

POST BASIC BACHELOR OF SCIENCE (NURSING)
F. Y. P. B. B. Sc. (Nursing) : WINTER : 2023
SUBJECT : BIOCHEMISTRY & BIOPHYSICS

Day : Saturday

Time : 10:00 AM-01:00 PM

Date : 20-01-2024

W-5658-2023

Max. Marks : 75

N.B.

- 1) All questions are **COMPULSORY**.
- 2) Figures to the right indicate **FULL** marks.
- 3) Answers to both the sections should be written in **SEPARATE** answer book.

SECTION – I

- Q.1** Write short answers on any **FIVE** of the following: **(5X2=10)**
- a) What are the types of endoplasmic reticulum? Give functions.
 - b) What is DNA? Give its function.
 - c) What are the functions of cell-membrane?
 - d) What is glycogenesis and glycogenolysis?
 - e) What is GTT? Give its importance.
 - f) Enlist different lipoproteins.
 - g) Give two factors affecting enzymes activity.
- Q.2** Write short notes on any **FOUR** of the following: **(4X4=16)**
- a) Carbohydrates-classification and functions.
 - b) Gout
 - c) Thyroid hormones
 - d) Diabetes Mellitus
 - e) Therapeutic and diagnostic role of enzymes.
 - f) Lipid profile
- Q.3** Attempt any **ONE** of the following: **(12)**
- a) What are proteins? Classify it with examples and functions. Add a note immunoglobulins.
- OR**
- b) Describe the regulation of water and electrolyte balance. Add a note on dehydration.

SECTION – II

- Q.4** Write short answers on any **FIVE** of the following: **(5X2=10)**
- a) Define unit of length, mass and time.
 - b) State law of conservation of energy.
 - c) What is lever? Describe different types of lever of lever.
 - d) What is specific heat?
 - e) What is radioactivity? Define half life period.
 - f) Explain centrifuge and its use.
 - g) Differentiate speed and velocity.
- Q.5** Write short notes on any **FOUR** of the following: **(4X4=16)**
- a) State Newton's law of motion and derive the equation $F=ma$.
 - b) State law of gravitation and explain relation between g and G .
 - c) Describe Pulleys.
 - d) Explain physical effect of heat on matter.
 - e) Explain Laser light therapy.
 - f) Explain EGG and ECT.
- Q.6** Attempt any **ONE** of the following: **(1x11=11)**
- a) Explain electronic equipments used in patient care.
- OR**
- b) Explain modern X-ray tube and production of X-rays. Write properties of X-ray.

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