

UNIVERSITY OF JAFFNA, SRI LANKA
 FACULTY OF ALLIED HEALTH SCIENCES
 THIRD YEAR FIRST SEMESTER EXAMINATION IN BPharmHons- 2020
 PHACN 3124 CHEMISTRY OF NATURAL PRODUCTS

Date: 26 MAY 2022

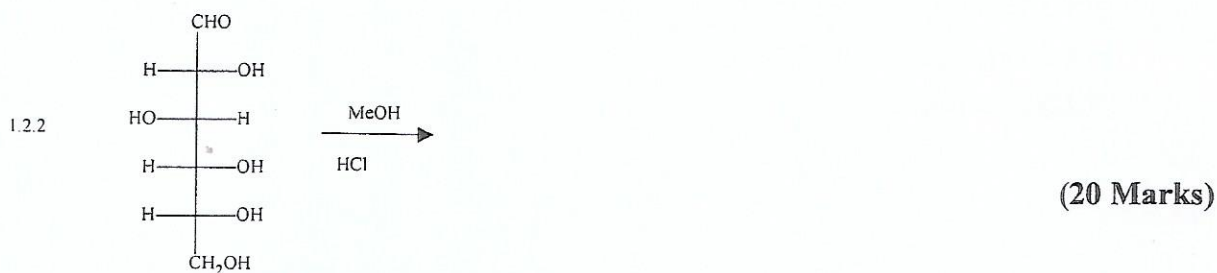
Time: 03 Hours

Answer All EIGHT Questions.

Answer Part A, Part B in separate answer books

Part A

1. 1.1 Write short notes on following:
 - 1.1.1 Anomeric effect (20 Marks)
 - 1.1.2 Carbohydrate vaccine (40 Marks)
- 1.2 Deduce the structure of the product of following reactions and give a mechanism for its formation.



PART B

2. 2.1 Define alkaloids. (10 Marks)
- 2.2 Briefly describe physical characteristics of alkaloids. (30 Marks)
- 2.3 Briefly explain the reactions involved in the biosynthesis of alkaloids. (60 Marks)

3. 3.1 Write a brief account on,
 - 3.1.1 pyrrolidine alkaloids. (40 Marks)
 - 3.1.2 Physotigmine. (60 Marks)

4. 4.1 Write down types of glycosides based on the linkage with examples. (40 Marks)
4.2 Briefly explain the functions of glucosides in plants. (20 Marks)
4.3 Write a short note on anthracene glycosides. (10 Marks)
5. 5.1 Write down physical properties of followings:
5.1.1. Lipids (20 Marks)
5.1.2. Triglycerides (20 Marks)
- 5.2 Write short note on followings:
5.2.1 Transfat (30 Marks)
5.2.2 Castor oil (30 Marks)
6. 6.1 Define terpenoids. (10 Marks)
6.2 Write down the uses of followings:
6.2.1 Cymene (15 Marks)
6.2.2 Limonene (15 Marks)
6.2.3 Geraniol (15 Marks)
6.2.4 Citral (15 Marks)
- 6.3 Briefly describe the chemical properties of terpenoids. (30 Marks)
7. 7.1 Write down the chemical properties of protein. (20 Marks)
7.2 7.2.1 What is proteomics? (20 Marks)
7.2.2 Briefly discuss the techniques involved in separation and identification of proteomics. (60 Marks)
8. 8.1 Write short note on followings:
8.1.1 Diastase (25 Marks)
8.1.2 Pepsin (40 Marks)
8.1.3 Vitamin K (35 Marks)

Allied Health Sciences.