

Shriyaji College, University of Delhi
Department of Chemistry
Internal Test (Retest)

Name of the course : GE
Semester : IV
Name of Paper : Coordination compounds and Organometallic compound
Faculty Name : Tamanna
Duration : 1 hour
Date of Test : 23-04-2024
Maximum Marks : 16 Marks
(Scaled down to 8 marks)

Attempt all questions

Que 1 What are organometallic compounds? which of following are organometallic. Give reason (4 Marks)
(i) $K[PtCl_3(C_2H_5)]$ (ii) $LiN(C_2H_5)_2$ (iii) $(C_2H_5)_2Fe$

Que 2 Using MO diagram explain the bonding between C-O, why it is referred as π -acid ligand. (3 Marks)

Que 3 Draw the structure of any one of following by VBT & MOT (both) approach (4 Marks)
(i) $Ni(CO)_4$ (ii) $Fe(CO)_5$

Que 4 Calculate EAN or valence electron count of following (2 Marks)
(i) $[Mn(CO)_5]^-$ (ii) $[Cr(CO)_6]$ (iii) $[Co(CO)_4]$

Que 5 What is synergic effect (2 Marks)

Tamanna