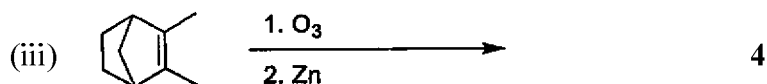
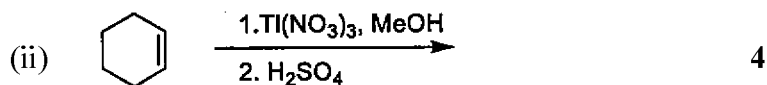
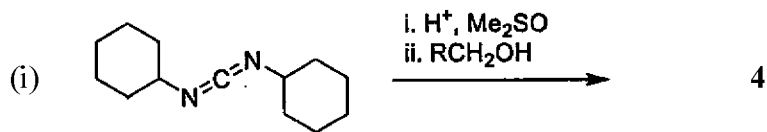
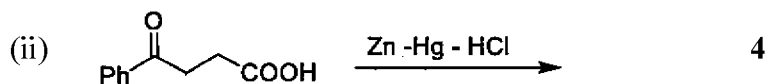
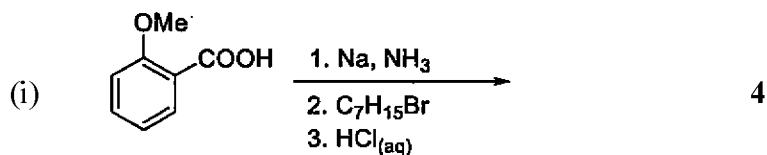


6. Rationalize the following transformation with a suitable mechanism :



Section D

7. Write the product and mechanism of the following reactions :



Roll No.

Total Pages : 05

LMDA/D-23

6538

ORGANIC CHEMISTRY SPECIAL-I
CHEM-304

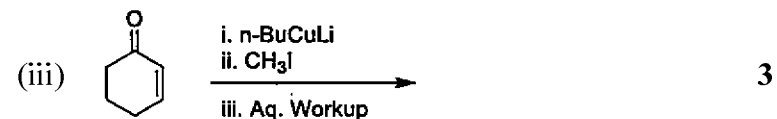
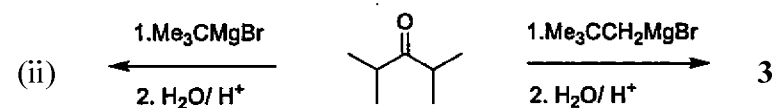
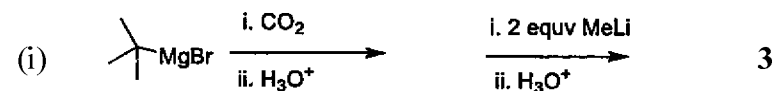
Time : Three Hours]

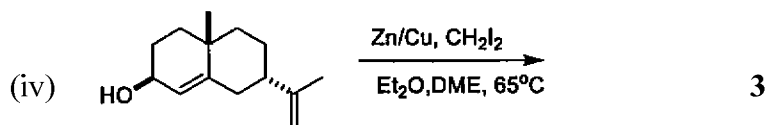
[Maximum Marks : 60]

Note : Attempt *Five* questions in all, selecting at least *one* question from each Section. All questions carry equal marks.

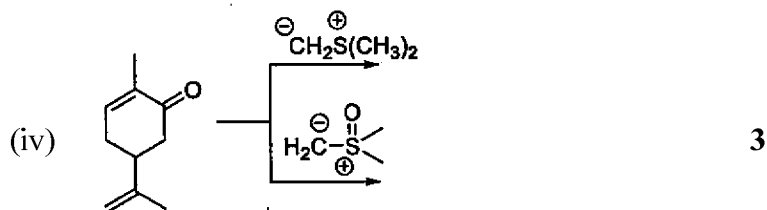
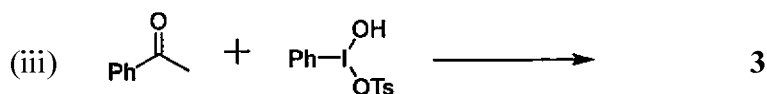
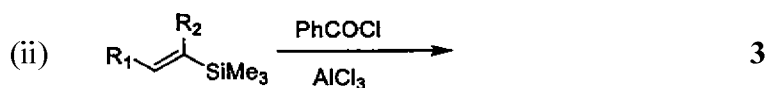
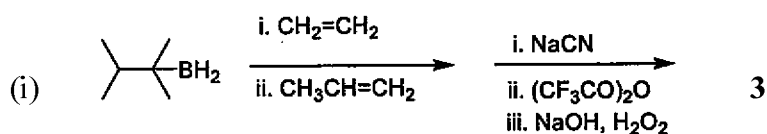
Section A

