UNIVERSITY OF THE PUNJAB

B.S. 4 Years Program / Sixth Semester – Spring 2022

Roll No. .....

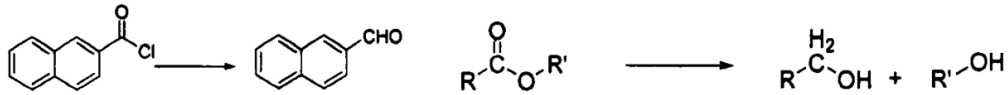
Paper: Organic Chemistry **Course Code: CHEM-317** **Time: 3 Hrs. Marks: 60**

THE ANSWERS MUST BE ATTEMPTED ON THE ANSWER SHEET PROVIDED

Q.1. Answer the following short questions. (6x5=30)

i. Explain Oppeneaur oxidation give mechanism and describe its role in oxidation of secondary alcohols?

ii. How would you carry out following conversions? Give name and mechanism?



iii. Describe Perch method for detection of free radicals.

iv. Describe instrumentation and sample handling in UV/VIS spectrophotometer.

v. Describe Clemmensen and Wolf-Kishner reduction with mechanisam for aldehydes and ketones.

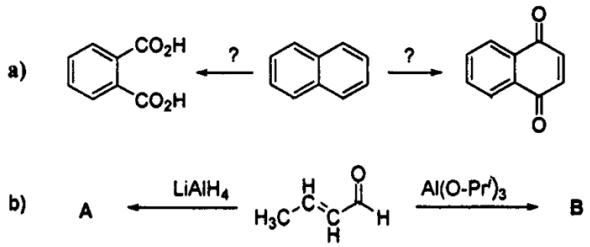
vi. Define lambert beer law and Differentiate hypochromic and bathochromic shift?

Answer the following questions.

Q. No. 2 i. Give mechanism of Corey-Kim oxidation of primary alcohols to aldehyde. (5)

ii. What is reductive amination? Give different variations and modifications of reaction. (5)

Q. No. 3 Complete the following reactions and draw their mechanisms: (2 x 5 = 10)



Q. No. 4. i. Write a note on applications of infrared spectroscopy. (5)

ii. Explain the method for the selective oxidation of $ArCH_3$. (5)