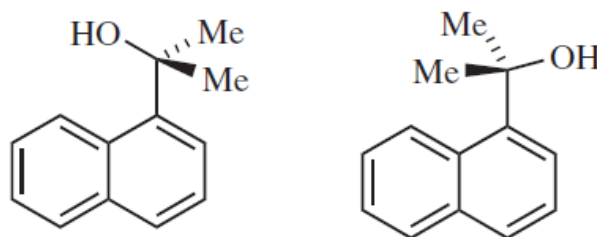


Answer any five questions:

5 X 2 = 10

Q1. Identify and explain the relationship between the following two compounds:



Q2. Draw the most stable conformers of 2-fluoroethanol and 1, 2-dichloroethane.

Q3. Account for the fact that phenyl *sec*-butyl ketone undergoes easy racemization in alkali solution??

Q4. How can you prove that nitration of benzene is a two step process?

Q5. What is nucleophilic catalysis? Explain it with a proper example.

Q6. Can kinetic studies be employed as a tool to determine reaction mechanisms?

Q7. How is the energy of activation of a chemical process related with temperature?

Send your answer script in pdf format within 12.30 pm mentioning your University Roll No. in the subject line to sm.missionexam@gmail.com