

# CHEMISTRY

41. The drug AZT (Azidothymidine) is used for \_\_\_\_\_
- (1) AIDS (2) Cancer therapy  
(3) Malaria (4) Orthopaedic
42. The volume and mass of 0.2 mol of O<sub>3</sub> at STP is
- (1) 4.48 L, 9.6 g (2) 4.48 L, 96 g  
(3) 2.24 L, 4.8 g (4) 2.24 L, 48 g
43. Relative abundance of <sup>12</sup>C, <sup>13</sup>C, <sup>14</sup>C are 98.892, 1.108 and  $2 \times 10^{-10}$ . Then average atomic weight is exactly
- (1) 134 (2) 144  
(3) 124 (4) 12.0114
44. The density of the solution is 2.15 g mL<sup>-1</sup>, then mass of 2.5 mL solution in correct significant figures is
- (1)  $5375 \times 10^{-3}$  g (2) 5.4 g  
(3) 5.38 g (4) 53.75 g
45. High purity dihydrogen is obtained by
- (1) Reaction of Zn with HCl  
(2) Reaction of Zn with NaOH  
(3) Electrolysis of acidic H<sub>2</sub>O  
(4) Electrolysis of aqueous Ba(OH)<sub>2</sub>
46. Syngas is
- (1) CO + H<sub>2</sub> (2) CO<sub>2</sub> + H<sub>2</sub>  
(3) CO + H<sub>2</sub>O (4) CO<sub>2</sub> + H<sub>2</sub>O
47. Which physical property of H<sub>2</sub>O is greater than D<sub>2</sub>O?
- (1) Boiling point  
(2) Enthalpy of vaporization  
(3) Viscosity  
(4) Dielectric constant
48. Hydrogen-bonded water molecule(s) in CuSO<sub>4</sub>.5H<sub>2</sub>O is
- (1) 1 (2) 2  
(3) 4 (4) 5
49. Which of the following is added to stabilize H<sub>2</sub>O<sub>2</sub> when stored?
- (1) Alkali salt (2) Dust  
(3) Charcoal (4) Urea
50. If N<sub>A</sub> is Avogadro's number then number of electrons in 4.2 g of nitride ion (N<sup>3-</sup>) is
- (1) 2N<sub>A</sub> (2) 4N<sub>A</sub>  
(3) N<sub>A</sub> (4) 3N<sub>A</sub>