

W-3271**M.Sc. (Fourth Semester) Examination, June-2020****CHEMISTRY****Paper - MCH-607****Physical Organic Chemistry***Time : Three Hours**Maximum Marks : 85**Minimum Pass Marks : 29***Note :** Attempt **all** questions.**Unit-I**

Q.1. Discuss Huckel molecular orbital method as a mean to explain treatical methods. 17

Unit-IIQ.2. Write notes on: 17
i) Molecular orbitals of allyl and butadiene system.
ii) Aromaticity**Unit-III**Q.3. Discuss the following: 17
i) Hammond's postulates.
ii) Theory of isotope effect.**Unit-IV**

Q.4. Explain acidity functions and their applications. 17

Unit-VQ.5. Discuss the following: 17
i) Structural and electronic effect on S_N^1 and S_N^2 reactions.
ii) Electrophilic reactivity.