MSc 3rd semester
Application of Spectroscopy-1
INTERNAL ASSIGNMENT
Attempt all the questions.

1. What do you understand about John - Tailor distortion?, Explain
2. What are ambident ligands?, Explain mode of bonding with metal ion.
3. Explain spin spin interactions with suitable examples.
4. Write a short note on vicinal coupling.
5. Write a short note on basic principle of mossbauer spectroscopy.
1. Explain the biological cycle of nitrogen and phosphorus.
2. Write a short note on acid rain.
3. Explain BOD and COD.
4. Explain the biochemical and damaging effects of Hg and Pb.
5. Write a short note on-
   A. London smog
   B. Sevoso (Italy).
MSc 3rd semester
Heterocyclic chemistry
INTERNAL ASSIGNMENT
Attempt all the questions.

1. Explain criteria of aromaticity in heterocycles.
2. What do you understand about anomeric effect?, Explain with suitable examples.
3. Write a short note on synthesis of oxiranes.
4. What are the meso-ionic heterocycles?, Explain in brief.
5. Explain the synthesis of Oxepines.
MSc 3rd semester
Photochemistry
INTERNAL ASSIGNMENT
Attempt all the questions.

1. How many modes are possible for the transfer of excitation energy.
2. Explain the effect of intensity of light on the rate of photochemical reaction.
3. Explain the photochemical cyclisation of alkenes with stereochemistry by suitable examples.
4. Write a short note on Norrish type -1 reaction.
5. Write a short note on Barton reaction.
Attempt all the questions.

1. What is polymerization? Explain condensation polymer.
2. Write a short note on number, mass, volume and viscosity average molecular weight.

4. Explain characteristic property and classification of inorganic polymers.
5. Write a short note on phosphazenes.