



PF-21259

Seat No. _____

First Year B. D. S. Examination

July - 2018

Physiology & Biochemistry

Time : **3** Hours]

[Total Marks : **70**

- Instructions :** (1) Write answers of each section in separate answer book.
(2) Answers should be brief and draw necessary diagrams.
(3) Illegible writing will not fetch any marks.
(4) Figures to the right indicate full marks.

SECTION - I : PHYSIOLOGY

- 1** Define cardiac output and discuss its regulation. **10**

OR

Describe the origin and spread of cardiac impulse.

- 2** Write notes on : (Any **Two**) **10**

- (a) Transport of oxygen in the body
(b) Posterior pituitary hormones
(c) Functions of cerebellum

- 3** (A) Write notes on : (Any **Two**) **10**

- (a) Feedback control system
(b) Saliva
(c) Micturition

- (B) Answer in few sentences : (Any **Five**) **5**

- (a) Name smallest blood cell and give its size
(b) Enumerate errors of refraction
(c) Name the phases of action potential
(d) Write the effects of sympathetic stimulation on cardiovascular system
(e) Name two important functions of Progesterone
(f) Give the normal value of Mean arterial blood pressure

**SECTION - II : BIOCHEMISTRY,
NUTRITION & DIETETICS**

- Instructions : (1) Write each section in separate answer sheet.
(2) Draw figure whenever necessary
(3) Figures on right indicate marks.
(4) Attend all the questions.

- 4** Describe Briefly : (Any **Two**) **10**
(a) Lipoprotein metabolism
(b) Deficiency manifestations of fat soluble vitamins
(c) Regulation of blood glucose level and diabetes mellitus
- 5** Short Notes : (Any **Two**) **10**
(a) Structure and function of Immunoglobulins
(b) Digestion and absorption of lipids and disorders associated with it.
(c) Liver function tests
- 6** (A) Write Short Notes : (Any **Two**) **10**
(a) Factor affecting calcium absorption. Write on biochemical function of calcium
(b) Primary and secondary structure of proteins
(c) Effect of substrate concentration on enzyme activity. Write on Coenzyme.
- (B) Answer the following : (Any **Five**) **5**
(a) CK-MB is better than LDH as a cardiac marker
(b) Human cannot digest cellulose still it is good for health.
(c) Vitamin C helps in Iron absorption
(d) Anticodon is present in t-RNA
(e) Vitamin K play an important role in blood - coagulation
(f) Serum alkaline phosphatase is increased in obstructive Jaundice