CHEMISTRY- GENERAL
Paper: CC3/GE 3
(Paper 3)
Full Marks – 10

Attempt all the questions

Q.1. Which having highest boiling point?

a) Kr   b) Xe   c) He   d) Ne

Q.2. Which is in liquid form at room temperature?

a) In   b) As   c) Ga   d) Al

Q.3. What is the structure of PCl_5 ?

a) Trigonalbipyramidal   b) Hexagonal   c) Linear   d) Pyramidal

Q.4. What is the electronic configuration of As?

a) $[Ar]$ $3d^{10}4s^24p^3$ b) $[Ar]$ $3d^9$ $4s^24p^4$ c) $[Ar]$ $3d^95s^24p^3$ d) none of these

Q.5. Which is correct arrangement according to increasing acidic property?

a) $H_2S < H_2O < H_2Se < H_2Te$,

b) $H_2Se < H_2Te < H_2O < H_2S$,.

c) $H_2O < H_2S < H_2Se < H_2Te$,

d) none of these

Q.6. Upon dilution, the molar conductance –

a) increases

b) decreases

c) remains same

d) none of the above

Q.7. The ionization constant of ammonium hydroxide is 1.77×10^{-5} at 298K. Hydrolysis constant of ammonium chloride is

a) 1.77×10^{-5}

b) 5.65×10^{-10}

c) 5.65×10^{-14}

d) 1.77×10^{-19}

Q.8. Ostwald's dilution law is applicable to
(a) strong electrolytes only
(b) weak electrolytes only
(c) non-electrolytes
(d) strong as well as weak electrolytes

Q.9. What is the standard cell potential for the following cell reaction

$$Zn + Cu^{2+} \rightarrow Zn^{2+} + Cu$$
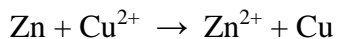
(Standard electrode potential for Zn^{2+}/ Zn electrode = -0.763V and for Cu^{2+}/Cu electrode=0.337 V)

a) 1.10 V

b) -1.10 V

c) -0.426 V

d) 0.426 V

Q.10. The compositions of a standard hydrogen electrode is

(a) H^+ ions
(b) platinum electrode
(c) hydrogen gas
(d) all of above