

(20913)

BDS-I Prof Paper

Roll No. Centre.....

Reserve

5136(N)

B. D. S. (Main & Supply) Examination, Sept. 2013

Human Physiology & Biochemistry

(BDS-02)

Time : Three Hours]

[Maximum Marks : 70

Note : Attempt all questions. Illustrate your answers with suitable diagrams. Use separate copy for Part A and Part B.

Part-A

(Human Physiology) [Marks : 35

1. Define erythropoiesis. Describe in brief the stages of erythropoiesis. Enumerate the factors affecting it. 5
2. Define Cardiac output. Describe its regulation. 6
3. Write briefly about the following: 2×3=6
 - (a) Role of parathyroid hormone in calcium metabolism.
 - (b) Chemical regulation of respiration.

(2)

4. Write short notes on any three of the following: 2×3

- (a) Functions of platelets
- (b) Peristalsis
- (c) Chloride shift or Hamburger phenomenon.

5. Differentiate between the following:

- (a) Simple and facilitated diffusion *S P*
- (b) Thick and thin skeletal muscle filaments *N M*
- (c) Excitatory post synaptic potential (EPSP) and inhibitory post synaptic potential (IPSP) *N S*
- (d) Photopic and scotopic vision *S O*

Part-B

(Biochemistry)

[Marks :35]

1. Explain the basis of increase of urea and creatinins in blood in renal insufficiency. 4

2. Explain the basis of internal bleeding arising due to deficiency of Vitamin-K. 4

3. Classify Jaundice and its evaluation. Describe in brief the liver function test. 4

4. What is end product inhibition ? Explain the competitive, uncompetitive and non-competitive inhibition. 5

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(3)

5. Write short notes on the following: 3×6

- (a) Vitamin-D
- (b) Hyperthyroidism
- (c) Collagen
- (d) Non-essential Amino Acid
- (e) Diabetes mellitus
- (f) Genetic code.

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