**CHEM 102 Recitation Ch 22 Name**

**Q1**. What is the oxidation number of vanadium, V, in the complex compound K3[V(EDTA)(CN)Br]?

 A) +1 B) +5 C) +6 D) +3

**Q2.** What is the coordination number of manganese, Mn, in the complex ion [Mn(en)(C2O4)(CO)2]**-** ?

 A) 8 B) 3 C) 4 D) 6

**Q3.** What is the name of the coordination compound [Fe(NH3)3(CO)3](NO3)3?

|  |  |
| --- | --- |
| A)  | Iron(III)trisamminetriscarbonyl trinitrate |
| B)  | Iron(III) triamminetricarbonyl nitrate  |
| C)  | Triamminetricarbonyliron(III) nitrate  |
| D)  | Triamminetricarbonylferrate(III) nitrate  |

**Q4.** What is the formula of dichlorobis(ethylenediamine)platinum(IV) sulfate?

|  |  |
| --- | --- |
| A)  | Pt[(en)2Cl2]SO4  |
| B)  | [Pt(en)2Cl2]SO4  |
| C)  | [Pt(en)2Cl2]2SO4  |
| D)  | [Pt(en)2Cl2(SO4)]  |

**Q5.** Predict the number of unpaired electrons in the two **octahedral** complex ions [PdI6]3- and [Pd(CO)4(CN)2], respectively? *Note: I- is a weak-field ligand, whereas CO and CN- are strong-field ligands.*

|  |  |
| --- | --- |
| A)  | 4, 0  |
| B)  | 5, 1  |
| C)  | 3, 2  |
| D)  | 4, 2  |

**Q6.** How many isomers exist for the **square planar** species Pt(H2O)(NH3)ClBr?

|  |  |
| --- | --- |
| A)  | 1 B) 2 C) 4 D) 3  |

**Q7.** Which of the pairs below is an optical isomer pair?

 A) (1) and (2) B) (1) and (3) C) (2) and (3) D) (1), (2) and (3)





 **(1) (2) (3)**