

[Total No. of Questions - 7] [Total No. of Printed Pages - 2]  
(2064)

14800

**B. Pharmacy (Ayurveda) 2nd Semester Examination**

**Pharmaceutical Chemistry (Organic) (N.S.)**

**BPA-223**

**Time : 3 Hours**

**Max. Marks : 70**

*The candidates shall limit their answers precisely within the answer-book (40 pages) issued to them and no supplementary/continuation sheet will be issued.*

**Note :** Question 1 is compulsory and candidates are required to attempt any five questions out of remaining six.

1. Answer the following questions (ANY TEN)

- (i) Differentiate carbocation and carbanion.
- (ii) Discuss inductive effect.
- (iii) Give structure of eclipsed and staggered conformation of ethane.
- (iv) Explain geometric isomers.
- (v) Classify alcohols giving examples.
- (vi) Give structure of naphthalene and anthracene.
- (vii) Explain why vinyl chloride is less reactive than ethyl chloride?
- (viii) Define crown ethers with examples.
- (ix) Give application of iodoform reaction with example.
- (x) Discuss Lowry-Bronsted acid-base with examples.

14800/70

[P.T.O.]

11. Give structure of formic acid and anthranilic acid.
12. Discuss optical activity. (20)
2. (a) Explain enantiomers and diastereomers. (5)  
(b) Define isomers and classify them in detail with examples. (5)
3. (a) Explain  $sp^3$  hybridization. (5)  
(b) Write a note on carbon free radicle and carbene. (5)
4. (a) Differentiate SN1 and SN2 reactions. (5)  
(b) Give physical properties of ethers. (5)
5. (a) Explain Friedel-Crafts alkylation of benzene. (5)  
(b) Give chemical reactions of alkanes. (5)
6. (a) Explain Saytzeff's rule with example. (5)  
(b) Explain Lucas test and its application. (5)
7. (a) Discuss two name reactions which are used for the preparations of aromatic aldehydes only. (5)  
(b) Explain reduction reactions of aromatic carboxylic acids with examples. (5)