

FIRST B.H.M.S. DEGREE EXAMINATION

(Regulations 2004-2005 onwards)

Pattern 5

PAPER V – PHYSIOLOGY - I

Q.P. Code : 581232

Time: Three Hours

Maximum: 100 marks

I. Long Essay: (Answer any TWO questions) (2 x 15 = 30)

1. Define arterial blood pressure. Write in detail about the regulation of arterial blood pressure.
2. Define Erythropoiesis. Write in detail about various stages of Erythropoiesis and factors responsible for Erythropoiesis.
3. Describe about the process of formation of urine.

II. Short notes on: (Answer any TEN questions) (10 x 5 = 50)

1. Decompression sickness.
2. Endocytosis.
3. Hemostasis.
4. Cardiac centres.
5. Lymph - its composition and function.
6. Auto immune diseases.
7. Micturition reflex.
8. Surfactant.
9. Heart sounds.
10. Thermogenesis.
11. Organ of corti.
12. Kreb's cycle.

III. Write Short answers : (Answer ALL questions) (10 x 2 = 20)

1. Rhodopsin.
2. Thermolysis.
3. Glomerular filtration rate.
4. Abnormal pace maker.
5. Uraemia.
6. Thrombosis.
7. Types of antibodies.
8. Nitrogen Narcosis.
9. Arrhythmia.
10. Pneumothorax.

[KV 1232]

AUGUST 2009

Sub. Code: 1232

FIRST B.H.M.S. DEGREE EXAMINATION

(Regulations 2004-2005 onwards)

Pattern 5

PAPER V – PHYSIOLOGY - I

Q.P. Code : 581232

Time: Three Hours

Maximum: 100 marks

I. Long Essay: (Answer any TWO questions) (2 x 15 = 30)

1. Define cardiac output and its variations. Write in detail about the factors maintaining cardiac output.
2. Write in detail about the mechanism of respiration.
3. Define blood coagulation. Describe the mechanisms involved in coagulation. Add a note on anticoagulants.

II. Short notes: (Answer any TEN questions) (10 x 5 = 50)

1. Layers of retina.
2. Homoeostasis.
3. Functions of spleen.
4. Cardiac Murmurs.
5. Arterial pulse.
6. Pulmonary function test.
7. Artificial respiration.
8. Surface tension.
9. Renal failure.
10. Functions of skin.
11. Dialysis.
12. Leukopoiesis.

III. Write Short answers : (Answer ALL questions) (10 x 2 = 20)

1. E.S.R.
2. Name the plasma proteins.
3. Pinocytosis.
4. Purpura.
5. Name the parts of nephron.
6. Artificial kidney.
7. Acidosis.
8. Stroke volume.
9. Diuresis.
10. Name the respiratory centres.

[KW 1232]

FEBRUARY 2010

Sub. Code: 1232

FIRST B.H.M.S. DEGREE EXAMINATION

(Regulations 2004-2005 onwards)

Pattern 5

PAPER V – PHYSIOLOGY - I

Q.P. Code : 581232

Time: Three Hours

Maximum: 100 marks

Answer ALL questions

I. Essay:

(2 x 15 = 30)

1. Describe Kreb's cycle (TCA).
2. Define Erythropoiesis. List the different stages of Erythropoiesis & explain in detail.

II. Short Notes:

(10 x 5 = 50)

1. Anemia.
2. T-Lymphocyte.
3. Rh-factor.
4. Structure of nephron.
5. Pacemaker.
6. Dead space.
7. Beri-beri.
8. Pulmonary circulation.
9. Nyctalopia.
10. Lipoproteins.

III. Short Answers :

(10 x 2 = 20)

1. Define Cardiac output.
2. Define coagulation.
3. Colour index.
4. Types of WBC's
5. Glycolysis.
6. GTT
7. Bence Jones protein.
8. Essential aminoacids.
9. Acidosis.
10. Thrombocytopenia.

[KX 1232]

AUGUST 2010

Sub. Code: 1232

FIRST B.H.M.S. DEGREE EXAMINATION

(Regulations 2004-2005 onwards)

Pattern 5

PAPER V – PHYSIOLOGY - I

Q.P. Code : 581232

Time: Three Hours

Maximum: 100 marks

Draw neat diagram wherever necessary

Answer ALL question

I. Essay question:

(2 x 15 = 30)

1. Define Cardiac cycle and write in detail about its phases.
2. What are Vitamins? Explain in detail what are the sources, absorption, metabolism, functions and deficiency disorders of Vitamin A.

