

# ARJUNA (NEET)

## Some Basic Concepts of Chemistry

**DPP-6**

- How many moles of lead (II) chloride will be formed from a reaction between 6.5g of PbO and 3.2g of HCl?  
[AIPMT (Prelims)-2008]  
(A) 0.029 (B) 0.044  
(C) 0.333 (D) 0.011
- What volume of oxygen gas ( $O_2$ ) measured at  $0^\circ C$  and 1 atm, is needed to burn completely 1 L of propane gas ( $C_3H_8$ ) measured under the same conditions?  
[AIPMT (Prelims)-2008]  
(A) 10 L (B) 7 L  
(C) 6 L (D) 5 L
- An organic compound contains carbon, hydrogen and oxygen. Its elemental analysis gave C, 38.71% and H, 9.67%. The empirical formula of the compound would be  
[AIPMT (Prelims)-2008]  
(A)  $CH_4O$  (B)  $CH_3O$   
(C)  $CH_2O$  (D)  $CHO$
- The amount of zinc required to produce 224 ml of  $H_2$  at STP on treatment with dilute  $H_2SO_4$  will be ( $Zn = 65$ )  
(A) 65 g (B) 0.065 g  
(C) 0.65 g (D) 6.5 g
- Given the number: 161 cm, 0.161 cm, 0.0161 cm. The number of significant figures for the three number is  
(A) 3,3 and 4 respectively  
(B) 3,4 and 4 respectively  
(C) 3,4 and 5 respectively  
(D) 3,3 and 3 respectively
- An organic compound containing C, H and N gave the following analysis C = 40%, H = 13.33%, N = 46.67%. Its empirical formula would be  
(A)  $CH_4N$  (B)  $CH_5N$   
(C)  $C_2H_7N_2$  (D)  $C_2H_7N$
- Volume of  $CO_2$  obtained at STP by the complete decomposition of 9.85 gm  $BaCO_3$  is (Mol. Wt. of  $BaCO_3 = 197$ )  
(A) 2.24 litre (B) 1.12 litre  
(C) 0.85 litre (D) 0.56 litre
- Percentage of Se in peroxidase anhydrous enzyme is 0.5% by weight (at. Wt. = 78.4) then minimum molecular weight of peroxidase anhydrous enzyme is  
(A)  $1.568 \times 10^4$  (B)  $1.568 \times 10^3$   
(C) 15.68 (D)  $2.136 \times 10^4$
- In Haber process 30 litres of dihydrogen and 30 litre of dinitrogen were taken for reaction which yielded only 50% of the expected product. What will be the composition of gaseous mixture under the aforesaid condition in the end?  
(A) 20 litres ammonia, 20 litres nitrogen, 20 litres hydrogen  
(B) 10 litres ammonia, 25 litres nitrogen, 15 litres hydrogen  
(C) 20 litres ammonia, 10 litres nitrogen, 30 litres hydrogen  
(D) 20 litres ammonia, 25 litres nitrogen, 15 litres hydrogen
- The maximum number of molecules is present in  
(A) 15 L of water at STP  
(B) 15 L of  $H_2O$  gas at STP  
(C) 15 g of ice  
(D) Same in all

11. The total number of electrons in 2.0 g of  $D_2O$  to that in 1.8 g of  $H_2O$

- (A) Double                      (B) Same  
(C) Triple                      (D) One fourth

12. From 200 mg of  $CO_2$  when x molecules are removed,  $2.89 \times 10^{-3}$  moles of  $CO_2$  are left x will be

- (A)  $10^{20}$  molecules    (B)  $10^{10}$  molecules  
(C) 21 molecules        (D)  $10^{21}$  molecules

## ANSWERS KEY

- |        |         |
|--------|---------|
| 1. (A) | 7. (B)  |
| 2. (D) | 8. (A)  |
| 3. (B) | 9. (B)  |
| 4. (C) | 10. (A) |
| 5. (D) | 11. (B) |
| 6. (A) | 12. (D) |



**\*Note\*** - If you have any query/issue



Mail us at [support@physicswallah.org](mailto:support@physicswallah.org)