Gurudas College
Internal Assessment-2021
Chemistry (General)
Semester-III
Subject-CEMG
Paper- CC3/GE3

Time - 30 minutes **Full Marks - 10**

Answer any **TEN** questions
Each question carries **Equal** mark

1. The electron affinity order of halogens is
   a) F < Cl > Br > I
   b) F > Cl > Br > I
   c) F > Cl < Br > I
   d) None of the above
2. If the electronegativity difference between two bonded atom is ~ 1.9, then the bond will be
   a) 70% ionic
   b) 50% ionic
   c) 40% covalent
   d) None of the above
3. Identify metalloids
   a) Ca, Mg, P
   b) O, S, Se
   c) Ge, As, Sb
   d) C, Sn, Pb
4. Which of the following oxides are amphoteric?
   a) MgO, B_2O_3
   b) BeO, Al_2O_3
   c) P_2O_5, SiO_2
   d) Cl_2O_7, N_2O_5
5. The correct electronic configurations of Cr (24) and Cu (29) are, respectively,
   a) [Ar] $3d^5\ 4s^1$, [Ar] $3d^{10}\ 4s^1$
   b) [Ar] $3d^4\ 4s^2$, [Ar] $3d^9\ 4s^2$
   c) [Ar] $3d^6\ 4s^0$, [Ar] $3d^{10}\ 4s^0$
   d) None of the above
6. Due to Lanthanoid contraction, size of the lanthanoids along the period from La to Lu
   a) increases
   b) decreases
   c) remain unaltered
   d) increases non-linearly

7. The colour exhibited by actinoid ions is due to
   a) *p-p* transitions
   b) *d-d* transitions
   c) *f-f* transitions
   d) None of the above
8. The hybrid state of B in BF_4^- is
   (a) sp^2
   (b) sp
   (c) sp^3
   (d) none of the above
9. Which of the following will be planar trigonal?
   (a) PCl_3
   (b) NH_3
   (c) ClF_3
   (d) $AlCl_3$
10. If the central atom in certain molecule has two lone pairs and three bond pairs, the shape of the molecule could be
   (a) T- shaped
   (b) trigonal planar
   (c) trigonal bipyramidal
   (d) distorted tetrahedral
11. The units of conductivity of solution are
   (a) ohm^{-1}
   (b) ohms
   (c) $ohm^{-1}cm^{-1}$
   (d) $ohm^{-1}eq^{-1}$
12. Which of the following statement is correct for a galvanic cell?
   (a) reduction occurs at cathode.
   (b) oxidation occurs at anode.
   (c) electrons flow from anode to cathode.
   (d) all the statements are correct.
13. Cholorobenzene can be prepared by reacting aniline with
   (a) Hydrochloric acid
   (b) Cuprous chloride
   (c) Chlorine in presence of anhydrous aluminium chloride
   (d) Ice cold nitrous acid followed by treatment with cuprous chloride and HCl
14. Reduction of nitrobenzene with Sn-HCl gives
   (a) aniline

(b) azoxybenzene
(c) phenylhydroxylamine
(d) azobenzene

15. The reaction of toluene with chlorine in the presence of ferric chloride gives mainly
(a) m-chlorotoluene
(b) benzyl chloride
(c) o & p - chlorotoluene
(d) benzoyl chloride

Note: Answer scripts sending mail id: cemgcbcs@gmail.com