



JC-21259

Seat No. _____

First Year B. D. S. Examination

July - 2019

General Human Physiology

Time : 3 Hours]

[Total Marks : 70

- Instructions :** (1) Write each section in separate answer book.
(2) Draw figure wherever necessary.
(3) Figures on right indicate marks.
(4) Attempt all the questions.

SECTION - I

- 1 What is Cardiac cycle? Describe pressure and volume changes during cardiac cycle. **10**

OR

- 1 What is GFR? Describe factors affecting and regulation of GFR. **10**

- 2 Write Short Notes : (Any **Two**) **10**

- (a) Action potential of nerve fiber.
(b) Functions of plasma proteins.
(c) Diabetes mellitus.

- 3 (A) Write Short Notes : (Any **Two**) **10**

- (a) Errors of refraction.
(b) Hemoglobin-oxygen dissociation curve.
(c) Spermatogenesis.

- (B) Answer in one sentence : (Any **Five**) **5**

- (a) What is Stroke volume?
(b) What is Hemophilia?
(c) What is Surfactant?
(d) What is Facilitated diffusion?
(e) What is Acromegaly?
(f) What is the name of sensory tract for transmission of "Fine touch" sensation?

SECTION - II
(Biochemistry, Nutrition & Dietetics)

- 4 Describe Briefly : (Any **Two**) **10**
- (a) Glycolysis and its regulation.
 - (b) Vitamin D : functions & deficiency manifestations.
 - (c) Homopolysaccharide: examples & significance.
- 5 Write Short Notes : (Any **Two**) **10**
- (a) Structure of Immunoglobulin
 - (b) Iron : functions & deficiency manifestations
 - (c) Classification of enzymes
- 6 (A) Write Short Notes : (Any **Two**) **10**
- (a) Lipoproteins: types & diagnostic significance
 - (b) Diagnostic significance of enzymes
 - (c) Transfer RNA (t-RNA): structure and functions.
- (B) Answer the following : (Any **Five**) **5**
- (a) Examples of saturated fatty acids
 - (b) Normal range of calcium in plasma
 - (c) Difference between Hemoglobin and Myoglobin
 - (d) Enumerate function tests for liver
 - (e) Dietary sources of vitamin C.
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