SUBJECT: CHEMISTRY	TOPIC: HOLIDAY SHEET	CLASS: X

Instructions-:
(i) Do the work in your Class Copy
(ii) Do the work neatly and correctly

LEARNING TOPICS

CHAPTERWISE BIFURCATION

S.NO	PERIODIC TABLE	CHEMICAL BONDING	ANALYTICAL CHEMISTRY	PRACTICAL CHEMISTRY
1)	Modern Periodic Law	Ionic or Electrovalent bond	Colour of the salts	Identification of gases
2)	Periodic Properties	Covalent bond	Reaction of NaOH and NH_4OH with different salts	Identification of anions
3)	Trends in periodic properties	Coordinate bond (Ammonium ion, Hydronium ion and Hydroxyl ion)	Action of certain alkalis on metals	Action of heat on different substances
4)	Variation in Group	Difference between Electrovalent compounds and Covalent Compounds	Action of alkalis on oxides and hydroxides of metals	Flame test
5)	Variation in Period	Non polar and polar Covalent bond	Tabular representation of observation	Copper (II) oxide and Manganese dioxide with conc. HCl

WORKSHEET

1) (i) The most electronegative element from the following is
(a) Magnesium (b) Sulphur (c) Aluminium (d) Chlorine

(ii) The salt solution which does not react with ammonium hydroxide is
(a) Calcium nitrate (b) Zinc nitrate (c) Lead nitrate (d) Copper nitrate

(iii) A chloride which forms a precipitate which is soluble in excess of ammonium hydroxide is
(a) Copper chloride (b) Calcium chloride (c) Ferrous chloride (d) Ferric chloride

(iv) Which of the following is the common characteristic of covalent compound?
(a) High melting point (b) Consists of molecules (c) Always soluble in water (d) Conducts electricity in molten state

2) (i) In period 3 the most metallic element is _____ (Sodium/Magnesium/Aluminium)
(ii) Ionic or electrovalent compounds do not conduct electricity in _____(fused/solid)
(iii) The energy required to remove an electron from a neutral isolated gaseous atom and convert it into a positively charged gaseous ion is called _____(Electron affinity/Ionisation potential/Electronegativity)
(iv) The compound that does not have a lone pair of electrons is _____(Water/Ammonia/Carbon tetrachloride)

3) Give reason for each of the following -:
(i) Ionic compounds have high melting point
(ii) Inert gases do not form ions
(iii) Ionisation potential increases across period from left to right
(iv) Alkali metals are good reducing agents

4) In period 3 of a periodic table, the element B is placed to the left of element A. On the basis of this information, choose the correct word from the brackets to complete the following statements -:

(i) The element B would have (lower/higher) metallic character than A
(ii) The element would probably have (lesser/higher) electron affinity than B
(iii) The element A would have (greater/smaller) atomic size than B

5) State the type of bonding in the following molecules -:
(i) Water (ii) Calcium oxide

6) Draw the electron dot diagram to show the formation of each of the following compounds -:

(i) Methane (CH_4)
(ii) Magnesium chloride ($MgCl_2$)

7) Distinguish between Manganese dioxide and copper (II) oxide using conc. HCl

8) Name the following -:
(i) The tendency of an atom to attract the electrons towards itself when combined in a covalent compound
(ii) The covalent bond in which electrons are shared equally between the combining atoms
(iii) The energy released when an electron is added to neutral gaseous isolated atom to form a negatively charged ion
(iv) The process of formation of ions from molecules which are not in ionic state

9) What do you observe when -:
(i) Lead nitrate is heated
(ii) Copper sulphate is passed in excess of ammonium hydroxide

10) Compound 'A' on reaction with dilute hydrochloric acid produces a colourless and odourless gas 'B' with brisk effervescence
(i) Identify the gas 'B' (ii) Identify the anion in the compound 'A' (iii) Give confirmatory test for the gas 'B'

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