MULTIPLE CHOICE QUESTIONS

1) **s and p block element is a measure of the tendency of an atom to attract a bending pair of electrons.**

a) Ionization energy b) Electron affinity

c) Electronegativity d) Atomic radius

2) **Magnesium and aluminium are _____ although in slightly different ways.**

a) 12— coordinated b) 16— coordinated

c) 20— coordinated d) 2— coordinated

3) **_____ has a giant covalent structure just like diamond.**

a) Caron b) Silicon

c) Oxygen d) Magnesium

4) **Sulphur burns in air an oxygen on gentle heading with a**

a) Pale blue flame b) Pinkish colour

c) Pale orange flame d) Pale Red flame.

5) **_____ oxide is one which shows both acidic and basic properties.**

a) Metallic Oxide b) Acidic Oxide

c) Basic Oxide d) Amphoteric Oxide

6) **In sodium oxide, the solid is held together by attraction between.**

a) I + and 2 — ions
b) 3 + and 4 — ions
c) 6+ and 3 — ions
d) 3 + and 3 — ions

7) **In magnesium oxide, the attraction are between.**

a) 2 + and 2 — ions
b) 8 + and 4 — ions
c) 6 + and 3 — ions
d) 3 + and 3 — ions

8) **Complete the following reaction.**

a) Al_2CO_3 + 6HCl → ?
b) $2AlCO_3 + 3H_2O$
c) $AlCO_3 + H_2O$
d) $2Al_2CO_3 + 3H_2O$

9) **Hydrogen after losing one electron from H+. In this property, it resembles.**

a) Transition element
b) Alkaline earths
c) Halogens
d) Alkali metals

10) **Which of force halogens has the highest electron affinity?**

a) Fluorine
b) Chlorine
c) Bromine
d) Iodine

11) **When potassium reacts with cold water violently it guesses?**

a) H_2 and KOH
b) $H_2$and NaOH
c) H_2 and LiOH
d) None

12) **Complete the following reaction.**

a) $P_4O_{10} + 6H_2O \rightarrow$?
b) $4H_2PO_4$

c) $2H_4PO_4$ d) $6H_4PO_4$

13) Complete the following reaction.

a) $Na_2HPO_4 + 2H_2O$ b) $Na_2HPO_4 + 2H_2O$

c) $Na_3HPO_4 + 3H_2O$ d) $NaHPO_4 + 3H_2O$

14) Complete the following reaction.

a) $2NaOH + Cl_2O_7$ --> ? + ? b) $NaClO_4 + H_2O$

c) $3NaClO_4 + 2H_2O$ d) $NaClO_4 + 3H_2O$

15) Complete and Balance the following equation.

$C1_2O + H_20 \Leftrightarrow$?

a) 2HOCl b) HOCl

c) $2HOCl + H_2O$ d) $HOC1_2 + H_2O$

16) Aluminium chloride is a solid which sublimes readily at about

a) 160°C b) 100°C

c) 180°C d) 130°C

17)_____ and _____ are ionic and consist of giant ionic lattices at room temperature.

a) Aluminium and chlorine

b) Magnesium and sodium chloride

c) Carbon chloride and aluminium chloride

d) Potassium chloride and magnesium oxide

18) Sodium and magnesium are ionic and so with undergo electrolysis when they are:

a) Solid b) Molten

c) Room temperature d) Mixture

19) Aluminium chloride and phosphorus chloride cases; the solid doesn't conduct electricity because.

a) Ions aren't 't free to move b) Ions are freely move

c) Ions are arranged is symmetry d) Electrons are freely

20) Magnesium chloride dissolve in H20 to give a faintly:

a) Basic solution b) Amphoteric Oxide

c) Acidic solution d) Neutral solution

21) Write down the formula of Hexa aqua magnesium ions are formed.

a) $[Mg\ (Al_2O_3)_6]^{2+}$ b) $[Mg(Mg_2O_3)_6]^{2+}$

c) $[Mg(Na_2O_3)_6]^{2+}$ d) $[Mg(H_2O_3)_6]^{2+}$

22) Complete the following reaction.

