

- (7) Pressure Cooker works on the principle of relationship of boiling point with:
A. External Pressure B. Evaporation
C. Boyle's law D. Volume
- (8) 17g of NH_3 is dissolved in 1 dm^3 of solution, its molarity will be:
A. 1 B. 2
C. 3 D. 4
- (9) In H_2S , the oxidation state of Sulphur is:
A. +1 B. +2
C. -1 D. -2
- (10) The compound having Hydrogen bonding among its molecule is:
A. C_6H_6 B. MgO
C. CH_4 D. H_2O
- (11) Metallic Character increases down the group, which one of the following is the most metallic:
A. Rb B. Cs
C. Na D. K
- (12) The most electronegative element in the group VIIA is:
A. F B. Cl
C. Br D. I
-



Federal Board SSC-I Examination
Chemistry Model Question Paper
(Curriculum 2006)

Time allowed: 2.40 hours

Total Marks: 53

Note: Answer all parts from Section 'B' and all questions from Section 'C' on the **E-sheet**.
Write your answers on the allotted/given spaces.

SECTION – B (Marks 33)

Q.2 Attempt all parts from the following. All parts carry equal marks. (11 × 3 = 33)

i. Calculate the number of molecules in 4.5 moles of Carbon dioxide. (1+2)

OR

Calculate the mass of one Hydrogen atom in gram. (1+2)

ii. Draw Bohr's Atomic Model for Potassium ${}_{19}\text{K}^{39}$ indicating the location of electrons, protons and neutrons. (1+1+1)

iii. State Charles's Law. Derive its mathematical expression. (1+2)

iv. Define ionic bond. Give one example of two elements forming an ionic bond between them. (1+2)

v. Write two similarities and two differences between isotopes. (1.5+1.5)

vi. Elements are unstable in free state except noble gases. Explain how elements attain stability? (1+2)

OR

Why is an atom always electrically neutral? Give reason (1+2)

vii. Write electronic configuration of Aluminum ${}_{13}\text{Al}^{27}$. Identify its group and period. (1+1+1)

OR

How does the change in temperature affect the Vapour Pressure of a liquid? Show with the help of graph. (1+2)

viii. How will you prepare 250 cm³ of 0.025M Na₂SO₄ solution from a stock solution of 2M Na₂SO₄? (1+2)

ix. Identify the oxidizing and reducing agents in the following reaction with indicating oxidation number: (1.5+1.5)



OR

Define corrosion. How is corrosion prevented by cathodic protection? (1+2)

x. Enlist the name of three noble metals? (1+1+1)

OR

Why is the boiling point of water at the top of Mount Everest 70°C. Give a reason? (1+2)

xi. Discuss why sugar is soluble in water but petrol is not? (1.5+1.5)

SECTION – C (Marks 20)

Note: Attempt all questions. Marks of each question are given within brackets.

- Q.3** What are the type of bonds responsible for the formation of F_2 , O_2 and N_2 ?
Explain the formation of bond with the help of structures. (2+2+2)
OR
Describe Rutherford's Experiment with diagram and its conclusions. (3+3)
- Q.4** Describe three importance of intermolecular forces in our life. (2+2+2)
OR
Describe the trend of Ionization Energy in the Period and group. Explain with reasons. (3+3)
- Q.5** Explain the working and construction of Daniel Cell with the help of a labelled diagram. (2+2)
OR
Identify the relationship between electronic configuration and the position of an element in the periodic table. ${}_{35}Br^{70}$ and ${}_{8}O^{16}$ (2+2)
- Q.6** By using following reactions. Discuss the reactivity (2+2)
i) $2KI + Br_2 \longrightarrow 2KBr + I_2$
ii) $KBr + Cl_2 \longrightarrow 2KCl + Br_2$

* * * * *

SUPPLEMENTARY TABLE

Atomic No	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Symbol	H	He	Li	Be	B	C	N	O	F	Ne	Na	Mg	Al	Si
Mass no	1	4	7	9	11	12	14	16	19	20	23	24	27	28
Atomic No	15	2	16	17	18	19	20	31	32	33	34	35	36	37
Symbol	P	He	S	Cl	Ar	K	Ca	Ga	Ge	As	Se	Br	Kr	Rb
Mass no	31	4	32	35	40	39	40	70	73	74	79	80	84	85
Atomic No	38	49	50	51	52	53	54	55	56	81	82	83	84	85
Symbol	Sr	In	Sn	Sb	Te	I	Xe	Cs	Ba	Tl	Pb	Bi	Po	At
Mass no	88	115	119	122	128	127	131	133	137	204	207	208	209	210