

Roll No.

Y – 3210
M.Sc. (Second Semester)
EXAMINATION, May/June 2021
INDUSTRIAL CHEMISTRY
Paper-202(A+B)
(Organic Chemistry-II)
Time : Three Hours

Maximum Marks : 85

Minimum Pass Marks : 29

Note : Attempt *all* questions.

Unit-I

1. Discuss conformational analysis of cyclohexane. Explain energies of various isomers of cyclohexane. 17

Unit-II

2. Explain asymmetric catalytic hydrogenation of olefins, with respect to its mechanism and product control. 17

Unit-III

3. Define cyclo-addition reaction and explain the mechanism of cyclo-addition of $4n$ and $4n + 2$ systems. 17

Unit-IV

4. Explain the following : 17
(i) Oxidation of diols
(ii) Oxidation of sulphides

Unit-V

5. Discuss the following : 17
(i) Reduction of carbonyl compounds by hydride transfer reagents.
(ii) Reduction of azo compounds.