Roll No…….. **Total No. of Printed Pages: 1**

Total No. of Questions: [09]

B. Sc. Non-Medical (Semester – 1st)
ORGANIC CHEMISTRY-I
Subject Code: BSNMS1104
Paper ID: [22131404]

Time: 03 Hours **Maximum Marks: 60**

Instruction for candidates:

1. Section A is compulsory. It consists of 10 parts of two marks each.
2. Section B consist of 5 questions of 5 marks each. The student has to attempt any 4 questions out of it.
3. Section C consist of 3 questions of 10 marks each. The student has to attempt any 2 questions.

Section – A **(2 marks each)**

Q1. Attempt the following:

a What is Clatherates?
b Explain Effect of hydrogen bonding.
c What are the difference between electrophiles and nucleophiles?
d What is Ozonolysis reaction of alkenes?
e Describe Synthesize alkane by Wurtz reaction.
f Explain Baeyer's strain theory.
g What is Huckel theory of Aromatic compounds?
h What are the difference between isolated, conjugated and cumulated dienes?
i What are isotope effects for determination of reaction mechanism?
j How can be synthesize Benzene from Phenol?

Section – B **(5 marks each)**

Q2. Describe the inductive field effects with suitable examples. 5
Q3. Explain mechanism of free radical halogenation of alkanes. 5
Q4. What are Physical properties of alkane. 5
Q5. Explain Corey- House reaction. 5
Q6. (a) Write a note on acidity of alkynes. 3,2
(b) Explain regioselectivity in alcohol dehydration.

Section – C **(10 marks each)**

Q7. Write note on- 4,3,3
(a) Saytzeff rule (b) Markownikoff's rule (c) Diels-Alder reaction
Q8. What are reactive intermediate? Explain Free radicals, carbenes, arynes and nitrenes 2,8
Q9. Explain Electrophilic substitution reaction of aromatic compounds with the example of nitration and Friedel-Craft's reaction. 10