



Printed Pages : 3

PHAR – 122

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

**PAPER ID : 5068**

Roll No.

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**B. Pharm.**

(SEM. II) EXAMINATION, 2006-07

PHARMACEUTICAL CHEMISTRY - II

(ORGANIC CHEMISTRY - I)

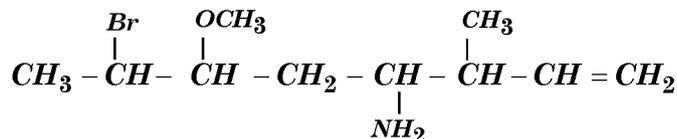
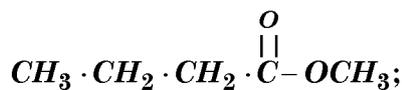
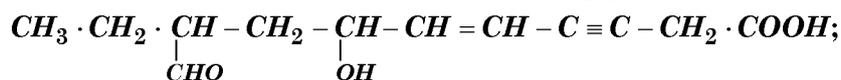
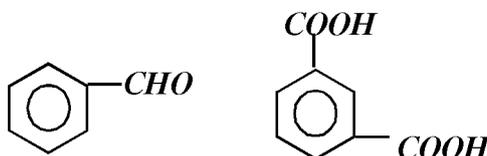
(SPECIAL CARRYOVER EXAMINATION)

Time : 3 Hours]

[Total Marks : 80

Notes : Answer all the questions. All questions carry equal marks.

1 (a) Give IUPAC name of : (any four)



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[Contd...

- (b) Write about different quantum numbers.

**OR**

- (b) Define electrovalent, covalent and co-ordinate bonds.  
(c) Give the chemical structure of :  
Methyl - 2 - bromo - 4 - cyano -  
3 -hydroxypentanoate;  
5 - Bromo - 4 - ethoxy - cyclopent - 2 en - 1 - one;  
2 - Chloro - 3 - bromo - 4, 4 - dimethyl pentanal;  
4 - Methyl - hept - 2 en - 5 yn - 1 - 01.  
(d) Define resonance with suitable examples.

- 2 (a) Write about structural isomerism with suitable examples.

**OR**

- (a) Define enantiomers. How will resolve the enantiomers from a racemic mixture ? Explain with suitable examples.  
(b) Give the different conditions required for conformational analysis. Write about R and S configuration.

- 3 Answer the following :

- (a) Free radical substitution reaction  
(b) Diels-Alder reaction  
(c) Give the important reactions of alkyl halides  
(d) Specific reactions of acetylene;

**OR**

- (d) Electrophilic addition reactions in propene.

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**[Contd...**

- 4 (a) Explain, why are chlorine deactivating but ortho and para orienting group which  $^-NO_2$  deactivating but meta orienting.

**OR**

- (a) Write about Friedel Craft acylation and Friedel Craft alkylation reactions.
- (b) Give the chemical properties of phenol.
- 5 (a) Why are aldehydes and ketones undergo nucleophilic addition reactions ? Explain. Give the reactions of acetaldehyde with  $NH_2OH \cdot HCl$ ;  $NaHSO_3$ ;  $HCHO$  and  $NaOH$  ;  $Ag(NH_3)_2^+ = OH^-$  .

**OR**

- (a) Write about Reformatsky reaction, Knoevenagel reaction and Benzoin condensation with mechanism (any **two**)
- (b) What is Grignard reagent ? Discuss the synthetic importance of Grignard reagent. How will you convert ethanoic acid into ethanoyl chloride, ethanamide; Ethylethanoate; and ethanoic anhydride.
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