## Sessional I -April 2023 B.Tech. ECE CHEMISTRY (BSC 102)

Time: 90 Minutes

All questions are compulsory.

- Q1. Calculate vibrational Degree of Freedom in CCl<sub>4</sub> and Ethyne.
- Q2. What are the applications of NMR spectroscopy?
- Q3. Explain the number of signals in spectrum of following molecules

- Q4. Define the following terms
  - **Wave Number** (i)

- (iv) C<sub>6</sub>H<sub>5</sub>CH=CH<sub>2</sub>
- (ii) Specific optical rotation

Max. Marks:15

- [2] -
- [4]

[1.5 x 4]

[1.5 x 2]