THE TAMIL NADU DR.M.G.R. MEDICAL UNIVERSITY

[PBBSCN 0224]   **FEBRUARY 2024**   Sub. Code: **4884**

**POST BASIC BACHELOR OF SCIENCE IN NURSING
DEGREE EXAMINATION**
(Regulations for candidates admitted from 2010-2011 Session onwards)
FIRST YEAR
PAPER III – BIOCHEMISTRY AND BIOPHYSICS
Q.P. Code: 684884

Time : Three Hours   Maximum : 75 Marks
Answer Section A and B in a SEPARATE answer book.
SECTION - A
(BIOCHEMISTRY)

I. Elaborate on: **(1 x 15 = 15)**

1. Draw a Eykaryotic cell and label its parts and explain briefly.

II. Write notes on: **(3 x 5 = 15)**

1. Define Glycolysis – add a note on its energetics.
2. Explain Metabolic alkalosis and its compensatory mechanism.
3. Explain the Urea cycle and write its significance.

III. Short answers on: **(5 x 2 = 10)**

1. What is meant by Glycosuira?
2. Define Osmosis and Diffusion.
3. Classify Diabetes mellitus.
4. Hypokalemia.
5. Name the enzymes of clinical importance in Myocardial infarction.

SECTION - B
(BIOPHYSICS)

I. Elaborate on: **(1 x 15 = 15)**

1. What are X-rays? List the properties and uses of X-rays in various fields.

II. Write notes on: **(2 x 5 = 10)**

1. What is Noise pollution? How it will be prevented?
2. Explain the use of heat for Sterilization.

III. Short answers on: **(5 x 2 = 10)**

1. What are the differences between Mass and Weight?
2. Law of conservation of energy.
3. What are the ways of minimizing friction?
4. Myopia and Hyper-metropia.
5. What is ocular pressure?

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