

AKM-535(A & B)

B. D. S. (First Professional)
EXAMINATION, 2007

GENERAL HUMAN PHYSIOLOGY AND
BIOCHEMISTRY

Time : Three Hours] [Maximum Marks : 50

Note : Attempt all questions and give diagram
wherever necessary.

Part - A (Marks : 25)

1. Describe gluconeogenesis and its significance. 5
2. Write short notes on any two of the following :
2 each
 - (a) Cori's cycle
 - (b) Diabetes mellitus
 - (c) Lipotropic factors
 - (d) Genetic Code
3. Describe transamination of amino acids. 4
4. Write notes on any two of the following : 3 each
 - (a) Role of fluoride in prevention of dental caries
 - (b) Transcription
 - (c) β -oxidation

P. T. O.

2 (07)

5. Write notes on the following : 2 each
- (a) Clinical significance of creatine phosphokinase (C.P.K.)
 - (b) IgG
 - (c) Rickets

Part—B (Marks : 25)

1. Define blood pressure. Discuss briefly the short term regulation of blood pressure. 1, 4
2. Discuss the following in short : 5
 - (a) Mechanism of formation of concentrated urine
 - (b) Digestion and absorption of fats
3. Write notes on the following : 5
 - (a) Stages of erythropoiesis
 - (b) Mechanism of respiration
4. Write in brief the following : 5
 - (a) Hypothyroidism
 - (b) Physiological basis of oral contraceptive pills
5. Describe the regulation of body temperature in man. 5

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Part—A (Marks : 25)

1. Describe gluconeogenesis and its significance. 5
2. Write short notes on any two of the following : 2 each
 - (a) Cori's cycle
 - (b) Diabetes mellitus
 - (c) Lipotropic factors
 - (d) Genetic Code
3. Describe transamination of amino acids. 4
4. Write notes on any two of the following : 3 each
 - (a) Role of fluoride in prevention of dental caries
 - (b) Transcription
 - (c) β -oxidation

P. T. O.

2(07)

5. Write notes on the following : 2 each
- (a) Clinical significance of creative phosphokinase (C. P. K)
 - (b) IgG
 - (c) Rickets

Part—B (Marks : 25)

1. Define blood pressure. Discuss briefly the short term regulation of blood pressure. 1, 4
2. Discuss the following in short : 5
 - (a) Mechanism of formation of concentrated urine
 - (b) Digestion and absorption of fats
3. Write notes on the following : 5
 - (a) Stages of erythropoiesis
 - (b) Mechanism of respiration
4. Write in brief the following : 5
 - (a) Hypothyroidism
 - (b) Physiological basis of oral contraceptive pills
5. Describe the regulation of body temperature in man. 5

AKM-335
B.D.S. I Professional Examination, 2007 (Supplementary)
Physiology and Biochemistry

Time : Three hours

Max. Marks: 25+25=50

Note : Attempt all questions and give diagram wherever necessary.

PART-A

Fold Here	① Describe Urea Cycle (Krebs Henseleit Cycle)	5
Fold Here	Name metabolic disorders of Urea Cycle	Fold Here
②	What are lipoproteins, give their clinical significance (Functions)	3+1=
③	How Serum Calcium level is regulated in human body	3 Fold Here
④	Write the role of m R.N.A and t R.N.A in Protein Biosynthesis	4
⑤	Write Short Notes on any two of the following	Fold Here 2+2
Fold Here	① Vanden Bergh Test and its clinical significance,	Fold Here
② Ketone bodies	③ Clinical significance of S.G.O.T. and L.D.H Enzymes	2+2
⑥	Describe Kreb's Cycle and give Energetics of Kreb's Cycle.	5

1. Describe the mechanism of urine formation.
How urine gets concentrated and diluted.

8

Fold
HereFold
Here

2. Discuss in brief:

(a) Short term regulation of blood pressure.

5

(b) Phases of gastric juice secretion.

3

3. Write short notes on:

(a) Hyper and hypofunctioning of
Thyroid gland.

Fold
Here

(b) Regulation of body temperature.

4