

Printed Pages : 3



BOP121

(Following Paper ID and Roll No. to be filled in your Answer Book)

**PAPER ID : 150201**

Roll No.

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**B. Pharm.**

(SEM. II) THEORY EXAMINATION, 2014-15

**PHARMACEUTICAL CHEMISTRY-II****(ORGANIC CHEMISTRY)**

Time : 3 Hours]

[Total Marks : 70

**Note :** Attempt all questions as per instructions**SECTION-A**

1 Attempt all question parts. Each part carries  $1 \times 14 = 14$   
1 marks.

- Why sigma bond is \_\_\_\_\_ than pi bond?
- IUPAC Name of  $\text{Cl-CH}_2\text{-CH}_2\text{-CH}_2\text{-CH}_2\text{-CHO}$   
\_\_\_\_\_
- Write the structure of 2,2,3 fluoro tetra hetanoic acid.
- In Cannizaro reaction used to prepare mainly  
\_\_\_\_\_
- Aromatic compounds mainly consist of \_\_\_\_\_
- $\text{CH}_3$  show \_\_\_\_\_ Inductive effect.

- (g) Chain isomer consist of \_\_\_\_\_ Structure.
- (h) One example of optical isomer is \_\_\_\_\_
- (i) \_\_\_\_\_ is example of Reimer-Tiemann reaction.
- (j) \_\_\_\_\_ follow  $4n+2$  rule.
- (k) Define terms Carbonion with example.
- (l) Give the structure of Cresol.
- (m) Arenes means \_\_\_\_\_
- (n) Define Mannich base.

## SECTION-B

2 Attempt any six questions. **6x4=24**

- (a) Discuss various types of geometrical isomers with suitable examples.
- (b) Explain nucleophilic reaction for Benzene with mechanism.
- (c) Discuss free radical substitution reaction of alkanes with mechanism.
- (d) Explain structure of benzene in detail.
- (e) Discuss aldol condensation reaction with its mechanism.
- (f) Explain Inductive effect with example.
- (g) Why phenol are more acidic than alcohol?

**SECTION-C**

**3** Attempt any four questions. **8×4=32**

- (a) Define Aromaticity, orientation & reactivity of aromatic compounds. Explain mechanism of electrophilic substitution reaction of benzene.
  - (b) Give any two methods of preparation of alkyl halides. Discuss about  $SN^1$  and  $SN^2$  reactions.
  - (c) Explain resonance and inductive effect in detail along with their applications.
  - (d) Define Isomerism. Explain different types of Isomerism with suitable examples.
  - (e) Discuss preparation of Arenes. Write four applications of Grignard reagent.
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