



MS-020107

Seat No. _____

First Year Post Basic B. Sc. (Nursing) Examination

January - 2018

Biochemistry & Biophysics

Time : 3 Hours]

[Total Marks : 75

- Instructions :**
- (1) No. to the **right** side indicates marks.
 - (2) Each section should be written in separate main answer books.
 - (3) Attempt part of a question at one place.
 - (4) Draw diagram wherever it's **necessary**.

SECTION - I (Biochemistry) (38 Marks)

- 1** Long essay : (any 2 out of 3) **2×10=20**
- (1) Give a detailed account on regulation of blood Glucose level. How is Glucose Tolerance Test (GTT) carried out ?
 - (2) Write the Neoglucogenesis (Glucogenesis) process in detail and explain the key enzymes action. on it.
 - (3) Explain the various factors which influence enzyme activity. Give the diagnostic importance of the enzymes-Transaminase and Alkaline phosphatase.
- 2** Short essay : (any 3 out of 5) **3×5=15**
- (1) Ketone Bodies
 - (2) Plasma proteins
 - (3) Urea cycle
 - (4) Lipoproteins
 - (5) Maintenance of fluid and electrolyte balance.

- 3** Short answers : (any 1 out of 2) **1×3=3**
- (1) Name the abnormal constituents of urine.
 - (2) Biological importance of lipids.

SECTION - II (Biophysics) (37 Marks)

- 1** Long essay : (any one out of two) **1×10=10**
- (1) Explain about measurements of pressure in the body.
 - (2) Explain about common electronic equipments used in patient care.
- 2** Short essay : (any 3 out of 4) **3×5=15**
- (1) Explain about Regulation of body temperature
 - (2) Explain about Pace maker and Defibrillator
 - (3) Uses of Radioactivity, Ultrasound and light in medicine.
 - (4) Application of principles of Gravity in nursing
- 3** Short answers : (all compulsory) **6×2=12**
- (1) ECG
 - (2) EEG
 - (3) EMG
 - (4) ECT
 - (5) MRI-scan
 - (6) CT-scan.
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