$MgCl_2 + 6H_2O \rightarrow ? + ?$

a) $[Mg\ (Al_2O_3)_6]^{2+} + 2Cl^-$ b) $[Mg(Mg_2O_3)_6]^{2+} + 2Cl^-$

c) $[Mg(Na_2O_3)_6]^{2+} + 3Cl^-$ d) $[Mg(H_2O_3)_6]^{2+} + 2Cl^-$

23) Silicon tetra chloride is a:

a) Odour less Liquid b) Tasteless Liquid

c) Colour less Liquid d) Bitter in taste

24) Phosphorus trichloride is a liquid because there are only:

a) Van der Waals and dispersion forces

b) Strong intermolecular forces

c) Strong attractive forces

d) Repulsive force

25) At room temperature solid aluminium chloride has an _____ with a lot of covalent character.

a) Covalent character b) Covalent lattice

c) Ionic lattice d) Metallic luster

26) Phosphorus (V) chloride has a violent reaction with water producing fumes of:

a) Phosphorus chloride b) Hydrogen chloride

c) Potassium hydroxide d) Hydrogen peroxide

27) _____like aluminium Oxide, is amphoteric it has both basic and acid properties.

a) Potassium hydroxide b) Hydrogen peroxide

c) Aluminium hydroxide d) Sodium hydroxide

28) Sulphuric acid and chloride (VII) acids are both very:

a) Strong Base b) Weak Base

c) Strong acid d) Strong Base

29) Atomic radii increase as we move from:

a) Lithium to caesium b) Caesium to Lithium

c) Caesium to carbon d) Carbon to caesium

30) _____is the energy required to remove the most loosely held electron from each of one mole of gaseous atom.

a) Electro negativity b) Atomic radii

c) Atomic size d) Ionization energy

31) The property of alkali metal to give coloration in the because flame has been used to detect their presence in salts by a task, known as:

a) Iodine test b) Flame test

c) Chlorine test d) Iodometry test

32) Due to small size Be^{2+} ion, BCO is_____ which other oxide are ionic?

a) Covalent b) Ionic

c) Coordinate covalent d) Metallic

33) Complete the following reaction.

$3Ca + N_2 \rightarrow ?$

a) Ca_4N_2 b) Ca_3N_2

c) Ca_2N_2 d) CaN_2

34) The melting and Boiling point of C and Si are notably high because of these elements to form _____

a) Complex structure b) Giant molecule

c) 12 coordinate molecule d) Covalent Bond

35) Silicon from only _____ with oxygen atoms while carbon forms double bond.

a) Triple bond b) Double bond

c) Single bond d) Co-ordinate covalent bond

36) The simplest formula of silica is:

a) SiO_4 b) SiO_2

c) SiO_6 d) SiO_3

37) Complete the following equation.

$NaOH + CO \rightarrow ?$

a) HCOONa b) HCONaO

c) H_2COONA d) NaCO + OH

38) The dioxide will react with hot concentrated sodium hydroxide solution to give soluble complexes of the form.

a) XO b) $20k{\cdot}r^2$

c) 20H- d) $[X(OH)_6]$

39) Atomic radius ____as we go down the group due to increase no of shell.

a) Constant b) Decreases

c) Increases d) Remain same

40) Fluorine and chlorine are_____ at ordinary temperature.

a) Liquid b) Solid

c) Gas d) Metal

41) Br is a _____ at ordinary temperature

a) gas b) liquid

c) solid d) Metal

42) Iodine is_____at ordinary temperature.

a) Solid b) Gas

c) Liquid d) Metal

43) The halogens due to high electron affinity values have a great tendency to accept electron and at as:

a) Reducing agent b) Oxidising agent

c) Polar compound d) Non polar compound

44) Oxidising power of halogen depends upon:

a) Energy of dissociation b) Electron affinity

c) Heat of vaporization d) All of above

45) Which is the strongest reducing agent?

a) HF b) HCl

c) HI d) HBr

Answers

1)	c	2)	a	3)	b	4)	a

5)	d	6)	a	7)	a	8)	a
9)	d	10)	a	11)	c	12)	b
13)	c	14)	a	15)	a	16)	c
17)	b	18)	b	19)	a	20)	c
21)	d	22)	d	23)	c	24)	a
25)	c	26)	b	27)	c	28)	c
29)	a	30)	d	31)	b	32)	a
33)	b	34)	b	35)	c	36)	b
37)	a	38)	d	39)	c	40)	c
41)	b	42)	a	43)	b	44)	b
45)	c						