Code No. 6038 / S

FACULTY

B. Pharmacy 2/4 I Semester (Suppl.) Examination, April 2016

Subject : Pharmaceutical Oranic Chemistry I

Time : 3 Hrs **M ax. Marks: 70**

Note: Answer all questions. All questions carry equal marks.

1 (a) (i) What is isomerism? Explain structural and spatial isomerism with examples. (7)
(ii) Explain : (7)
(A) Inductive effect, (B) Mesomeric effect (C) Resonance with suitable examples.

OR

(b) (i) Explain SP^1, SP^2 and SP^3 hybridization. (7)
(ii) Discuss the followin with suitable examples
(A) Polarity (B) Solubility (C) Inter molecular forces (7)

2 (a) (i) Write the eneral methods of preparation of alkynes. (7)
(ii) Explain peroxide effect (or) Kharasch effect in electrophilic addition reactions. (3)
(iii) Write a note on the free radical reactions of alkanes. (4)

OR

(b) Explain the followin: (4+5+4)
(i) Sachse – Mohr theory
(ii) Baeyer's strain theory
(iii) Cis trans isomerism

3 (a) (i) ive a ny three methods to synthesize alkyl halides. (6)
(ii) Explain E^1 and E^2 elimination reactions with mechanism. (4)
(iii) Write the differences between Nucleophilic substitution Vs Elimination. (4)

OR

(b) (i) Discuss SN^1 and SN^2 reactions with mechanism and stereochemistry. (8)
(ii) Write abt oxidation of alcohols. (3)
(iii) Write Williamson's synthesis of ethers. (3)

4 (a) (i) Write any three methods each to prepare Ketones and aldehydes. (7)
(ii) Discuss any two named nucleophilic addition reactions of carbonyl compnds with mechanism. (7)

OR

(b) (i) Write any three eneral methods of preparation of carboxylic acids. (6)
(ii) Write synthetic applications of any acetoacetic ester. (6)
(iii) Explain mechanism involved in the hydrolysis of acid derivatives. (2)

5 (a) (i) Write any three important reactions of amines. (6)
(ii) Explain separation of amines by Hinsberś method. (4)
(iii) Write the sinificance of Sand Meyerś reaction. (4)

OR

(b) (i) Write synthesis and applications of aryldiazonium salts. (6)
(ii) ive any three methods to prepare nitroalkanes. (6)
(iii) How do y differentiate primary, secondary and tertiary amines by chemical reactions? (2)

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