II. Short Notes:

(10 x 5 = 50)

1. What are Enzymes? Write the Characteristics of it.
2. Organ of Corti.
3. Functions of Skin.
4. Functions of Plasma Proteins and write its applied Physiology.
5. Surfactant.
6. Hemostasis.
7. Micturition Reflex.
8. Functions of Reticulo-Endothelial system.
9. Dialysis.
10. Visual Pathway.

III. Short Answers :

(10 x 2 = 20)

1. Hypoxia.
2. Tidal Volume.
3. Cyanosis.
4. Mention the factors of coagulation.
5. Erythropoietin.
6. Factors needed for synthesis of Hemoglobin.
7. Pernicious Anemia.
8. Diffusion.
9. Scurvy.
10. Hypothermia.

[KZ 1232]

AUGUST 2011

Sub. Code: 1232

FIRST B.H.M.S. DEGREE EXAMINATION

PAPER V – PHYSIOLOGY - I

Q.P. Code : 581232

Time: Three Hours

Maximum: 100 marks

Answer ALL questions

I. Essay: (2 x 15 = 30)

1. Define Differential leucocyte count. Describe the different varieties of leucocyte with their functions?
2. Define Respiration. Explain the different mechanism of regulations of respiration?

II. Short Notes: (10 x 5 = 50)

1. Electro cardio gram.
2. Cardiac output.
3. Define surface tension and its physiological significance.
4. Errors of refraction.
5. Cough reflex.
6. Hypoxia.
7. Give an account of micturition.
8. Juxta glomerular apparatus.
9. Basal metabolic Rate.
10. Radial pulse

III. Short Answers : (10 x 2 = 20)

1. Deoxyribo Nuclie acid.
2. Phagocytosis.
3. Rhodopsin.
4. Spirometry.
5. Hypothermia.
6. T-Lymphocyte.
7. Lymph.
8. Haemophilia.
9. Surfactant.
10. Thrombocytopenic Purpura.

FIRST B.H.M.S. DEGREE EXAMINATION**PAPER V – PHYSIOLOGY - I***Q.P. Code : 581232***Time: Three Hours****Maximum: 100 marks****Answer ALL questions****I. Elaborate on:**

Pages (Max.)	Time (Max.)	Marks (Max.)
-----------------	----------------	-----------------

- | | | | |
|--|----|----|----|
| 1. Describe in detail about the generation and conduction of Cardiac impulses. | 16 | 25 | 15 |
| 2. Define Erythropoiesis. Write in detail the stages of development of Erythrocytes. | 16 | 25 | 15 |

II. Write notes on:

- | | | | |
|--|---|---|---|
| 1. Alveolar air. | 3 | 8 | 5 |
| 2. Transport of oxygen. | 3 | 8 | 5 |
| 3. Arterial Pulse. | 3 | 8 | 5 |
| 4. Reticuloendothelial system. | 3 | 8 | 5 |
| 5. Heart sounds. | 3 | 8 | 5 |
| 6. Lewis triple response. | 3 | 8 | 5 |
| 7. Sarcotubular system. | 3 | 8 | 5 |
| 8. Periodic breathing. | 3 | 8 | 5 |
| 9. ABO blood groups. | 3 | 8 | 5 |
| 10. Hypoxia –classification and cause. | 3 | 8 | 5 |

III. Short Answers

- | | | | |
|------------------------------------|---|---|---|
| 1. Mountain sickness. | 1 | 5 | 2 |
| 2. Plasma proteins. | 1 | 5 | 2 |
| 3. Erythrocyte sedimentation rate. | 1 | 5 | 2 |
| 4. Lymph. | 1 | 5 | 2 |
| 5. Respiratory unit. | 1 | 5 | 2 |
| 6. Angina pectoris. | 1 | 5 | 2 |
| 7. Gap junctions. | 1 | 5 | 2 |
| 8. ECG Waves. | 1 | 5 | 2 |
| 9. DNA. | 1 | 5 | 2 |
| 10. Purpura. | 1 | 5 | 2 |

[LC 1232]

FEBRUARY 2013

Sub. Code: 1232

FIRST B.H.M.S. DEGREE EXAMINATION

PAPER V – PHYSIOLOGY - I

Q.P. Code : 581232

Time: Three Hours

Maximum: 100 marks

Answer ALL questions

I. Essay: (2 x 15 = 30)

1. Define cardiac output and its variations. Write in detail about the factors maintaining cardiac output.
2. Define blood coagulation. Describe the mechanisms involved in coagulation. Add a note on anticoagulants.

