

SAMPLE QUESTION PAPER CHEMISTRY CLASS XII

Design of Question paper

Time: 3 hrs. Maximum Marks:70

A. Weightage to different forms of questions

| S. No. | Type of question | Marks per Question | Total number of Questions | Total marks | |
|--------|----------------------------------|-----------------------|---------------------------|----------------|-------|
| 1 | VSA | 1 | 8 | 8 | |
| 2 | SA I | 2 | 10 | 20 | |
| 3 | SA II/Value Based Question | 3 | 9 | 27 25ale | .co.u |
| 4 | LA | 5 | W 13101 | 1 0 | |
| Total | 36 | W tro | 34 0 | 70 | |

B. Typology of Questions

| | ı | 1 | - |
|-----|------------------|--------------|--------------|
| S. | Typology | Weightage in | Weightage in |
| No. | | marks | percentage |
| | | | 1 0 |
| | | | |
| 1 | Knowledge Based | 14 | 20% |
| | | | |
| | | | / |
| | Conceptual | 21 | 30% |
| 2 | Understanding | | |
| | | | |
| 3 | Inferential Type | 14 | 20% |
| | | | |
| | | | |
| 4 | Reasoning Based | 11 | 15% |
| | | | |
| | | | |
| 5 | Skill Based | 10 | 15% |
| | | | |
| | Total | 70 | 100% |
| | | | |

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- 1/2 21 (a) Acidic flux is SiO₂
 - 1/2 Basic flux is CaO

(b)

(i) Cu₂O undergoes self reduction to form blister copper as

$$2Cu_2O + Cu_2S \longrightarrow 6Cu + SO_2$$

(ii)
$$Fe_2O_3 + 3C \longrightarrow 3CO + 2Fe$$

OR

- (a) Cryolite reduces melting point of alumina.
- (b) Concentration of ore is carried out by digesting the powdered ore with a concentrated solution of NaOH at 473-523 K and 35 -36 bar pressure. Al₂O₃ is leached out as sodium of the luminate and SiO₂ as sodium silicate leaving behind impurities.

 Al₂O₃ (s) + 2 NaOH(aq) + 3H₂O \rightarrow 2Nr[1]OH)₄] (aq)

 The resulting solution is filtered, collected 3.d. Feutralised by passing CO₂ gas through it. Then hydrated Al₂O₃

$$Al_2O_3(s) + 2 NaOH(aq) + 3H_2O \rightarrow 2Nn[NOH]_4] (aq)$$
 1

gets precipitated leaving sodium silicate in the solution.

$$2Na[Al(OH)_4] (aq) + CO_2(g) \longrightarrow Al_2O_3.xH_2O(s) + 2NaHCO_3(aq)$$
 1/2

Sodium silicates remain in the solution and hydrated alumina is filtered, washed, dried and heated to get pure alumina (Al_2O_3) .

$$Al_2O_3 .x H_2O(s) \longrightarrow Al_2O_{3(s)} + x H_2O(g)$$
 1/2

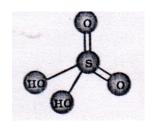
22.(i)
$$H_3PO_3 + 2AgNO_3 + H_2O \longrightarrow 2Ag + HNO_3 + 2H_3PO_4$$
 1

(ii)
$$3Cl_2 +6 NaOH$$
 (conc.) \longrightarrow $5NaCl + NaClO_3 +3 H_2O$ 1

(iii)
$$2XeF_2 + 2H_2O$$
 \longrightarrow $2Xe + O_2 + 4H^+ + 4F^-$ 1



23(i)



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|--|---|
| (ii) Since the formation of ozone from oxygen is endothermic reactions | electric discharge prevents its |
| (iii) Since the formation of ozone from oxygen is endothermic reaction she decomposition. (iii) Bleaching by sulphu and the is temporary because or its reducing nature | |
| (iii) Bleaching by sulphu colde is temporary because of its reducing nature | e. 1 |
| 24 (i) Amylose is a long unbranched chain polymer $lpha$ -D(+) glucose. | 1/2 |
| Amylopectin is a branched chain polymer of $lpha$ -D glucose. | 1/2 |
| (ii) Globular protein and its shape is spherical. | 1/2 +1/2 |
| (iii) Liver and adipose tissue. | 1/2 +1/2 |
| 25. (i) Antiseptics are the chemicals applied to the living tissues either to kill o microorganisms .e.g dettol. | or prevent the growth of ½ +1/2 |
| (ii) Antioxidants are the compounds which retard the action of oxygen on food decomposition by oxidation.e.g BHA | and reduces its rate of $\frac{1}{2}+\frac{1}{2}$ |