



P-1612030701020300 Seat No. _____

**Master of Pharmacy Management (Sem. II)
(CBCS) Examination**

July - 2018

**Pharmaceutical Chemistry - II
(Organic Chemistry - I)**

Time : 3 Hours]

[Total Marks : 80]

Instructions :

- (1) Attempt three questions from each section.
- (2) Questions 1 and 5 are compulsory.
- (3) Figure to the right indicates full marks for the respective question.

SECTION - I

1	Explain the following terms : (any seven)	14
(1)	Orbital	
(2)	Electrophile	
(3)	Hyperconjugation	
(4)	Resonance	
(5)	Carbanion	
(6)	Homolysis	
(7)	Aromaticity	
(8)	Markonikov rule	
(9)	Electronegativity	
(10)	Asymmetrical ether.	
2	(A) Enumerate various methods of nitrogen estimation. Explain any one in detail.	7
(B)	Differentiate between E2 and E1 mechanism of elimination with example.	6
3	(1) Explain reaction with mechanism which involves carbene formation.	7
(2)	What are reactive intermediates of carbon? Describe any one in detail.	6

4 (1) Give structural formula of the following : 7

- 3-Choloro-2-Methyl hexane
- 1,3-Butadiene
- Anthracene
- Isopropyl alcohol
- Toluene
- Nitro benzene
- 2-Ethoxy-4-methyl pentane.

(2) Explain Williamson ether synthesis and Fries rearrangement. 6

SECTION - II

5 Answer the following questions : (any **two**) 14

- Explain haworth synthesis of naphthalene.
- Write in details on EAS reactions.
- Explain halogenation of alkane with mechanism.

6 (1) Give preparation of alkane. 7

(2) How you will differentiate primary, secondary and tertiary alcohol ? 6

7 (1) Give methods for preparation of alkynes and alkyl halides. 7

(2) Differentiate : S_N1 and S_N2 reactions (with suitable example and mechanism of action). 6

8 (1) Explain any one method use to determine molecular weight of organic compound. 7

(2) What is hybridization? Explain Sp^3 hybridization in detail. 6