II. Short Notes: (10 x 5 = 50)

1. Layers of retina.
2. Homoeostasis.
3. Functions of spleen.
4. Arterial pulse.
5. Pulmonary function tests.
6. Artificial respiration.
7. Surface tension.
8. Organ of corti.
9. Leucopoiesis.
10. Iron deficiency anemia.

III. Short Answers : (10 x 2 = 20)

1. Thrombosis.
2. Rhodopsin.
3. GFR.
4. Fibrinolysis.
5. Pinocytosis.
6. Pneumothorax.
7. Arrhythmia.
8. Types of antibodies.
9. Nitrogen Narcosis.
10. Pacemaker.

[LD 1232]

AUGUST 2013

Sub. Code: 1232

FIRST B.H.M.S. DEGREE EXAMINATION

PAPER V – PHYSIOLOGY - I

Q.P. Code : 581232

Time: Three Hours

Maximum: 100 marks

Answer ALL questions

I. Essay: **(2 x 15 = 30)**

1. Define Blood Coagulation, Describe the mechanisms involved in coagulation and the factors influencing it.
2. Define Arterial Blood Pressure. Describe the nervous regulation of Arterial Blood Pressure.

II. Short Notes: **(10 x 5 = 50)**

1. Lewis Triple Response.
2. Odema.
3. ABO blood groups.
4. Functions of Reticuloendothelial system.
5. Functions of Skin.
6. Properties of cardiac muscle.
7. Decompression sickness.
8. Periodic breathing.
9. Arrhythmia.
10. Hypoxia – Classification and its Causes.

III. Short Answers : **(10 x 2 = 20)**

1. Respiratory unit.
2. Plasma proteins.
3. Pneumothorax.
4. VO₂ max.
5. Angina pectoris.
6. Marey's reflex.
7. Gap junctions.
8. Lymph.
9. Anticoagulants.
10. Purpura.

[LE 1232]

FEBRUARY 2014

Sub. Code: 1232

FIRST B.H.M.S. DEGREE EXAMINATION

PAPER V – PHYSIOLOGY - I

Q.P. Code : 581232

Time: Three Hours

Maximum: 100 marks

Answer ALL questions

I. Essay: **(2 x 15 = 30)**

1. Define blood coagulation. Explain in detail about the mechanisms of blood clotting.
2. What is spirometer? Explain in detail about the different volumes and capacities of lung.

II. Short Notes: **(10 x 5 = 50)**

1. Nephron and its functions.
2. Organ of corti.
3. Regulation of body temperature.
4. Components of protoplasm.
5. Erythroblastosis foetalis.
6. Fate of Red blood cells.
7. Arrhythmia.
8. Artificial respiration.
9. Venous return.
10. Juxta glomerular apparatus.

III. Short Answers : **(10 x 2 = 20)**

1. Specific dynamic action.
2. Dead space air.
3. Polycythemia vera.
4. Innate immunity.
5. S.A Node.
6. Hypoxia.
7. Heart sounds.
8. Dialysis.
9. Sweat gland.
10. Taste buds.

FIRST B.H.M.S. DEGREE EXAMINATION

PAPER V – PHYSIOLOGY - I

Q.P. Code : 581232

Time: Three Hours

Maximum: 100 marks

Answer ALL questions

I. Essay: **(2 x 15 = 30)**

1. Define and classify anemia. Explain in detail about the iron deficiency anemia.
2. Define cardiac cycle. Explain various events during each cardiac cycle.

II. Short Notes: **(10 x 5 = 50)**

1. Spirometer.
2. Functions of spleen.
3. Surfactants.
4. Structure and functions of skin.
5. Micturition reflex.
6. Transport across the cell membrane.
7. Caisson's Disease.
8. Plasma proteins.
9. Visual pathway.
10. Glomerular filtration rate.

III. Short Answers : **(10 x 2 = 20)**

1. Platelets.
2. Deoxyribo Nucleic Acid
3. Cyanosis.
4. Electro cardiograph.
5. Tissue macrophages.
6. Weber's test.
7. Megaloblastic anemia.
8. Renal threshold.
9. All or None law.
10. Respiratory membrane.

