



**DBZ-21259**

Seat No. \_\_\_\_\_

**First Year B. D. S. Examination**

**July - 2022**

**Physiology**

*(Biochemistry, Nutrition and Dietetics)*

Time :  $2\frac{1}{2}$  Hours]

[Total Marks : 70

- Instructions :** (1) Write each section in separate answer book.  
(2) Draw figure whenever necessary.  
(3) Figures on right indicates marks.

**SECTION - I**

- 1 Discuss the origin and spread of cardiac impulse. **10**
- OR**
- 1 Discuss the process of hemostasis. **10**
- 2 Write short notes : (any two) **10**
- (a) Excitation- contraction coupling
  - (b) Surfactant
  - (c) Peristalsis
- 3.1 Write short notes : (any two) **10**
- (a) Oxytocin
  - (b) Hormonal Contraceptives
  - (c) Synapse
- 3.2 Answer in onesentence : (any five) **5**
- (a) Define cardiac output.
  - (b) What is accommodation in eye?
  - (c) Define Haldane's effect.
  - (d) Define Glomerular Filtration Rate and give its normal value.
  - (e) Parasympathetic system is called nerve of tomorrow
  - (f) Why cardiac muscle cannot be tetanized?

## SECTION - II

- 4 Describe briefly : (Any Two) 10**
- (1) Biological role of Pyridoxal phosphate (Vita. B<sub>6</sub>) in our body and its deficiency manifestation.
  - (2) Enumerate Acute Phase Proteins and their functions.
  - (3) Explain enzyme inhibitions with its clinical examples.
- 5 Write Short Notes : (Any Two) 10**
- (1) Function of Calcium with factors regulating blood calcium level in our body.
  - (2) Bilirubin anabolism and catabolism.
  - (3) Water regulation in our body.
- 6 Write Short Notes : (Any Five) 10**
- (1) Enumerates lipotropic factors.
  - (2) Enumerate Different types of RNA and their function.
  - (3) Why vita C deficiency causes Anemia?
  - (4) Rancidity of Fat.
  - (5) What is telomere and telomerase?
  - (6) How ammonia is detoxified in our body ?
- 7 Answer the following : (Any Five) 5**
- (1) Clinical significance of blood Cholesterol estimation.
  - (2) What is Glycemic Index?
  - (3) Why fluoride vacuette is used for plasma glucose estimation?
  - (4) What is acquired immunity?
  - (5) Function of Vitamin E.
  - (6) What is plasma Osmolality?
-