

DEPARTMENT OF CHEMISTRY
NATIONAL INSTITUTE OF TECHNOLOGY, KURUKSHETRA
THEORY EXAMINATION
Date: 20-02-2024

Mid-Term 1 (for ECE and EE)

Subject: **Chemistry**
Maximum marks: 5x4 =20

Course code: **CHIC-13**
Time allowed: **50 mins**

Answer to all question

1. Explain different oxidation states (with structure) and synthesis of polyaniline (4 marks.)
2. Give an account on the classification of liquid crystals and explain the characteristics of each phase (4 marks).
3. Explain the conduction mechanism of polyacetylene by formation of polarons and Bipolarons (4 marks).
4. What are stimuli-sensitive polymers, categorize based on external stimuli (4 marks).
5. Describe biodegradable polymers? Give two examples of natural and synthetic biodegradable polymers (4 marks).