Yakeen NEET 2.0 2026

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Some Basic Concept of Chemistry

DPP: 5

Q1 The number of moles of oxygen obtained by the electrolytic decomposition of 90 g water is

$$\left(2H_2O \xrightarrow{\text{elec.}} 2H_2 + O_2\right)$$

(A) 2.5 (B) 5
(C) 7.5 (D) 10

Q2 The number of moles of hydrogen molecules required to produce 20 moles of ammonia through Habers process is .
(A) 40 (B) 10
(C) 20 (D) 30

Q3 The volume of a gas at 0°C and 760 mm pressure is 22.4 cc. The no. of molecules present in this volume is
(A) $10^{-3}N_A$
(B) $10^{-4}N_A$
(C) $10^{-5}N_A$
(D) $10^{-2}N_A$

Q4 22.4 litre of water vapour at NTP, when condensed to water, occupies an approximate volume of:
(A) 18 L
(B) 1 L
(C) 1 mL
(D) 18 mL

Q5 From 320mg. of $O_2, 6.023 \times 10^{20}$ molecules are removed, the no. of moles remained are:
(A) 9×10^{-3} moles
(B) 9×10^{-2} moles
(C) Zero
(D) 3×10^{-3} moles

Q6 The number of moles of hydrogen molecules required to produce 40 moles of ammonia through Haber's process is:
(A) 60 (B) 30
(C) 40 (D) 50

Q7 Calculate the moles of H_2O vapours formed if 1.57 mole of O_2 are used in presence of excess of H_2 for the given change.

$$2H_2 + O_2 \longrightarrow 2H_2O$$

Q8 How many molecule are present in 12 L of liquid CCl_4 ? The density of the liquid is 1.59 g cm^{-3} ?
(A) 7.44×10^{26}
(B) 1.59×10^{26}
(C) 0.744×10^{26}
(D) 15.9×10^{26}

Q9 How many grams of calcium oxide is obtained on heating 100 g of $CaCO_3(s)$?
(A) 50 g
(B) 40 g
(C) 56 g
(D) 44 g

Q10 What is the mass of glucose required to produce 44 g of CO_2 on complete combustion?
(A) 30 g
(B) 45 g
(C) 60 g
(D) 22 g

Q11 According to the following reaction the minimum quantity in g of H_2S needed to precipitate 63.5gm of Cu^{2+} ions will be nearly?
$Cu^{+2} + H_2S \rightarrow CuS + 2H^+$
(A) 63.5 g
(B) 31.75g
(C) 34g

(D) $20g$

Q12 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

Answer Key

Q1	(A)
Q2	(D)
Q3	(A)
Q4	(D)
Q5	(A)
Q6	(A)
Q7	3.14 moles H_2O
Q8	(C)
Q9	(C)
Q10	(A)
Q11	(C)
Q12	(C)