

W-3264**M.Sc. (Fourth Semester) Examination, 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 various transition, involved in U.V. - visible spectroscopy. 17

Unit-II

Q.2. Write various molecular vibrations, involved in I.R. spectroscopy. 17

Unit-III

Q.3. Explain "Shielding mechanism" in NMR spectroscopy. 17

Unit-IV

Q.4. Discuss general theory of carbon-13 NMR spectroscopy. 17

Unit-V

Q.5. What is MC-Lafferty rearrangement? Explain its mechanism with examples. 17

