

**POST BASIC BACHELOR OF SCIENCE IN NURSING  
DEGREE EXAMINATION  
FIRST YEAR – NON SEMESTER  
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. Describe the  $\beta$ -oxidation of fatty acids. Mention the Energetics and its deficiency.

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

1. Transamination and Deamination.
2. Glycogen storage diseases.
3. Cardiac related enzymes.

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

1. Translation.
2. Cytosol and cytoskeleton.
3. Normal levels of AST and ALT.
4. Homo-polysaccharides.
5. Normal cholesterol levels in blood.

**SECTION - B  
(BIOPHYSICS)**

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

1. Describe the various types of pulleys and explain the lever mechanism in the human body.

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

1. Explain different theories to explain the nature of light.
2. Pace-maker.

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

1. What are the differences between mass and weight?
2. Relative density.
3. Astigmatism.
4. State Fleming left hand rule.
5. What is Echo?

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