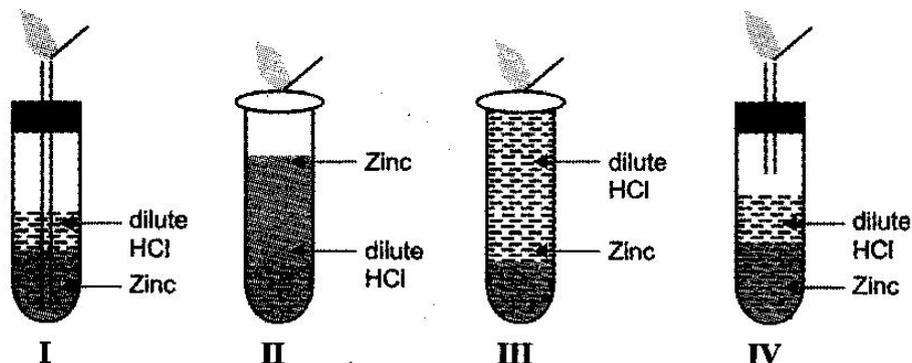


## CHEMISTRY SAMPLE PAPER

01. Which of the following shows Tyndall effect?  
A. Milk                      B. Vinegar                      C. Sulphur in water                      D. Salt solution
02. Six elements a, b, c, d, e and f have the following atomic numbers:  
(a = 12, b = 17, c = 18, d = 7, e = 9 and f = 11).  
Among these elements, the element, which belongs to the 3<sup>rd</sup> period and has the highest ionization potential, is  
A. a                      B. b                      C. c                      D. f
03. Which of the following is an odd compound?  
A. Ethene                      B. Ethane                      C. Propene                      D. Acetylene
04. There is no difference between valency and valence electrons except in the case of  
A. elements of group 2                      B. elements of group 3  
C. elements of group 4                      D. elements of group 5
05. The nucleus of an atom of phosphorus is represented as  ${}_{15}\text{P}^{31}$ . The number of protons, neutrons and electrons in the atom of phosphorous are respectively  
A. 15, 31, 15                      B. 15, 15, 16                      C. 15, 31, 16                      D. 15, 16, 15
06. Which of the following is not a saturated hydrocarbon?  
A. Cyclohexane                      B. Benzene                      C. Butane                      D. Isobutane
07. Read the following statements carefully and select the correct statements about the physical and chemical properties of metals:
- I. All metals are ductile.
  - II. Generally metals are ductile.
  - III. Metals which are more reactive than hydrogen react with acids to release hydrogen gas.
  - IV. All metals react with acids to release hydrogen gas.
- The correct statements from the above are  
A. I and IV                      B. I and III                      C. II and III                      D. II and IV
08. Identify the substance reduced in the following equation:  
$$\text{MnO}_2 + 4\text{HCl} \longrightarrow \text{MnCl}_2 + 2\text{H}_2\text{O}$$
  
A.  $\text{H}_2$                       B.  $\text{MnO}_2$                       C.  $\text{HCl}$                       D. None of the above

09. Four setups given below were arranged to identify the gas evolved when dilute hydrochloric acid was added to zinc granules. The most appropriate set up is



A. I

B. II

C. III

D. IV

10. Which of the following are exothermic processes?

- (i) Reaction of water with quicklime
- (ii) Dilution of an acid
- (iii) Evaporation of water
- (iv) Sublimation of camphor (crystals)

A. (i) and (ii)

B. (ii) and (iii)

C. (i) and (iv)

D. (iii) and (iv)

11. Electrolysis of water is a decomposition reaction. The mole ratio of Hydrogen and Oxygen gases liberated during electrolysis of water is

A. 1:1

B. 2:1

C. 4:1

D. 1:2

12. A shiny brown coloured substance X on heating in air becomes black in colour. Name the element X and the black coloured substance Y.

- A. X = copper and Y = copper oxide
- B. X = sulphur and Y = sulphur trioxide
- C. X = aluminium and Y = aluminium oxide
- D. X = carbon and Y = Carbon monoxide

