

W-3271(A)

M.Sc. (Fourth Semester) Examination, (Second Chance) 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. Explain advance techniques in PMO or FMO theory.

Unit-II

Q.2. Explain relationship between valence bond configuration mixing and resonance theory.

Unit-III

Q.3. Describe linear free energy relationship Hammett equation and substituent constant.

Unit-IV

Q.4. Explain the following:

- i) Steric strain and their influence on reactivity.
- ii) Curtin Hammett principle.

Unit-V

Q.5. Discuss the following properties of covalent bond.

- i) Force constant.
- ii) Molecular dipole moment.

