

BIRLA INSTITUTE OF TECHNOLOGY, MESRA, RANCHI
(MID SEMESTER EXAMINATION)

CLASS: IMSC
BRANCH: CHEMISTRY

SEMESTER: V
SESSION : MO/2018

SUBJECT : IMC5003 ORGANIC CHEMISTRY-I

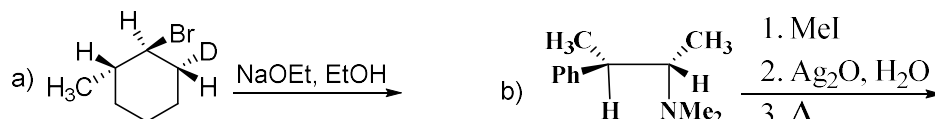
TIME: 1.5 HOURS

FULL MARKS: 25

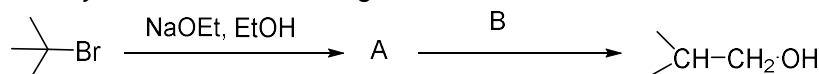
INSTRUCTIONS:

1. The total marks of the questions are 30.
2. Candidates may attempt for all 30 marks.
3. In those cases where the marks obtained exceed 25 marks, the excess will be ignored.
4. Before attempting the question paper, be sure that you have got the correct question paper.
5. The missing data, if any, may be assumed suitably.

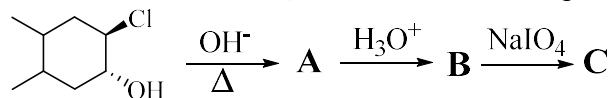
Q1 Write the structure of major product. [2+3]



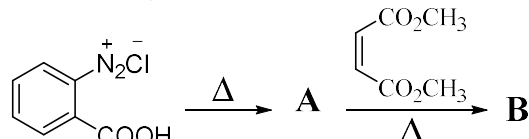
Q2 (a) Identify A and B in the following reaction. [2]



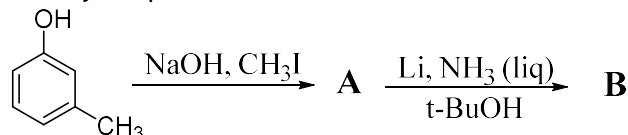
(b) Write the structures of A, B and C in the following reaction. [3]



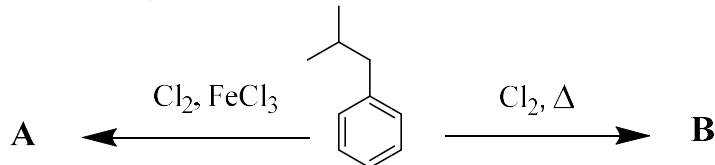
Q3 (a) Identify compound A and B. [2]



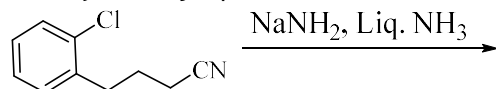
(b) Identify compound A and B. [3]



Q4 (a) Identify compound A and B. [2]



(b) Identify the major product. [3]



Q5 (a) Give one example of transmetalation reaction. [2]

(b) Discuss the mechanism involved in decarboxylation of carboxylic acid in Soda-lime method. [3]

Q6 (a) Draw the transition state involved in Simon-smith cyclopropanation reaction. [2]

(b) Discuss the carbanionic mechanism proposed in Clemmensen reduction. [3]