



KT-1832

Seat No. _____

M. Sc. (Sem. IV) Examination

April / May - 2013

CHN - 704 B : Organic Photochemistry

Time : 2 Hours]

[Total Marks : 50

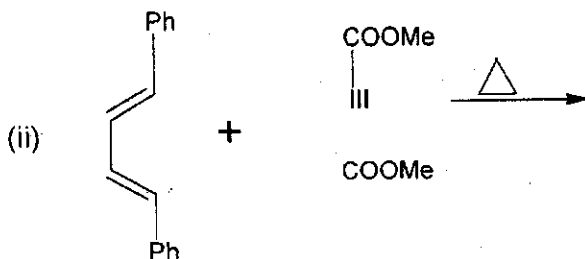
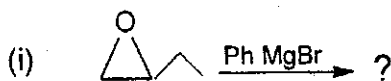
- 1 Answer any four of the following : 20
- (a) Give suitable example and explain disconnection approach.
 - (b) What is regioselectivity ? Discuss regioselective alkylation of ketones and in Michal reactions.
 - (c) Discuss the use of nitro compound in organic synthesis.
 - (d) Discuss the important of the order of event in organic synthesis.
 - (e) Discuss the one-group c-c disconnections with suitable example.
 - (f) Write a short note on use of acetylenes (alkynes) in Organic synthesis.
- 2 Answer any four of the following : 20
- (a) Discuss the two group c-x disconnections with suitable example.
 - (b) Discuss two group c-c disconnection with reference to Diels-alder reaction.
 - (c) Define the terms :
 - (1) Stereospecificity
 - (2) Stereoselectivity
 - (3) Endo selectivity.

- (d) How will you synthesis fredericamycin A, discuss the key steps involved in it ?
- (e) How will you Synthesise Vitamine D₂ ?
- (f) Give outline of the total synthesis of reserpine.
- (g) Give synthesis of alkenes and cyclo alkanes using thiophnes.

3 Answer the following :

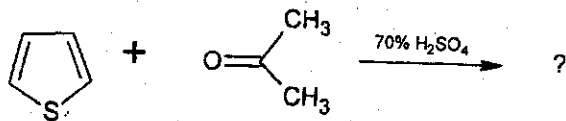
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- (a) What is Stereo electronic effect ?
- (b) What is Synthons ?
- (c) Define the term Function group inter conversion.
- (d) Complete the following reaction :



- (e) What is Umpolung ?
- (f) What is Dieckmann Condensation ?
- (g) Why the tetrahydropyranyl ether is used as a hydroxyl protecting group ?
- (h) What is the Protecting group.

(i) Complete the following reaction.



(j) Complete the reaction.

