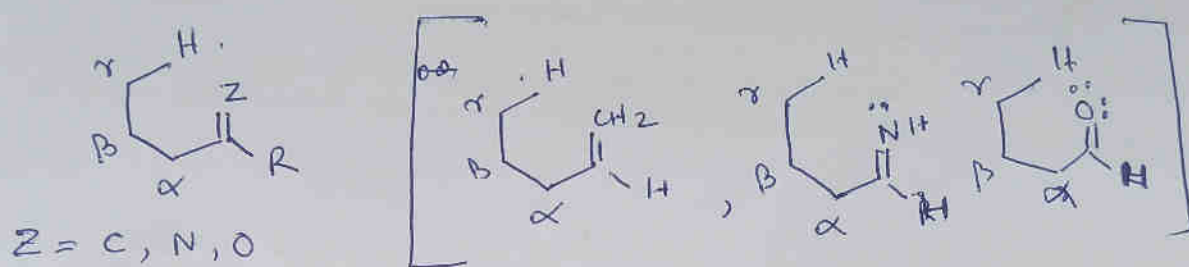
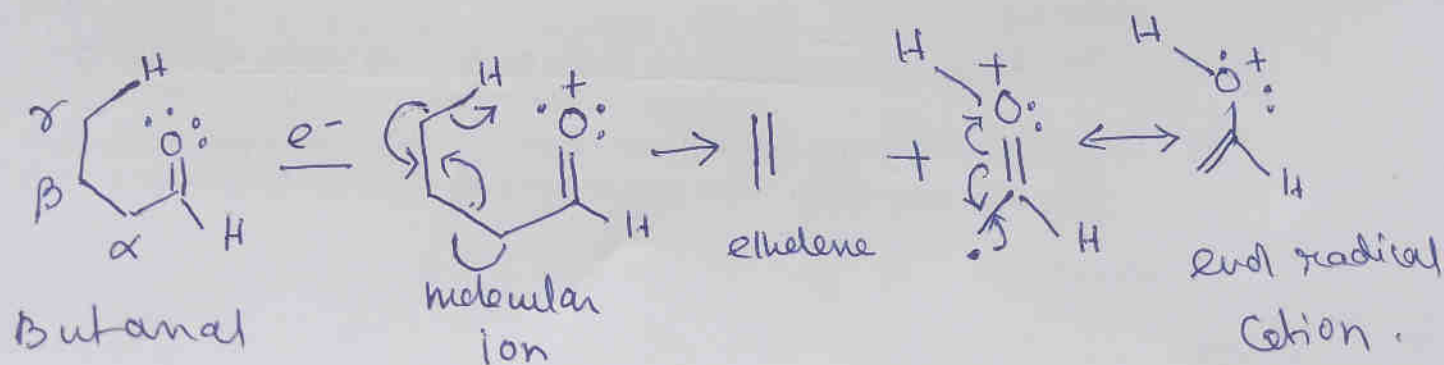


(VI)

The Mc Lafferty rearrangement is a very common reaction observed in Mass spectrometry. For Mc Lafferty rearrangement the molecule must contain at least one γ hydrogen and the functionality which can form radical cation

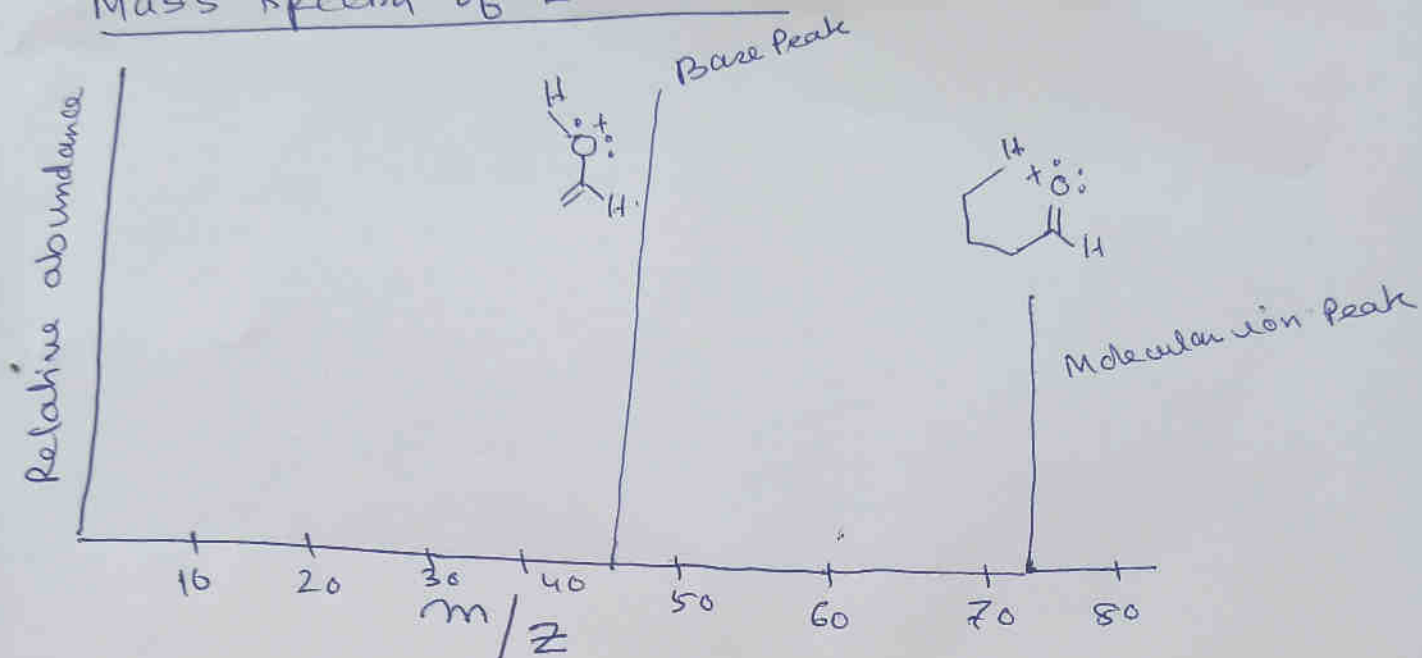


In the Mc Lafferty rearrangement reaction, radical center in molecular ion abstracts one hydrogen from the γ position during which pi bond is formed between the β and γ position and the α bond between the α and β position is broken and produces alkene and a new radical cation



(VII).

Mass spectra of butanal.



Questions:

1. Discuss the basic principle of mass spectrometry.
2. What are different possible fragmentation types?
3. Describe the working of a mass spectrometer.
4. Define molecular ion and base peak.
5. Write note on McLafferty Rearrangement.
6. Draw the mass spectra of n-heptane.