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**BDS 1st Year Knowledge Park-III, Greater Noida**

S136

**B. D. S. Examination, Jan. 2002****Paper II****General Human Physiology & Biochemistry****(BDS-02)**

33

**Time Three Hours, Maximum Marks 25 + 25**

**Note:** Attempt all the questions of Section A and five questions from Section B. Illustrate your answers with suitable diagrams.

**Section A****(General Human Physiology)**

- (a) Describe the electron-microscopic structure of cell membrane.
- (b) Write a note on active transport.
- (c) Enumerate the enzymes secreted in saliva and describe their functions.
- (d) Discuss the pharyngeal stage of swallowing. 5

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(2)

27

name the normal heart sounds of the heart.

How these are produced ?

Describe Renin-angiotensin system.

5

Write notes on any two of the following :

- (a) Vitamin D
- (b) Cretinism
- (c) Growth hormone.

(a) Compare the structure and functions of skeletal and smooth muscle.

(b) Discuss the action potential in the nerve.

### Section B

#### Biochemistry

How are enzymes important in clinical diagnosis ? Illustrate with examples.

5

Write short notes on any three of the following :

- (a) Glucose tolerance test
- (b) Ketone bodies
- (c) Galactosemia
- (d) Gout.

5

(3)

28

3. Why it is necessary to remove ammonia from the body ? How it is excreted ? Briefly explain the cycle.

Describe the role of different buffers in the body and how they maintain the pH of the blood.

5

Describe the significance of citric acid cycle in carbohydrate metabolism.

5

Describe the biochemical functions of vitamin C.

5

7. Describe briefly various inborn errors of amino acid metabolism.

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**B. D. S. Examination, Aug. 2002**

**Paper II**

**General Human Physiology & Biochemistry**

**(BDS-02)**

**Time : Three Hours]**

**[Maximum Marks : 50]**

**Note:** Attempt all questions. Illustrate your answers with suitable diagrams.

**Section A**

**(General Human Physiology)**

1. Describe the pathway for pain sensation. 5

2. Describe the protein digestion in gastrointestinal tract. 5

(2)

30

Describe short-term regulation of blood pressure.

Describe central chemo-regulation of respiration.

5  
Write short notes on the following :

- (a) Rh blood group
- (b) GFR
- (c) Cretinism
- (d) Ovulation

Section B

(Biochemistry)

1. Describe briefly various steps of protein biosynthesis.

7

3. Write short notes on the following :

- |                                  |   |
|----------------------------------|---|
| (a) Liver function test          | 3 |
| (b) Immunoglobulins              | 3 |
| (c) Iodine deficiency disorders. | 2 |

(3)

31

(b) Describe the reactions involved in the  $\beta$ -oxidation of palmitic acid.

2. (a) Draw complete electron transport chain showing sites of action of various inhibitors.

5