

SESSIONAL EXAMINATION-2021, S. B. DEORAH COLLEGE

CHEMISTRY (Major, 6th Semester)

PAPER M 603 (Organic Chemistry)

Total marks: 30

Time: 90 mins

Answer the following questions:

1. What is isoprene rule? 1
2. Show with reactions the conversion of glucose to fructose. 2
3. Draw the structure of citral and mark off the isoprene units. 2
4. Draw the Fisher projection and Haworth projection formula of galactose. 2
5. Give one example of Norrish Type-I and Norrish Type-II reaction each. 2
6. Give the name and structure of sugar component present in DNA and RNA. 3
7. Show the products and reactions involved when D-arabinose is made to undergo Killiani Fischer synthesis. 3
8. Write the name of purine and pyrimidine bases present in DNA. Show how these bases stabilize the double helix structure of DNA molecules. 4
9. Describe the structure and functions of hemoglobin. 5
10. Write the product with mechanism of the following photochemical reactions. 6