[LG 1232]

FEBRUARY 2015

Sub. Code: 1232

FIRST B.H.M.S. DEGREE EXAMINATION

PAPER V – PHYSIOLOGY - I

Q.P. Code : 581232

Time: Three Hours

Maximum: 100 marks

Answer ALL questions

I. Essay:

(2 x 15 = 30)

1. Define Cardiac Cycle. Write in Detail About its Phases.
2. Define Differential Leucocyte Count. Describe the Different varieties of Leucocytes with their functions.

II. Short Notes:

(10 x 5 = 50)

1. Basal Metabolic Rate.
2. Lymph.
3. Sarcotubular system.
4. Juxtaglomerular apparatus.
5. Surfactant.
6. Erythroblastosis Foetalis.
7. Visual Pathway.
8. Glycosuria.
9. Heart sounds.
10. Micturition.

III. Short Answers :

(10 x 2 = 20)

1. Dialysis.
2. Refractory period.
3. Astigmatism.
4. Immunity.
5. E. C.G.
6. Phagocytosis.
7. Rhodopsin.
8. Tidal volume.
9. Balanced diet.
10. Heart block.

[LH 1232]

AUGUST 2015

Sub. Code: 1232

FIRST B.H.M.S. DEGREE EXAMINATION

PAPER V – PHYSIOLOGY - I

Q.P. Code: 581232

Time : Three Hours

Maximum : 100 marks

Answer ALL questions

Draw diagram wherever necessary

I. Essay Questions:

(2 x 15 = 30)

1. Define Erythropoiesis. Write in detail the various stages of erythropoiesis and Factors responsible for it.
2. Define Nephron. Write briefly about all its parts and its functions.

II. Write notes on:

(10 x 5 = 50)

1. Organ of Corti.
2. Baroreceptors.
3. Antibodies.
4. Lipoproteins.
5. Pulmonary Circulation.
6. Accommodation.
7. Oxygen Transport.
8. Functions of lymphocyte.
9. Refractive errors.
10. Peculiarities of renal circulation.

III. Short answers:

(10 x 2 = 20)

1. Diffusion.
2. Glomerular Filtration Rate.
3. Pacemaker.
4. Sarcomere.
5. Stroke Volume.
6. Vital Capacity.
7. Arterial Pulse.
8. Rigor Mortis.
9. Erythrocyte Sedimentation Rate.
10. D N A.

FIRST B.H.M.S. DEGREE EXAMINATION

PAPER V – PHYSIOLOGY - I

Q.P. Code : 581232

Time: Three Hours

Maximum : 100 Marks

**Answer All questions
Draw diagram wherever necessary**

I. Essay Questions: (2 x 15 = 30)

1. Explain transport of oxygen in Blood?
2. Describe the factors controlling Heart rate.

II. Write Notes on: (10 x 5 = 50)

1. ECG.
2. Surfactant.
3. Glomerular filtration rate.
4. Functions of spleen.
5. Regulation of body temperature.
6. Errors of refraction.
7. Decompression sickness.
8. Lung volumes and capacities.
9. Blood groups.
10. Micturition.

III. Short Answers on: (10 x 2 = 20)

1. Marey's reflex.
2. Immunoglobulins.
3. Haemoglobinopathies.
4. Purpura.
5. Visual receptors.
6. SCUBA.
7. Pacemaker.
8. Tight junctions.
9. Eosinophilia.
10. Essential hypertension.

[LJ 1232]

AUGUST 2016

Sub.Code :1232

FIRST B.H.M.S. DEGREE EXAMINATION

PAPER V – PHYSIOLOGY - I

Q.P. Code : 581232

Time: Three Hours

Maximum : 100 Marks

**Answer All questions
Draw diagram wherever necessary**

I. Essay Questions:

(2 x 15 = 30)

1. Describe in detail the Pulmonary Function Tests.
2. Describe the mechanism of urine formation.

II. Write Notes on:

(10 x 5 = 50)

1. Artificial respiration.
2. Organ of corti.
3. Hypoxia.
4. Renal function test.
5. Coagulation factors.
6. Conducting system of heart.
7. Colour blindness.
8. Heart rate.
9. Polycythemia.
10. Erythroblastosis foetalis.

III. Short Answers on:

(10 x 2 = 20)

1. Dialysis.
2. Define blood pressure.
3. Facultative reabsorption of water.
4. Dead space.
5. Types of WBC.
6. Snellen's chart.
7. Arterial pulse.
8. Hyperthermia.
9. Lymph.
10. Renin.
