

2024-2025

Semester-V

Paper 7D (Green chemistry)

Assignment-1 :

- 1) Explain the 12 Principles of Green chemistry
- 2) What is A.E & Explain 100% A.E Retn

Assignment-02 :

- 1) What is $ScCo_2$ Explain the Decarbonylation & Dms cleaning process
- 2) Explain Suzuki & Heck retn in Green method

Assignment-03: 1) Explain the MAOS process Explain with 2 applications

Assignment-04: 1) What PTC Explain the mechanism & Application

Assignment-05: Explain the Sol-Gel process

6D - Environmental chemistry :

Assignment-1 ① write on Nuts components (segments) of Environment

② Explain the Natural Resources

Assignment-2 ① sources of Air pollution,

② Classification of Air pollution

③ Acid Rains, photochemical smog, Green House effect
Formation of ozone, Depletion of ozone, Bhopal
or Saste

Assignment-3 ① unique physical, chemical properties of water,

② water Quality and Criteria for finding of water quality

Assignment-4 ① Effect of Toxic chemicals

② structure of the ecosystem, level and types of Biodiversity

SEMESTER-3 : Assignment-I : 1) Explain the Inductive effect
write any 2 applications

(ii) Explain Mesomeric effect

Assignment-II : (i) Explain the 2 preparations of alkenes

(ii) Explain the following retn (a) Mercuration-Demercuration

(b) Ozonolysis

Assignment-III : 1) Explain the conformations of Ethane, Butane & Propane

2) Explain the conformation of Cyclohexane

Assignment-IV 1) Explain the mechanism of Nitration (ii) F.C allylate
aromatic sub.Assignment-V Explain the Huckel rule for Benzoid &
non Benzoid comp.

Semester - II (Major + Minor)

Paper - I

List of Questions : Assignment - I : (i) What is Lattice Energy, factors affecting Lattice Energy

(ii) Explain the covalent character by Fajan's rule.

Assignment - 2 : (i) Explain the VBT.

(ii) What is Hybridization Explain the Hybridization of BF_3 & CH_4
(iii) VSEPR Theory

Assignment - 3 :

(i) Explain MOT by LCAO theory

(ii) Explain the MOED of CO & NO

Assignment No - 04 :

(i) Explain Free e^- theory (ii) VBT of metal bonding

Assignment No - 05

(i) Explain the HSAB theory with Applications.
(Pearson HSAB)

Semester - II

Paper - II (Major)

Assignment No: I* (i) Explain the preparation & structure of diborane.
(ii) Write about silanes.

Assignment No: II : (i) Write the structures of oxoacids of sulphur.

(ii) Write the preparation of a) interhalogen compounds.

b) pseudo halogens.

Assignment No: III :

(i) Write the following characteristics of d-block elements.

a) electronic configuration b) variable valence c) colours.

(ii) Write the combination and catalytic properties of d-block elements.

Semester-IVPaper-II

Assignment-1 1. Explain optical isomerism in Tartaric acid
2. Explain symmetry elements in Organic Compounds

Assignment-2 1. Explain the toxicity of metal ions
2. Discuss the structure & function of haemoglobin

Assignment-3 1. Explain the theories of indicators
2. Write in detail Common ion effect & Solubility product

Assignment-4 1. Derive rate equation for 1st order reaction
2. Determine the order of reaction by half life method and van't Hoff differential method.

Assignment-5 1. Explain mode of action of enzyme & Derive Michael-Menten equation

2. Explain activation complex theory

V. K. J.

11/3/21

A-A