

02/07/19

Total No. of printed pages = 4 Assistant Librarian
Bina Chowdhury Central Library
(GIMT & GIPS)
Guwahati - 781017

PY 132208

Roll No. of candidate

--	--	--	--	--	--	--	--	--	--

2019

B.Pharm. 2nd Semester End-Term Examination

**PHARMACEUTICAL CHEMISTRY — II (ORGANIC
CHEMISTRY — I)**

(Old Regulation)

Full Marks – 100

Time – Three hours

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

1. Multiple choice questions (MCQS) : (10 × 1 = 10)
- (i) Which of the following molecule is polar?
- (a) Methane
 - (b) Butane
 - (c) Methanol
 - (d) Carbon tetra chloride
- (ii) Which hybridized orbital carbon used in ethene?
- (a) SP
 - (b) SP²
 - (c) SP³
 - (d) None of the above

[Turn over

- (iii) Which of the following compound is called olefin
- (a) Alkene (b) Alkane
(c) Alkyne (d) Alcohol
- (iv) Which of the following compound is a meso-compound?
- (a) Lactic acid (b) Acetic acid
(c) Formic acid (d) Tartaric acid
- (v) Benzene shows
- (a) Electrophilic addition reaction
(b) Electrophilic substitution reaction
(c) Nucleophilic substitution reaction
(d) Nucleophilic addition reaction
- (vi) Alkene shows
- (a) Conformational isomerism
(b) Optical isomerism
(c) Geometrical isomerism
(d) Tautomerism
- (vii) Halogenation of alkane is example of
- (a) Electrophilic addition reaction
(b) Nucleophilic addition reaction
(c) Free radical substitution reaction
(d) Nucleophilic substitution reaction
- (viii) Methanol is also known as
- (a) Wood alcohol (b) Grain alcohol
(c) Rectified spirit (d) None of the above

(ix) Which of the following compound obeys Huckel rule?

- (a) Naphthalene (b) Cycloheptatriene
(c) Cyclohexane (d) All of the above

(x) Diethyl ether and methyl propyl ether are

- (a) Geometrical isomers
(b) Tautomers
(c) Metamers
(d) Enantiomers

2. Answer the following questions (any six) :

(6 × 15 = 90)

(a) Explain the mechanism of halogenations of methane. Why alkanes are called paraffins? Write down five methods of preparation of alkanes. (5 + 2 + 8 = 15)

(b) Describe the Markovnikov's rule with example. Write down five important chemical reactions of alkene with mechanism. (5 + 10 = 15)

(c) Write down five important chemical reactions of Benzene with mechanism. (15)

(d) Write note on inductive effect, mesomeric effect and electromeric effect citing examples. (15)

- (e) Describe the stability of cycloalkane. Write down five important chemical reaction of cycloalkane. (10 + 5 = 15)
- (f) Write different types of organic reaction with suitable example. (15)
- (g) Define isomerism. Classify isomerism and explain each with suitable example. (15)
- (h) Differentiate SN1 and SN2 reaction and describe the stereo chemistry of these two reactions. (8 + 7 = 15)
-