

W-3264(A)

M.Sc. (Fourth Semester) Examination, (Second Chance) June-2020

CHEMISTRY

Paper - MCH-504

Application of Spectroscopy (Organic Chemistry)

Time : Three Hours

Maximum Marks : 85

Minimum Pass Marks : 29

Note : Attempt **all** questions.

Unit-I

- Q.1. Write Woodward-Fieser rules for calculation of λ -max for conjugated dienes. Give examples.

Unit-II

- Q.2. Write intra molecular factors affecting the carbonyl absorption in I.R. spectroscopy.

Unit-III

- Q.3. Write short notes on:
- Chemical exchange.
 - Nuclear magnetic double resonance.

Unit-IV

- Q.4. Explain "COSY technique" with example.

Unit-V

- Q.5. Write short notes on:
- Nitrogen rule.
 - Retro Diel's Alder reaction.

