

Madhya Pradesh Medical Science University, Jabalpur

PBBSc. Nursing First Year Main Examination January - 2020

Paper Code:- 20AN0101101821

Subject:- Biochemistry & Biophysics

Time: 3 Hours

Maximum Marks: 75

- 1) All questions are compulsory
- 2) Draw diagrams wherever necessary
- 3) Answers of Questions and Sub questions must be written strictly according to the serial order of question paper, otherwise the question shall not be valued
- 4) Do not write anything on the blank portion of the question paper. If written anything, such type of act will be considered as an attempt to resort to unfair means.
- 5) Student can answer the question in both Hindi and English Language.

Q.1 Select the correct answer:

(1x5=5)

i) The synthesis of glucose from fat is called.

- a) Glycolysis b) Krebs Cycle c) Saponification d) Gluconeogenesis

ii) Enzymes are:

- a) Proteins b) Carbohydrates c) Nucleic Acid d) DNA Molecules

iii) Xerophthalmia is caused by the deficiency of:

- a) Vitamin K b) Vitamin A c) Vitamin C d) Vitamin D

iv) Function of nucleotide includes:

- a) Information, Storage & Transmission b) Storage of chemical energy
c) cell signalling d) All of the above

v) Which of following pairs is not correctly matched?

- (a) Vitamin B4- Pellagra (b) Vitamin B12- Pernicious anemia
(c) Vitamin C Scurvy (d) Vitamin B6- BeriBeri

Q.2 Write brief notes on: (Any Two)

(5x2=10)

- a. Fluid Mosaic model of cell membrane
- b. Phospholipids
- c. Classification of Enzymes

Q.3 Short Notes on: (Any Five)

(2x5=10)

- a. Plasma Protein
- b. Function of electrolytes
- c. Galactosemia
- d. Urea cycle
- e. Essential fatty acid
- f. Ketone bodies

Q.4 Define gluconeogenesis. Write in details the pathway and regulation of gluconeogenesis.

(15)

Q.5 Define the following: (Any Five)

(2x5=10)

- a. Atmospheric pressure
- b. Ultrasound
- c. P,Q,R,S,T Waves of electrocardiogram
- d. MRI
- e. Osmosis
- f. Law of conservation of energy

Q.6 Write short notes on: (Any Two)

(5x2=10)

- a. Use of light in therapy
- b. Pulleys and its type
- c. Pacemaker
- d. Ocular Pressure

Q.7 Describe briefly the use of various electronic equipment's in patient care?

(15)

Proud of Nurses

Without them humanity cannot survive