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B.D.S. I Prof.

Roll No.

5136(N)

B.D.S. Supply. & Main Examination,
April - 2017

Human Physiology & Biochemistry

[BDS-02(N)]

Time : Three Hours] [Maximum Marks : 35+35=70

Note : (1) Attempt all questions.

(2) Illustrate your answers with suitable diagram wherever necessary. Use separate copy for Part-A and Part-B.

Part-I

Human Physiology

1. Define arterial blood pressure. Give its types and discuss the short term regulation of blood pressure.

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P.T.O.

2. Enumerate the hormones secreted by thyroid gland. Discuss briefly the physiological actions of thyroxine.

3. Differentiate between the following-

$$2.5 \times 4 = 10$$

- (a) 1st Heart sound and 2nd heart sound
- (b) White and Red muscle fiber
- (c) Diabetes mellitus and diabetes insipidus
- (d) Fetal haemoglobin and adult haemoglobin

4. Discuss briefly:

$$2.5 \times 2 = 5$$

- (a) Spermatogenesis
- (b) Lactational Amenorrhoea

5. Write short notes on any **three** of the following :

$$2 \times 3 = 6$$

- (a) Immunoglobulins
- (b) Vital capacity

- (c) Saliva
(d) Rh-factor

Part-B

Bio-Chemistry

1. Explain the steps of beta oxidation of palmitic acid giving energetics. 6
2. Describe the sources, biochemical functions, normal requirement and deficiency manifestation of Vitamin D. 5
3. Write short notes on the following:

3×8=24

- (i) Fluid Mosaic Model
- (ii) HMP Shunt Pathway
- (iii) Oncogenes
- (iv) Protein calorie malnutrition
- (v) Structure and function of t-RNA
- (vi) Immuno globulins
- (vii) Salivary enzymes
- (viii) Mutation