ABHINAV COLLEGE OF ARTS, COMMERCE AND SCIENCE, BHAYANDAR EAST
DEPARTMENT OF CHEMISTRY
PRACTICE QUESTION PAPER-INORGANIC CHEMISTRY-SUMMER SESSION 2020

1. For d^3 configuration, CFSE is……
(a) 10Dq (b) 13Dq (c) 12Dq (d) -12Dq
2. In trigonal geometry, the bonds lie in …….plane.
(a) xy (b) h (c) d (d) v
3. The value of 10Dq for the complex ion, $[Ti(H_2O)_6]^{3+}$, Ti^{3+} ion has …….configuration.
(a) d^1 (b) d^2 (c) d^3 (d) d^4
4. The cyanide ligand produces more crystal field splitting and hence is a …….ligand.
(a) Weak (b) Strong (c) Polar (d) Non-polar
5. In Octahedral complexes, the 'd' orbitals of the central metal split into two energy levels.
(a) Six (b) Seven (c) Three (d) Two
6. $[Co(NH_3)_6]^{3+}$ is a …….. spin complex
(a) Outer (b) High (c) Low (d) Weak
7. The absorption spectrum of $[Ti(H_2O)_6]^{3+}$ with …….absorption maximum at wavelength of 500nm.
(a) Six (b) Three (c) Four (d) Two
8. MOT has many advantages over the other theories in explaining …….in complexes.
(a) Anti-bonding (b) Ionic (c) Strong (d) Bonding
9. In kinetic stability, …….factor plays an important role.
(a) Time (b) Temperature (c) Density (d) Pressure
10. The symbol SN^1 stands for substitution, nucleophilic……..
(a) Unimolecular b) Bimolecular (C) Trimolecular (d) molecule
11. The term for d^1 configuration Is……..
(a) ^1S (b) ^2S (c) ^3D (d) ^2D
12. Most of the alkaline earth metal complexes are not very stable but EDTA, being a strong …….ligand, forms quite stable complexes with metal ions like Ca^{2+}.
(a) hexadentate (B) Tetradentate (C) Monodentate (d) Bidentate
13. …….may be regarded as taking place by the exchange of a formal carbanion R^- with a halide anion X^-.
(a) Metathesis (b) Hydrolysis (c) Oxidative (d) Reductive
14. Aryls of many main group elements readily react with protic reagent like water and undergo……..
(a) Distillation (b) Hydrolysis (c) Smelting (d) Poling
15. Ferrocene is …….solid which sublimes at 373 K.
(a) Red (b) Pink (c) Orange (d) Yellow
16. Ferrocene undergoes sulphonation with concentration …….acid and forms mono substituted derivative.
(a) Nitric (b) Oxalic (c) Sulfuric (d) Hydrochloric
17. The substances that accelerate the rate of chemical reactions without undergoing any chemical change are called……..
(a) Catalysts (b)Ion (c) Complex (d) Product
18. …….of double bond of hydrogen at an alkene is a very important reaction in pharmaceutical industry.
(a) Liquation (b) Zone Refining (c) Oxidative (d) Hydrogenation
19. ……., involves the conversion of sulfide ores to their oxides by reduction with air.
(a)Roasting (b) Electrolytic Refining (c) Bessemerisation (d)Reduction
20. …….agent produces froth when air passed through the emulsion.
(a)Emulsion (b) Electrometallurgy (c) Frothing (d) Oxidative
21. XeF_2 is …….type of molecule.
(a) AB_3E_3 (b) AB_2E_3 (c) AB_2E_4 (d) AB_3E_2
22. …….is also used in vacuum drying and in neon signs.
(a) Helium (b) Neon (c) Argon (d) Krypton
23. Excess of silicon cause a …….disease.
(a) Goiter (b) Wilson's (c) Nausea (d) Lung

24. Fe(II) – heme complex is an …….complex.
(a) Tetrahedral (b) Bipyramidal (c) Planar (d) Octahedral
25.The process of converting metal oxides into metals is called……..
(a)Emulsion (b) Electrometallurgy (c) Frothing (d)Reduction