

HINTS & SOLUTION WORKBOOK-1

Stoichiometry - I

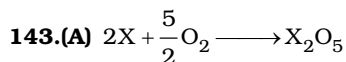
Daily Tutorial Sheet-12	Level - 3
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141.(C) M.M of $\text{H}_2\text{O} = 2 \times M_{\text{H}} + M_{\text{O}} = 2 \times \frac{M_{\text{e}^{12}}}{6} + \frac{M_{\text{C}^{12}}}{6} \times 16 = 36$

142.(B) $M_{\text{C}_6\text{H}_8} = 80 \text{ g / mol .}$

Each mole of C_6H_8 contains 3 moles of double bonds

$$\Rightarrow \frac{80}{3} \text{ g of } \text{C}_6\text{H}_8 \text{ contains 1 moles of double bonds.}$$



Moles of X = 2 × moles of X_2O_5

$$\frac{2.0769}{M_{\text{X}}} = \frac{2 \times 3.6769}{2M_{\text{X}} + 80}$$

Calculate M_{x} and then moles = $\frac{2.0769}{M_{\text{x}}}$.

144.(A) Water is liquid at the given T & P.

∴ Volume of 20g of H_2O 20 ml.

145.(D) Avg MQ = $\frac{A_1 \times M_{97}}{100} + \frac{A_2 \times M_{914}}{100} = \frac{23.4 \times 8.082 \times 12}{100} + \frac{76.6}{100} \times 7.833 \times 12 = 94.695$

146.(B) Here abundance of O^{18} , is more

⇒ Avg atomic mass will be close to that of O^{18}