B.Sc.(N) [Post Basic (1st Year)]

BF/2017/02

Biochemistry & Biophysics

[New Scheme-w.e.f. 2007 admission]

Time : 3 Hours **Max Marks : 75**

Note: 1.) ***Attempt all questions.***

2.) ***USE SEPARATE ANSWER BOOK FOR EACH PART.***

3.) ***The Student must write separate Q.P. Code in the space provided on the Title Page of the respective Answer Book.***

SECTION-A [38 marks]

QP Code: PBN103 **(Biochemistry)**

1. (i)	(a)	Draw a well labelled diagram of Eukaryotic cell showing different organelles.	[2]
	(b)	Malabsorption Syndrome.	[4]
	(c)	Factors responsible for regulation of water.	[4]
		OR	
(ii)	(a)	Anion Gap.	[2]
	(b)	Classifications of Proteins.	[4]
	(c)	Essential Fatty Acids.	[4]
2.	(a)	Stereoisomerism.	[2]
	(b)	Cori's Cycle.	[4]
	(c)	Electron Transport Chain (ETC) and its inhibitors.	[4]

3. **Describe brief (Any TWO) :** [2x3=6]

(a) Amphibolic role of Tri- Carboxylic Acid (TCA) (b) Fatty Liver

(c) Plasma Proteins and their functions. (d) VLDL

4. **Write Short Notes on any FOUR of the following :** [4x3=12]

(a) Importance of Cholesterol.
(b) Glycogen Storage Disease.
(c) Isoelectric pH.
(d) Regulation of Blood Glucose.
(e) Non-protein Nitrogenous Compounds.
(f) Role of liver in fat metabolism.

SECTION-B [37 marks]

QP Code: PBN104 **(Biophysics)**

1. (i)	(a)	SI units.	[2]
	(b)	Difference between Vector and Scalar Motion.	[4]
	(c)	Discuss application of Forces in Nursing.	[4]
		OR	
(ii)	(a)	Specific gravity.	[2]
	(b)	Heat Sterlisation.	[4]
	(c)	Relationship between Energy, Frequency and Light.	[4]
2.	(a)	Effect of gravitational Force on Human Body.	[2]
	(b)	Principles of Body Mechanics.	[3]
	(c)	Effect of Heat on Matter.	[4]

3. **Describe briefly (Any TWO) :** [2x3=6]

(a) Arterial and Venous Pressure (b) EEG

(c) Pacemakers (d) Role of Light in therapy.

4. **Write Short Notes on any FOUR of the following :** [4x3=12]

(a) Radiation protection and its limitations (b) Flow of electricity in Solids

(c) Electromagnetism (d) Importance of temperature regulation

(e) Structure of Atom (f) Radioisotopes
