

16352(J) 5-16

B. Pharmacy 2nd Semester Examination

Pharmaceutical Chemistry-II (Organic Chemistry) (CBS)

BP-201

Time : 3 Hours

Max. Marks : 60

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 : Candidates are required to attempt five questions selecting one question from each section A, B, C and D of the question paper and subparts of the questions in section E are compulsory.

SECTION - A

- (a) What is carbocations; define the structure of carbocations. (6)
- (b) How are alkyl halides prepared? Describe their synthetic utility. (6)
- (a) Write a note on Wurtz reaction. (6)
- (b) How is ethyl alcohol manufactured from molasses or starch? (6)

SECTION - B

- (a) What are cycloalkanes? Describe the stability of cycloalkanes. (6)
- (b) How are dienes prepared? Describe their important reactions. (6)
- How are aliphatic carboxylic acid prepared? Describe the important reactions. (12)

[P.T.O.]

SECTION - C

- (a) Explain why phenol is more acidic than ethyl alcohol. (6)
- (b) What is Friedel-Crafts alkylation and their mechanism? (6)
- Discuss the mechanism of S_N1 and S_N2 reactions of alkyl halides. (12)

SECTION - D

- (a) How are ketones prepared? Describe their important reactions. (6)
- (b) Write short note on Reimer-Tiemann reaction and Kolbe reaction. (6)
- Explain the resonance stabilization of allyl cations: hyper conjugation. (12)

SECTION - E

- Attempt all questions.
 - What happens when ethyl chloride is treated with sodium metal?
 - A triple bond consists of.....bonds.
 - What happens when sodium benzoate is heated with soda-lime?
 - The number of structural isomers of alcohols with molecular formula C_4H_9OH is.....?
 - Grain alcohol is another name for.....?
 - Lucas test is used to determine the type of.....?
 - Phenol is acidic because of.....?
 - Ethers react with cold concentrated H_2SO_4 to form.....?
 - Aliphatic primary amines react with cold nitrous acid to form.....?
 - Hinsberg's reagent is.....acid.
 - A primary amine can be identified by using.....+ KOH.
 - The reduction of ketone always gives.....alcohol. (1×12=12)