

M.Sc. Examination, 2018
Semester-III
Chemistry(Elective)
Course: CH-917
Optional (Organic Chemistry)

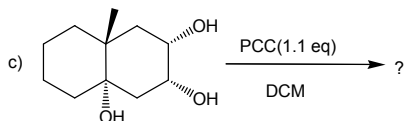
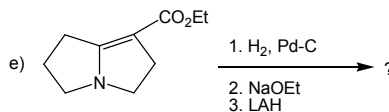
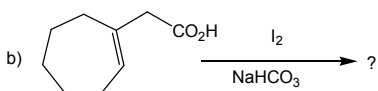
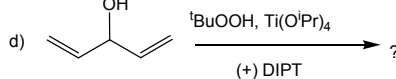
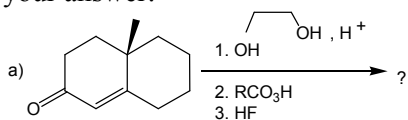
Time: Three Hours

Full Marks: 40

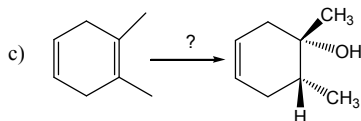
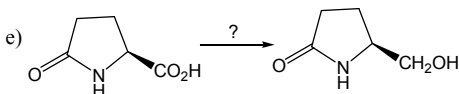
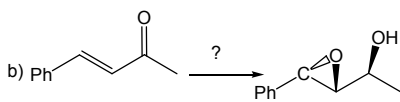
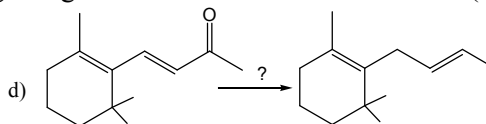
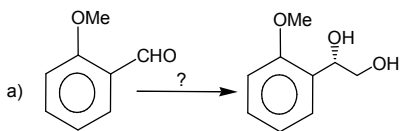
Questions are of value as indicated in the margin.
 Answer **four** questions, taking **any two** from **each group**.

Group-A

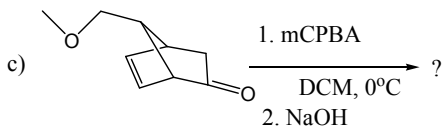
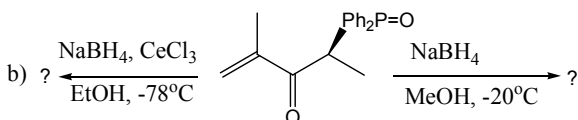
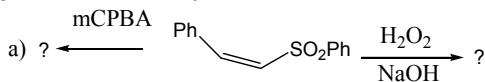
1. Predict the structures of the products with appropriate stereochemistry (if applicable). Justify your answer: 5x2



2. Carry out following conversions suggesting the structures of the intermediate(s) if any: 5x2



3. Give the structures with appropriate stereochemistry of the products in each case. Give justification for your answers:

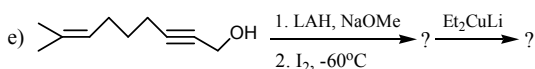
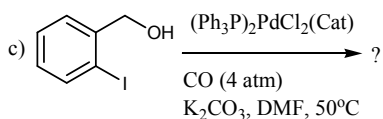
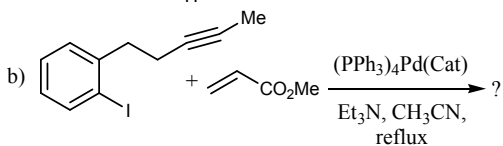
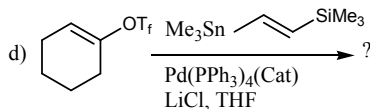
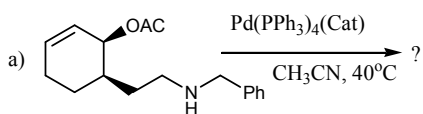


(2+2)+(2+2)+2
P.T.O.

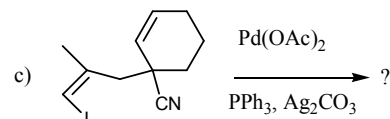
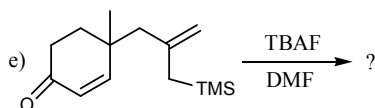
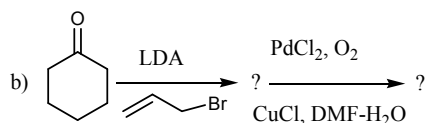
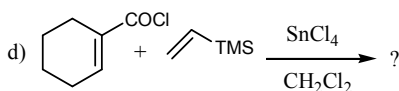
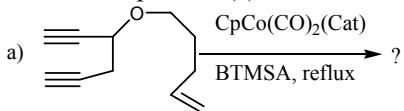
(2)

Group-B

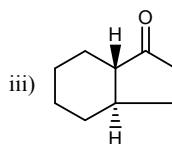
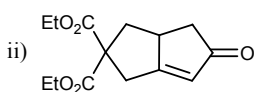
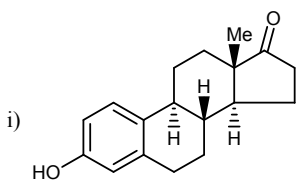
4. Predict the products with appropriate stereochemistry where applicable of the following transformations: 5x2



5. Predict the product(s) of the following with plausible reaction mechanism (*any five*): 5x2



6. a) Propose the synthetic route for the following molecules from available starting materials: 3x2



- b) Carry out the following transformations:

2+2

