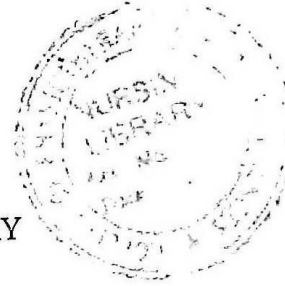


2013

( June )

BIOPHYSICS & BIOCHEMISTRY



Full Marks : 75

Time : 3 hours

The figures in the margin indicate full marks for the questions

Answer all questions

Write the answers to the two Halves in separate books

FIRST HALF

1 × 5 = 5

1. Fill in the blanks

- (a) Convex lens in front of the eyes is used to correct \_\_\_\_\_.
- (b) The intraocular pressure is measured with the help of \_\_\_\_\_.
- (c) The unit of current is \_\_\_\_\_.
- (d) The power of lens is expressed in \_\_\_\_\_.
- (e) The normal body temperature is \_\_\_\_\_.

1 × 5 = 5

2. Write 'True' or 'False'

- (a) Light rays from a near object that strikes the lens are diverging.
- (b) Power of convex lens is negative.
- (c) When a person is standing still the pressure in the veins of the feet is lower than in the upper part of the body.
- (d) Neutron, proton and electron are the smallest elementary particles of atoms.
- (e) X-ray is not a source of radiation exposure.

3. What are the different mechanisms of heat loss from the body? How can these principles be applied to nursing? 2 + 4 = 6

4. What are the effects of noise pollution? What measures can be taken to prevent noise pollution? 2 + 5 = 7

(Turn Over)

5. Write short notes on *any four* of the following

3 × 4 = 12

- (a) Arterial blood pressure.
- (b) User of light in therapy
- (c) E.C.G.
- (d) Intracranial pressure
- (e) Use of heat for sterilization
- (f) Osmotic pressure

SECOND HALF

6. What is the normal fasting and post prandial blood sugar level? Describe how normal blood sugar is maintained in our body.

2 + 8 = 10

7. What are lipoproteins? What are the substances produced from Cholesterol? Why HDL cholesterol is said to be good cholesterol?

Or,

Classify proteins. Name all essential amino acids. What do you understand by transamination reaction?

4 + 3 + 3 = 10

8. Write short notes (*any five*)

4 × 5 = 20

- (a) Rothera's test
- (b) Factors effecting enzyme action.
- (c) Chromatography
- (d) Essential fatty acid.
- (e) Thyroid hormones
- (f) Immunoglobulins

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