

SECTION 'A' (Multiple Choice Questions)(33)

1. Choose the correct answer for each from the given options:

(i) These elements Eka-Aluminium and Eka-Silicon were known as:

- *Gallium and Germanium ✓
*Aluminium and Germanium
*Gallium and Silicon
*Beryllium and Magnesium

(ii) Elements of group VI—A are called:

- * chalcogens ✓
* coinage metals
* alkali metals
* halogens

(iii) Elements of this group forms an ion with charge +3:

- *I A
*II A
*III A ✓
*VA

(iv) All elements form ionic hydrides except:

- *Li
*Na
*Be ✓
*Ca

(v) This group forms basic hydrides:

- * IIIA
* IVA
* VA ✓
* VIA

(vi) The half life of radioactive isotope of hydrogen is:

- *10.5 years
*12.5 years ✓
*13.5 years
* 14.5 years

(vii) This element of IA group forms a superoxide:

- *Li
*Na
*K ✓
*Sr

(viii) This one is liberated at the anode during electrolysis of brine in diaphragm cell is:

- * H₂
*Na
*Cl₂ ✓
*O₂

(ix) This one has maximum hydration energy:

- * Be²⁺ ✓
*Mg²⁺
*Ca²⁺
*Ba²⁺

(x) The oxidation state of nitrogen in HNO₃ is

- * +3
* -3
* +5 ✓
* -5

(xi) Duralumin is an alloy of:

- *Iron
*Nickel
*Zinc
*Aluminium ✓

(xii) The basicity of ortho boric acid is:

- *1 ✓
*2
*3
*4

(xiii) All elements get corroded except

- *Iron
*Copper
*Zinc
*Gold ✓

(xiv) The coordination number of Co in [Co(en)₂Cl₂]⁺¹ is:

- *3
*4
*5
*6 ✓

(xv) This metal is used for galvanizing:

- *Fe
*Co
*Ni
*Zn ✓

(xvi) The hybridization of all carbon atoms in cyclohexane (C₆H₁₂) is:

- *sp
*sp²
*sp³ ✓
* dsp³

(xvii) This catalyst is used as 'Knock inhibitor':

- *Zeolite
*Tetra Ethyl Lead ✓
*Platinum
*Raney Nickel

(xviii) The general formula of ester is:

- *RCOOH
*RNH₂
*RCOR
*RCOOR ✓

(xix) This compound obeys Markonikoff rule when reacting with HBr:

- *CH₃ - CH₃
*CH₃ - CH = CH₂
*CH₂ = CH₂ ✓
*CH₃ - CH = CH - CH₃

(xx) Vinyl chloride polymerizes into:

- *PVA
*PVC ✓
*Bakelite
*Perspex

(xxi) The dehydration of alcohol gives:

- * Alkane
*Alkene ✓
*Alkyne
*Benzene

(xxii) This compound gives SN¹, mechanism:

- *Chloroethane
*Chloromethane
*2-chloro2-methyl propane ✓

(xxiii) The most stable carbonium ion is:

- *CH₃
*RCH₂
*R₂CH
*R₃C ✓

(xxiv) CH₃I reacted with sodium metal to form:

- *CH₃OH
*C₂H₂
*C₂H₄
*C₂H₆ ✓

(xxv) The colour of precipitate obtained in Iodoform test is:

- *Red
*Orange
*Yellow ✓
*Green

(xxvi) Ethyl acetate is present in:

- *Pineapple ✓
*Guava
*Orange
*Lemon

(xxvii) This one does not contain carboxyl group:

- *Acetic Acid
*Benzoic Acid
*Picric Acid ✓
*Butyric Acid

(xxviii) The animal starch is:

- *Glycogen ✓
*Amylose
*Cellulose
*Amino Acids

(xxix) Blood cancer is caused by:

- *Methane
*Ethane
*Butane
*Benzene ✓

(xxx) Bleeding of teeth is caused by the deficiency of this vitamin:

- *D
*C ✓
*B
*A

(xxxi) Bakelite is a polymer of:

- *Phenol — Formaldehyde ✓
*Phenol — Benzaldehyde
*Urea — Formaldehyde
* Phenol — Urea

(xxxii) This impart green colour to glass:

- *Cr₂O₃ ✓
* CoO
* CuO
* ZnO

(xxxiii) Fertilizer maintains this pH of the soil:

- * 7 to 8 ✓
* 6 to 7
* 9 to 11
* 12 to 14