### February-2006

## [KO 1232]

Sub. Code: 1232

#### FIRST B.H.M.S DEGREE EXAMINATION.

#### (Regulations 2004)

### Paper V — PHYSIOLOGY — I

Time: Three hours

Maximum: 100 marks

Theory: Two hours and

Theory: 80 marks

forty minutes

M.C.Q. : Twenty minutes

M.C.Q. : 20 marks

I. Long Essay:

Answer any TWO of the following:

 $(2\times15=30)$ 

- 1. What is erythropoiesis? Write in detail stages of development of erythrocytes.
- 2. Define cardiac output and give a detailed note on control of cardiac output.
- 3. What is Hamburgers phenomenon? Write about carriage of Carbon-di-oxide.
- II Short notes:

Answer any TEN of the following:

 $(10 \times 5 = 50)$ 

- 1. Conjugated proteins.
- 2. Errors of refraction.

- 3. Functions of Reticulo-endothelial system.
- 4. ABO groups.
- 5. Functional tissues of heart.
- 6. Renin-angiotensin mechanism.
- 7. Functions of skin.
- 8. Osmosis, its physiological importance.
- 9. Caisson's disease.
- 10. Mechanism of heat loss.
- 11. Facultatory reabsorption.
- 12. Sino-Aortic mechanism.

[KP 1232]

Sub. Code: 1232

# FIRST B.H.M.S. DEGREE EXAMINATION.

### (Regulations 2004)

### Paper V — PHYSIOLOGY — I

Time: Three hours Maximum: 100 marks

Theory: Two hours and Theory: 80 marks

forty minutes

M.C.Q.: Twenty minutes M.C.Q.: 20 marks

I. Essay on:

1. Define coagulation. Mention the types of clotting.

Write a note on intrinsic clotting. (20)

Write an essay on any TWO of the following:  $(2 \times 15 = 30)$ 

- 2. Describe in detail the generation and conduction of cardiac impulses.
- 3. Describe the formation, composition, circulation and functions of lymph.
- 4. Describe the functions of kidneys and their role in maintenance of body water.

II. Write short notes on any SIX on the following:  $(6 \times 5 = 30)$ 

- 1. Active immunity.
- 2. Cell membrane.
- 3. O<sub>2</sub> diffusion through respiratory membrane
- 4. Peripheral resistance.
- 5. Errors of refraction.
- 6. Bohr effect.
- 7. Organ of Corti.
- 8. Dead space air.

### **AUGUST 2007**

[KR 1232]

Sub. Code: 1232

FIRST B.H.M.S. DEGREE EXAMINATION.

(Regulations 2004)

Paper V — PHYSIOLOGY — I

Time: Three hours Maximum: 100 marks

Theory: Two hours and forty minutes

Theory: 80 marks

M.C.Q.: Twenty minutes

M.C.Q. : 20 marks

I. Write any TWO

- 1. Describe the source, chemistry, daily requirement, biochemical functions and deficiency manifestation of Vit. C. (1+2+1+8+3=15)
- 2. Describe ' $\beta$ ' oxidation of palmitic acid with its energetics. (10 + 5 = 15)
- 3. Draw a neat and labelled diagram of anterolateral spinothalamic tract. (7 + 8 = 15)

II. Short notes:  $(10 \times 5 = 50)$ (Write any TEN)

- 1. GTT.
- 2. Km value.

- 3. Significance of HMP pathway
- 4. BMR (Basal Metabolic Rate)
- 5. BBB (Blood Brain Barrier)
- 6. Functions of stomach
- 7. Menstrual cycle
- 8. Receptors
- 9. Errors of refraction
- 10. Organ of Corti
- 11. ABO blood group
- 12. Caisson's disease.

### **FEBRUARY 2008**

[KS 1232]

Sub. Code: 1232

FIRST B.H.M.S. DEGREE EXAMINATION.

(Regulations 2004)

Paper V - PHYSIOLOGY - I

Q.P. Code: 581232

Time: Three hours Maximum: 100 marks

Theory: Two hours and Theory: 80 marks

forty minutes

M.C.Q.: Twenty minutes M.C.Q.: 20 marks

I. Long Essay (write any TWO):  $(2 \times 15 = 30)$ 

- 1. Define Coagulation. Explain in detail about the mechanism involved in that and the factors influencing it. (2+8+5)
- 2. Define heart rate, it's variation and the mechanism of regulation of heart rate. (2+2+11)
- 3. Explain in detail about various stages involved in urine formation.
- II. Short notes (Write any TEN):  $(10 \times 5 = 50)$
- 1. Surface tension and it's physiological significance.
- 2. Hypoxea.

- 3. Micturition.
- 4. Cyanosis.
- 5. Functions of plasma proteins.
- 6. Vital Capacity and it's significance.
- 7. Juxta glomerular apparatus.
- 8. First heart sound.
- 9. E.C.G.
- 10. Factors regulating erythropoiesis.
- 11. Rigormortis.
- 12. Taste buds.

# August 2008

### [KT 1232]

Sub. Code: 1232

### FIRST B.H.M.S. DEGREE EXAMINATION.

(Regulations 2004)

Paper V — PHYSIOLOGY — I

Q.P. Code: 581232

Time: Three hours Maximum: 100 marks

I. Long Essay:

 $(2 \times 15 = 30)$ 

Answer any TWO.

- 1. Define Respiration. Name the muscles of respiration. Write briefly about the mechanism of respiration.
- 2. Define Cardiac cycle. Write in detail about all its phases.
- 3. What is Differential Leucocyte count. Write briefly about the functions of individual WBCs.

II. Short notes:

 $(10 \times 5 = 50)$ 

Write any TEN.

- 1. Blood groups.
- 2. Plasma membrane of the cell.

# August 2008

Lung volume.

3.

Surface tension and its importance. 4. Artificial respiration. 5. 6. ESR. First Heart Sound. 7. Rh factor. 8. Blood pressure. 9. 10. GFR. Functions of Platelets. 11. Renal function tests. 12.  $(10\times 2=20)$ Short answers: III. Hemostasis. 1. Gene. 2. Lung compliance. 3.

Heart rate. ECG. 5. Nephron. 6. Dialysis. 7. Proteinuria. 8. Dead space. 9. Hypoxia. 10.

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