Yakeen NEET 2.0 2026

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Some Basic Concept of Chemistry

DPP: 6

Q1 The number of moles of ' B ' required to produce 2.5 mole of $\mathrm{AB_4}$ according to equation:
$\mathrm{A} + 4\,\mathrm{B} \rightarrow \mathrm{AB_4}$
(A) 1 (B) 10
(C) 5 (D) 15

Q2 The equation $2\mathrm{Al(s)} + \frac{3}{2}\mathrm{O_2} \longrightarrow \mathrm{Al_2O_3}$ (s) shows that
(A) 2 moles of aluminium react with $\frac{3}{2}$ moles of oxygen to produce one mole of aluminium oxide
(B) 2 atoms of aluminium react with $\frac{3}{2}$ atoms of oxygen to produce one atom of aluminium oxide
(C) $2g$ of aluminium react with $\frac{3}{2}$ g of oxygen to produce 1 g of aluminium oxide
(D) 2 g of aluminium react with $\frac{3}{2}$ litres of oxygen to produce 1 g of aluminium oxide

Q3 The number of moles of $\mathrm{Ca(HCO_3)_2}$ required to prepare 1.50 moles of $\mathrm{CO_2}$, according to the equation
$\mathrm{Ca(HCO_3)_2} + 2\mathrm{HCl} \rightarrow \mathrm{CaCl_2} + 2\mathrm{CO_2} + 2\mathrm{H_2O}$ is
(A) $1.00\ \mathrm{mol}$
(B) $2.00\ \mathrm{mol}$
(C) $0.750\ \mathrm{mol}$
(D) $1.50\ \mathrm{mol}$

Q4 0.7 moles of potassium sulphate is allowed to react with 0.9 moles of barium chloride in aqueous solutions. The number of moles of the substance precipitated in the reaction is:
(A) 1.4 moles of potassium chloride
(B) 0.7 moles of barium sulphate
(C) 1.6 moles of potassium chloride
(D) 1.6 moles of barium sulphate

Q5 How many grams of calcium oxide is obtained on heating 100 g of $\mathrm{CaCO_3(\ s)}$?
(A) 50 g
(B) 40 g
(C) 56 g
(D) 44 g

Q6 What is the mass of glucose required to produce 44 g of $\mathrm{CO_2}$ on complete combustion?
(A) 30 g
(B) 45 g
(C) 60 g
(D) 22 g

Q7 What is the weight of oxygen required for the complete combustion of 2.8 kg of ethylene?
(A) 2.8 kg
(B) 6.4 kg
(C) 9.6 kg
(D) 96 kg

Q8 According to the following reaction the minimum quantity in g of $\mathrm{H_2\ S}$ needed to precipitate $63.5\mathrm{gm}$ of $\mathrm{Cu^{2+}}$ ions will be nearly?
$\mathrm{Cu^{+2}} + \mathrm{H_2\ S} \rightarrow \mathrm{CuS} + 2\mathrm{H^+}$
(A) 63.5 g
(B) 31.75g
(C) 34g
(D) 20g

Q9 A quantity of 2.76 g of silver carbonate on being strongly heated yields a residue(Solid/liquid) weighing $Gramatomicmassof(\mathrm{Ag} = 108)$,C=12g and O=16 g)
$\mathrm{Ag_2\ CO_3\ (s)} \xrightarrow{\Delta} 2\,\mathrm{Ag\,(s)} + \mathrm{CO_2\ (g)} + \frac{1}{2}\mathrm{O_2\ (g)}$

(A) 2.16 g

(B) $2.48\ \mathrm{g}$
(C) $2.32\ \mathrm{g}$
(D) $2.64\ \mathrm{g}$

Q10 How many grams of $\mathrm{H_2}$ are required to consume $2\ \mathrm{mol}$ of CO ?
(Gram atomic mass of H = 1 g, C = 12 gand O = 16 g)
$\mathrm{CO(g) + 2H_2(\ g) \rightarrow CH_3\ OH(g)}$
(A) $2\ \mathrm{g}$
(B) $4\ \mathrm{g}$
(C) $8g$
(D) $16\ \mathrm{g}$

Q11 The mass of $70\%\ \mathrm{H_2SO_4}$ required for neutralization of one mole of NaOH is : (Gram atomic mass of H = 1 g, O = 16 g, Na = 23 g and S = 32 g)
$\mathrm{2NaOH + H_2SO_4 \rightarrow Na_2SO_4 + 2H_2O}$
(A) $70\ \mathrm{g}$
(B) $35\ \mathrm{g}$
(C) $30\ \mathrm{g}$
(D) $95\ \mathrm{g}$

Answer Key

Q1	(B)
Q2	(A)
Q3	(C)
Q4	(B)
Q5	(C)
Q6	(A)
Q7	(C)
Q8	(C)
Q9	(A)
Q10	(C)
Q11	(A)