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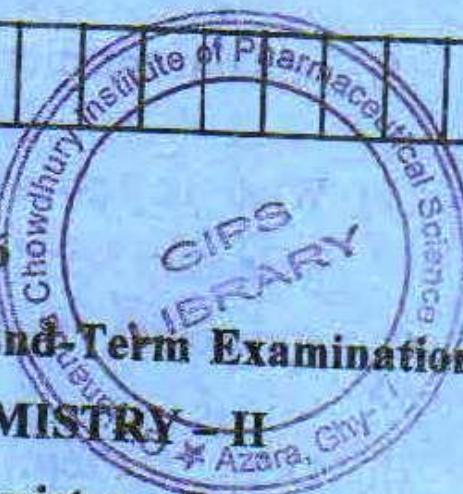
Total No. of printed pages = 4

PY 132208

Roll No. of candidate

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2016



B. Pharm 2nd Semester End-Term Examination
PHARM CHEMISTRY - II
(Organic Chemistry - I)

Full Marks-100 Pass Marks-35 Time-Three hours

The figures in the margin indicate full marks for the questions.

1. Answer any *ten* : 3×10=30
- (a) Write the number of proton, electron and neutron present in sodium atom.
 - (b) Define the term orbital. What is the maximum number of electron present in any orbital ?
 - (c) Write differences between sigma bond and Pi bond.
 - (d) Define the term polarity in covalent bond and what is the unit of polarity ?

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(e) Define metamerism with example.

(f) Explain enantiomer with example.

(g) What is optical isomerism and which two necessary conditions must be fulfilled by a compound to show optical isomerism ?

(h) Define the term carbonium ion with example.

(i) Prepare propane from propene and propanol.

(j) What happens when isopropyl alcohol reacts with Cu at 300°C ?

(k) Explain Markovnikov rule with example.

2. Answer any *eight* : $5 \times 8 = 40$

(a) Briefly describe Bohr's atomic model.

(b) Describe sp^3 hybridisation. How it occurs in NH_3 molecules ?

(c) Define cis and trans isomer. Write an account on their stability.

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(d) Explain how hybridisation satisfy tetra covalency of carbon.

(e) Explain absolute configuration with example.

(f) What are carbanions ? How they are produced ? Give example.

(g) Explain the term homolytic bond fission and hetrolytic bond fission with example.

(h) Write any three methods of preparation of propyne.

(i) Write an account on the weak acidic character of alcohol.

(j) Classify dienes with example.

3. Answer any *three* : $3 \times 10 = 30$

(a) How alcohols are prepared from ester and from alkenes ? Write two reactions to distinguish from 1°, 2° and 3° alcohol.

$1+1+4+4=10$

(b) Define, classify and describe different types of substitution reactions with example. 10

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(3)

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(c) Explain stereo selective and stereo specific reactions with example. Write an example of stereo selective reaction in biological system.

10

(d) Write any two methods of preparation of cyclo alkanes. Write an account on various theories satisfying the stability criteria of cyclo alkanes.

2+6+2=10