

Maharaja Krishnakumar Bhavnagar University

First Year Post Basic B.Sc Nursing

Subject: Biochemistry and Bio Physics

Date:-

Time:-

Instruction: - 1. Write each section in a separate answer book.

2. Tie both sections separately

3. Figure to the right indicate full marks

4. Draw diagrams wherever necessary

[Total Marks: 75]

Section –I (Biochemistry) (38 marks)

Q.1 Long Essay. (Any Two) 2*10=20

- (1) Explain Urea cycle in detail
- (2) Explain glycolysis and its regulation
- (3) Explain factors affecting enzymes activity

Q.2 Write short notes on following (any three) 3*5=15

- (1) Lipoprotein and their functions.
- (2) Role of nucleic acid in protein synthesis.
- (3) Blood glucose regulation and glucose tolerance test

Q.3. Briefly answer on following (Any one) 1*3=3

- (a) How enzymes are useful in diagnosis
- (b) What are the saturated and unsaturated fatty acids?
- (c) Patient with impaired hearing.

Section II (Biophysics) (37 Marks)

Q.4 Long Essay (Any one) 10

- (a) Explain human body is machine
- (b) What is law of Floatation and explain Hydrometer in detail

Q.5 Answer on following. (Any six) 6*2=12

- (a) What is traction
- (b) Define speed and velocity
- (c) Differentiate fundamental unit and derived units.
- (d) What is laser? Write only its uses in medicine.
- (e) Define power and give its unit.
- (f) What is hypermetropia? How it can be corrected?
- (g) What is an isotope?

Q-6. Write short notes on following. (Any three) 3*5=15

1. Effect of gravitation force on body
2. Biological effect of light and their use in therapy.
3. Clinical thermometer
4. Sterilization with heat.