

SSC 1st ANNUAL EXAMINATION 2023
Rubrics CHEMISTRY SSC- I (HA)

Q.# Part #	Criteria	Level 1 (Marks)	Level 2(Marks)	Level 3 (Marks)	Level 4 (Marks)	Level 5 (Marks)	Level 6 (Marks)	Level 7 (Marks)
2(i)	Explaining the terms Ions, Environmental Chemistry and atomic mass with example	Writing correct explanation of ion with example (1)	Partially correct response i.e. either correct explanation or example (0.5)	Wrong answer (0)				
		Writing correct explanation of Environmental Chemistry with example (1)	Partially correct response i.e. either correct explanation or example (0.5)	Wrong answer (0)				
		Writing correct explanation of Atomic Mass with example (1)	Partially correct response i.e. either correct explanation or example (0.5)	Wrong answer (0)				
2(ii)	Comparison of compound and mixture with example	Writing correct comparison of compound and mixture with examples (03)	Partially correct comparison (02)	Any relevant information (01)	Wrong answer (0)			
2(iii)	Drawing the diagram of three isotopes of hydrogen	Drawing correct diagram of three isotopes (by mentioning electron, proton and neutron) (3)	Drawing correct diagram of any two isotopes and partially one correct diagram (2.5)	Drawing correct diagram of any two isotopes (2)	Drawing correct diagram of any one isotope and one partially correct diagram (1.5)	Drawing correct diagram of any one isotope (1)	Any relevant information (0.5)	Wrong answer (0)

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2(iv)	Distinguishing between shell and subshell	Writing three correct differences (3)	Writing any two correct differences (2)	Writing any one correct difference (1)	Wrong answer (0)			
2(v)	Stating periodic law and writing the names of groups in s Block elements	Writing correct statement of periodic law (1)	Writing partially correct statement (0.5)	Wrong answer (0)				
		Writing correct names of both groups (either by names or group No) of s Block element (2)	Writing correct name of any one group of s Block element (1)	Any relevant information (0.5)	Wrong answer (0)			
2(vi)	Showing the valance shell electronic configuration of given groups	a. Writing correct valence shell electronic configuration of alkali metals (1)	Writing partially correct electronic configuration (0.5)	Wrong answer (0)				
		b. Writing correct electronic configuration of Nobel gases (1)	Writing partially correct electronic configuration (0.5)	Wrong answer (0)				
		c. Writing correct electronic configuration of Halogens (1)	Writing partially correct electronic configuration (0.5)	Wrong answer (0)				

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2(vii)	Determining the location of ${}_6\text{C}^{12}$ in periodic table	Writing correct location of ${}_6\text{C}^{12}$ both group No and period No (3)	Writing partially correct location (any one parameter is correct) (1.5)	Wrong answer (0)				
2(viii)	Explaining any two of the following: a. Melting b. Freezing c. Boiling	Writing correct explanation of any one (1.5)	Writing partially correct explanation of any one (1)	Any relevant information (0.5)	Wrong answer (0)			
		Writing correct explanation of second term (any) (1.5)	Partially correct response (1)	Any relevant information (0.5)	Wrong answer (0)			
2(ix)	Finding the number of electron in valance shell of given elements	Correctly drawing/finding the number of valence electron in Neon (1)	Partially correct response (0.5)	Wrong answer (0)				
		Correctly drawing/finding the number of valence electron in Helium (1)	Partially correct response (0.5)	Wrong answer (0)				
		Correctly drawing/finding the number of valence electron in Hydrogen (1)	Partially correct response (0.5)	Wrong answer (0)				
2(x)	Calculation of molarity of a solution	Correct calculation of Molarity with correct answer (3)	Partially Correct calculation (2)	Any correct step (1)	Wrong answer (0)			

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2(xi)	Calculating the number of protons, electrons and neutrons in an element	Calculating the correct number of protons, electrons and neutrons in an element (3)	Calculating the correct number of any two particles (2)	Calculating the correct number of any one particle (1)	Wrong answer (0)			
2(xii)	Enlisting the uses of an electrolytic cell	Enlisting any five/six correct uses of electrolytic cell (3)	Enlisting any three/four correct uses of electrolytic cell and partially correct one use (2)	Enlisting any one/two correct uses of electrolytic cell (1)	Any relevant information (0.5)	Wrong answer (0)		
2(xiii)	Finding the oxidation state of nitrogen in any two compounds	Finding the correct oxidation state of nitrogen in any one compound (1.5)	Partially correct response (1)	Wrong answer (0)				
		Finding the correct oxidation state nitrogen in any second compound (1.5)	Partially correct response (1)	Wrong answer (0)				
2(xiv)	Writing the reaction of Mg with steam and Ca with cold water	Writing the correct reaction of Mg with steam (1.5)	Partially correct response (1)	Wrong answer (0)				
		Writing the correct reaction of Ca with cold water (1.5)	Partially correct response (1)	Wrong answer (0)				
2(xv)	Explanation of high oxidizing power of fluorine	Writing correct explanation of oxidizing power of fluorine (3)	Partially correct response (2)	Any relevant information (1)	Wrong answer (0)			

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3 (a)	Explaining evaporation with interpreting the decrease in water level in aquarium tank	Writing correct explanation/description of evaporation (2)	Partially correct response (1)	Any relevant information (0.5)	Wrong answer (0)			
		Writing correct interpretation of decrease in water level (3)	Partially correct response (2)	Any relevant information (1)	Wrong answer (0)			
3 (b)	Comparing the effect of formation of Al_2O_3 and Fe_2O_3 from Al and Fe	Writing the correct effect of Al_2O_3 (2.5)	Writing partially correct effect of Al_2O_3 (02)	Any relevant information (1)	Wrong answer (0)			
		Writing the correct effect of Fe_2O_3 (2.5)	Writing partially correct effect of Fe_2O_3 (02)	Any relevant information (1)	Wrong answer (0)			
4 (a)	Describing the formation of ionic bond in KCl and MgF_2	Correct dot and cross model for the formation of KCl (03)	Partially correct response (02)	Any relevant information (0.5)	Wrong answer (0)			
		Correct dot and cross model for the formation of MgF_2 (03)	Partially correct response (02)	Any relevant information (01)	Wrong answer (0)			
4 (b)	Discussing the types of solution with example	Writing correct explanation of solids in liquids with example (02)	Partially correct response (01)	Any relevant information (0.5)	Wrong answer (0)			
		Writing correct explanation of solids	Partially correct response (01)	Any relevant information	Wrong answer (0)			

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		in Solids with example (02)		(0.5)				
5 (a)	Comparison of unsaturated, saturated and super saturated solution	Writing correct description of unsaturated solution(2)	Writing partially correct description of unsaturated solution (01)	Any relevant information (0.5)	Wrong answer (0)			
		Writing correct description of saturated solution(2)	Writing partially correct description of saturated solution (01)	Any relevant information (0.5)	Wrong answer (0)			
		Writing correct description of super saturated solution(2)	Writing partially correct description of super saturated solution (01)	Any relevant information (0.5)	Wrong answer (0)			
5 (b)	Describing the formation of anions in bromine and phosphorous	Writing/Drawing correct formation of anion in Br (02)	Partially correct response (01)	Any relevant information (0.5)	Wrong answer (0)			
		Writing/Drawing correct formation of anion in Phosphorous (02)	Partially correct response (01)	Any relevant information (0.5)	Wrong answer (0)			

Note: All the markers must know the solutions of all the question items of the question paper before starting marking.