# PPSC Chemistry Full Book Test

| Sr | Questions | Answers Choice |
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| 1 | Strong field ligands such as CN | A. Usually produce high spin complexes and small crystal field splitting<br>B. Usually produce low spin complexes and small crystal field splitting<br>C. Usually produce low spin complexes and high crystal field splitting<br>D. Cannot form low spin complexes |
| 2 | Consider to violet colored compund.[Cr(OH)2)6 Cl3 and the yellow compound. [Cr(NH3)6]C;2 which of the following statements is false. | A. Both chromium metal ions are paramagnetic with 3 unpaired electrons.<br>B. [Cr(NH3)6)3+ is calculated directly form the energy of yellow light<br>C. For [Cr(OH)2)6]3+ is less than for [Cr(NH3)6]3+<br>D. The two complexes absorb their complementary colors. |
| 3 | How many unpaired electron are there in a strong field iron (II) octahederal compled. | A. 0<br>B. 1<br>C. 2<br>D. 4 |
| 4 | Which one of the following statements if false with respect to CFT. | A. In an octahederal crystal field. the d electron on a metal ion occupy the ex of orbitals before they occupy the t98 not of orbitals.<br>B. Diamagnetic metal ions cannot have an odd number of electrons<br>C. Low spin complexes can be paramagnetic<br>D. Low spin complexes contain strong field ligands. |
| 5 | A molecule the cannot be susperimposed on its mirror image is said to exhibit which of the following. | A. Geometrical isomerism<br>B. Optical isomerism<br>C. Linkage isomerism<br>D. Reactive isomerism |
| 6 | What is the oxidation number of the central meal atom in the coordination compound. [Pt(NH#)#Cl]Cl | A. -1<br>B. 0<br>C. +2<br>D. +3 |
| 7 | Select the correct IUPAC nae for [Co(NH3)6 ]2+ | A. Hexammoniacobaltate (II) ion<br>B. Hexaamminecobaltate (II) ion<br>C. Hexammoniacobalt (II) ion<br>D. Hexaamminecobalt (II) ion |
| 8 | Select the correct IUPAC name for [FeF4(OH)2]- | A. Diaquatrafluoriron (III) ion<br>B. Diaquateratrafluoriferrate (III) ion<br>C. Diaquatertrafluoroiron (I)<br>D. None of these |
| 9 | Consider the coordination compound K2[Cu(CN)4] A coordinate covalent bond exists between | A. K+ and CN-<br>B. Cu2+ and CN-<br>C. K_ and [Cu(CN)4]2+<br>D. C and N in Cn |
| 10 | Consider the coordination compound Na2[Pt(CN)4] the Lewis and is | A. [Pr(CN)4]2<br>B. Na+<br>C. Pt<br>D. Pt2+ |
| 11 | In coordination chemistry the donor atom of a ligand is. | A. A Lewis acid<br>B. The counter ion<br>C. The central metal atom<br>D. The atom in the legend that shares an electron pair with the metal |
| 12 | The _____ sphere is enclosed in brackets in formulas for complex species, and it includes the central metal ion plus the coordinated group | A. Ligand<br>B. Donor<br>C. Coordination |

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| | | D. Oxiation |
| 13 | Which of the following process is involved in the purification of crude metals. | A. Liquation process<br>B. Oxidation process<br>C. Distillation process<br>D. Electro refining |
| 14 | The process in which ore is heated generally in the presence of air, at temperature below their melting points is called. | A. Calcination<br>B. Roasting<br>C. Fourth floatation<br>D. besemerization |
| 15 | The process in which ore is heated generally in the absence of air, to expel water from a hydrated oxide at temperature below their melting points is called. | A. calcination<br>B. Roasting<br>C. Froth floatation<br>D. Bessemerization |
| 16 | The matrix is usually in the form of. | A. Sand<br>B. Limestone<br>C. Rocks<br>D. All |
| 17 | Which of the following method is used for the coventrating of ores. | A. Gravity separation<br>B. Magnetic concentration<br>C. Fourth floatation<br>D. Electrostatic concentration<br>E. All |
| 18 | The process of extracting a metal in pure form its ores is known as. | A. Crushing<br>B. Grinding<br>C. Dressing<br>D. Metallurgy |
| 19 | Which of the following is not a property of Cr. | A. it is brilliant silvery metal<br>B. it is malleable<br>C. It can take very high polish<br>D. Its surface is tarnished easily |
| 20 | Ferrochrum contains Cr up to | A. 60-70%<br>B. 70-80%<br>C. 80-90%<br>D. 40-50% |
| 21 | Which of the following is not an ore of Cr. | A. Chrome iron<br>B. Nicollite<br>C. Crocisite<br>D. Chrome ochre |
| 22 | Chromium is found in nature in the the form of. | A. Oxides<br>B. Silicates<br>C. Borates<br>D. Sulphides |
| 23 | The process of heating to redness and then slow cooling in known as | A. Tempering<br>B. Annealing<br>C. <blockquote style="margin: 0 0 0 40px; border: none; padding: 0px;">Quenching</blockquote><br>D. Hardening |
| 24 | Which of the following is not a proper use of Ni. | A. It is used as catalyst<br>B. It is used in alloy formation<br>C. It is used in the preparation of Monel metal<br>D. It is attached by alkalis |
| 25 | Which of the following is not a property of Ni. | A. it is a soft silvery white metal<br>B. It is malleable and ductile<br>C. It is highly magnetic<br>D. It has high electrical and thermal conductivities |
| 26 | Which of the following metals form volatile carboyl with CO below 80 $^{o}$C | A. Cu<br>B. Fe<br>C. CO<br>D. Ni |
| 27 | Which of the following process is used for the conversion of matte is to nickel. | A. Orford process<br>B. Mond's process<br>C. Electrolytio process<br>D. All |
| 28 | Monel metal is a alloy of Ni which constrains Ni uptown | A. 50%<br>B. 60%<br>C. 70%<br>D. 80% |
| | | A. Silica<br>B. Coke |

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| 29 | In smelting process the ore is mixed with | B. Coke<br>C. Limestone<br>D. All |
| 30 | What % if nickel is present in the major ore Pentlandite. | A. 22%<br>B. 18%<br>C. 14%<br>D. 10% |