07
Date :	 	Objec	Teacher Remarks	

Section - A

Q. No.1:- Circle the correct option. Each part carries one mark.

01	in which of the following changes the nitrogen atom is reduced:							
Α	N ₂ to NO	b	N_2 to NO_2 c N_2 to NH_3 d N_3		N ₂ to HNO ₃			
02	Which of the following changes reaction is an example of oxidation:							
Α	Chlorine molecule to	b	Silver atoms to	С	Oxygen molecule to	d	Iron (iii) ion to iron	
	chloride ion		silver(I) ion		oxide ion		(II) ion	
03	Which of the following elements in the given reaction is reduced:							
	$ZnO + H_2 \rightarrow Zn + H_2O$							
Α	H ₂	b	ZnO c Zn d O				0	
04	Consider the following reaction:							
Α	Reducing agent	b	Oxidizing agent c Catalyst d Ele			Electrolyte		
05	The oxidation state of Cr in K2Cr2O7 is:							
Α	12	b	6	С	3	d	Zero	
06	Which of the following	g state	ement is not correct ab	out tl	ne galvanic cell:			
Α	Cations are reduced	b	Anions are oxidized	С	Electrons flow from	d	Oxidation occurs at	
	at cathode		at anode		cathode to anode		anode	
07	Which of the following is not true about the Daniel cell:							
Α	Half-cell of an active	b	Half-cell contains an	С	A salt bridge	d	A spontaneous	
	metal acts as		element in contact		connects the two		oxidation-reduction	
	cathode		with its ions in		half cells		reaction generates	
			aqueous solution				electricity.	
08	Which of the following do not involve electrolytic process:							
Α	Refining of copper	b	Manufacture of	С	Electroplating of	d	Reduction of metal	
			sodium from NaCl		steel		oxide by a reducing	
							agent	
09	Galvanizing is:							
Α	Coating with Sn	b	Coating with Zn	С	Coating with Cr	d	Coating with Cu	
10	Which of the following is true for the Nelson cell:							
A	Sodium metal is	b	Chlorine gas is	С	Hydrogen gas is	d	Sodium ions are	
	produced at anode		produced at anode		produced at anode		not reduced at	
							cathode	
11	Elements in free state have oxidation number:							
Α	1	b	0	С	2	d	3	
12 Nelson's cell is used to prepare caustic soda along with gases. Which of the following gas is produce					gas is produced at			
	cathode:							
Α	Cl ₂	b	H_2	С	O_3	d	O ₂	

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Section - B

Q. No.1:- Attempt any eleven parts. The answer of each part should not exceed 3 to 4 lines.

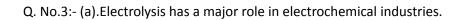
(11×3=33).

01	What is oxidation state?	02	Why tin plated steel is used to make food cans?
03	Identify reducing agent in the following reaction:	04	Write chemical reactions that occur in Nelson's
	$CuO + H_2 \rightarrow Cu + H_2O$		cell.
05	Explain one example from daily life which involves	06	What is the oxidation number of Cr in chromic acid
	oxidation-reduction reaction?		(H ₂ CrO ₄)?
07	What materials do you need to electro plate	08	Design an experiment to demonstrate cathodic
	copper onto an iron nail? Make a diagram showing		protection from corrosion.
	how these materials should be arranged.		
09	List the possible uses of electrolytic cell.	10	Describe how a battery produces electrical energy.
11	Explain how food and beverage industries deal	12	Explain how chemistry interacts with
	with corrosion?		photography?
13	Find the oxidation state of S in the following		
	compounds:		
	A. H ₂ S B. Na ₂ S ₂ O ₃		

Q. No.4:- Attempt any TWO questions. All questions carry equal marks:

(2×10=20)

- Q. No.1:- (a). Define oxidation and reduction in terms of loss or gain of oxygen or hydrogen.
 - (b). Describe the method of recovering metal from its ores.
- Q. No2:- (a). Explain electrolytic refining of copper.
- (b). Compare the effects of Al_2O_3 and Fe_2O_3 formation on their parent metals and cite examples from daily life.



(b). Distinguish between electrolytic and voltaic cell.