

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT
MAKEUP EXAMINATION- APRIL 2018
B.Tech IInd Semester

COURSE CODE: 14B11BT211
COURSE NAME: GENRAL CHEMISTRY
COURSE CREDITS: 4

MAX. MARKS: 25

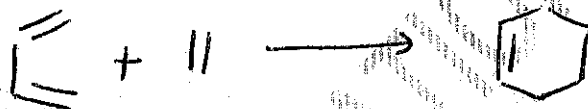
MAX. TIME: 1.5 Hr

Note: All questions are compulsory. Carrying of mobile phone during examinations will be treated as case of unfair means. Use of calculator is allowed

Q1. Answer the followings questions.

[2.5x4=10]

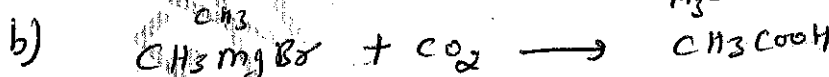
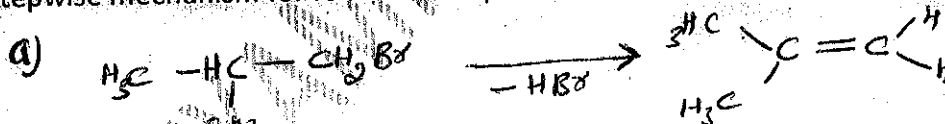
- What is the difference between conformation and configuration? Draw the Newman conformations of chair form of cyclohexane. Explain stability of cyclohexane conformations.
- What is pKa? How will you separate a mixture of benzoic acid and phenol using appropriate reagents?
- Draw all possible stereoisomers of 2-bromo-4-chloropentane.
- Consider the following reactions and predict whether at high temperature reaction would favor reactant or product? Explain your answer?



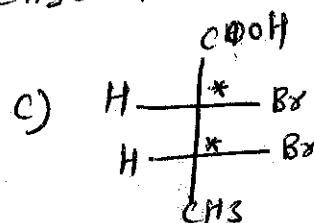
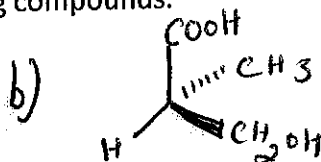
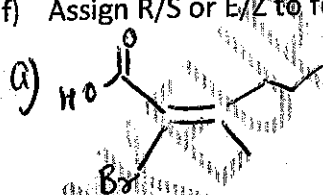
Q2. Answer/explain the following questions.

[3x5=15]

- e) Explain stepwise mechanism for formation of product in the reactions given below.



- f) Assign R/S or E/Z to following compounds.



- Draw structures of different types of diene. Explain reaction of 1,3butadiene with HBr.
- What is optical activity? How specific rotation is different from optical rotation? How optical purity is calculated explain with examples?
- Give IUPAC name of the following compounds.