1. Write product of the following transformations and propose a mechanism for each transformation to explain the observed regioselectivity and stereochemistry.



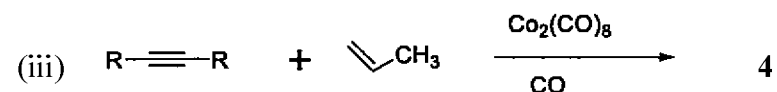
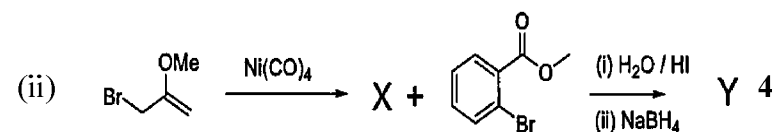
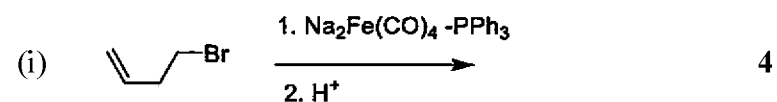


2. Complete the following organic reactions and propose a mechanism for each transformation to explain the observed regioselectivity and stereochemistry.



Section B

3. Complete the following chemical conversion with suitable mechanism :

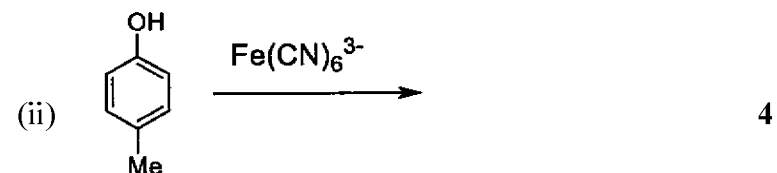
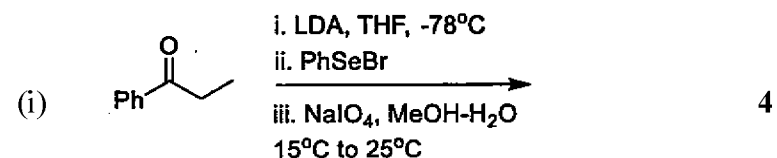


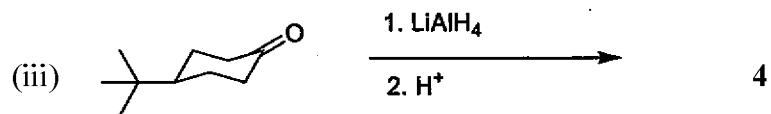
4. Explain the role of the following organometallic reagent in carbon-carbon bond forming reaction.

- (a) Reaction of σ -organochromium 4
 (b) Tebbe Reagents 4
 (c) (η^2 -alkene)palladium(II) complex. 4

Section C

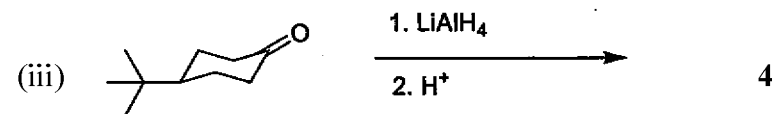
5. How will you carry out the following reactions and suggest a suitable mechanism :





8. Explain the following with suitable example(s) and mechanism :

- (i) Rosenmund's Reduction. 4
- (ii) Reductive amination. 4
- (iii) Why reduction of alkynes by electron transfer method gives trans-product ? 4



8. Explain the following with suitable example(s) and mechanism :

- (i) Rosenmund's Reduction. 4
- (ii) Reductive amination. 4
- (iii) Why reduction of alkynes by electron transfer method gives trans-product ? 4