CHEMISTRY

1. (1)
2. (2)
3. (1)
   10 vol H_2O_2 means
   1 L H_2O_2 produces 10 L O_2 or
   1 mL H_2O_2 produces 10 mL O_2
4. (4)
   Reactivity order: H > [H] > H_2
5. (1)
   1 L = 1 dm^3 = 1000 mL = 1000 cc
6. (3)
   $C_6H_{12}O_6$ = 6(12) + 12(1) + 6(16) = 180
7. (2)
   20.8 + 9.8 = 7.3 + W $\Rightarrow$ W = 23.3 g
8. (4)
   Molecular weight = 2 × VD = 2 × 11.2 = 22.4
   $\text{Moles of gas} = \frac{2.4}{22.4}$
   (1 mol occupies = 22.4 L at STP]
   Volume of gas = 2.4 L
9. (4)
10. (2)
    22.4 L of oxygen = 1 mol
    $\text{11.2 L of oxygen} = \frac{11.2}{22.4} = 0.5 \text{ mol}$