

Seat No.: _____

Enrolment No. _____

PARUL UNIVERSITY
DEPARTMENT OF PARAMEDICAL AND HEALTH SCIENCES
1st Internal Exam, March 2022

Year: 1st year B.Sc. (New)

Date: 08/03/2022

Subject code: 19100162

Time: 10:30 am

Subject Name: Biochemistry

Total Marks: 30 marks

Instructions:

1. Attempt all questions from each section
2. Figures to the right indicate full marks.
3. Make suitable assumptions wherever necessary

Q.1. Answer the following Questions (Any Two) (Each 7.5 Marks) (15)

1. What are carbohydrates? List down the functions of carbohydrates.
2. What is pH? Derive Henderson-hasselbalch equation.
3. Write about the general reactions of monosachharides.

Q.2. Answer the following Questions (Any Two) (Each 5 Marks) (10)

1. What is mole fraction? A solution is prepared by adding 2 moles alcohol to 10 moles of water. Calculate the mole fractions of alcohol and water.
2. Give the classification of carbohydrates with examples.
3. 80g NaOH is used to prepare 1000mL solution. Calculate the molarity and normality of the solution.(Mol wt =40g/mol)
4. What are mucopolysaccharides? What are their functions? Give some examples.

Q.3. Answer the following Questions (Any Five) (Each 1 Mark) (05)

1. How will you prepare 3% 100 mL NaCl solution?
2. What are homopolysachharides? Give examples.
3. What is a pH meter?
4. Glucose + galactose =
5. Define normality.
6. Define molarity.
7. What are pH indicators? Give examples.