## OCTOBER 2016

#### **FIRST B.H.M.S. DEGREE EXAMINATION** (New Regulation – From 2015-2016 Batch onwards)

## PAPER IV – PHYSIOLOGY - I

Q.P. Code: 581504

## **Time: Three Hours**

#### Answer All questions

 $(2 \times 15 = 30)$ 

 $(10 \times 5 = 50)$ 

Maximum : 100 Marks

## I. Essay Questions:

- 1. Define blood. Explain in detail about the Erythropoiesis and the factors influencing it.
- 2. Define cardiac cycle. Explain about the various events of Cardiac cycle.

### II. Write Notes on:

- 1. Phagocytosis.
- 2. Blood groups.
- 3. Properties of skeletal muscle.
- 4. Countercurrent mechanism.
- 5. Surfactants.
- 6. Lung volumes.
- 7. Valves of the heart.
- 8. Juxtaglomerular apparatus.
- 9. Functions of skin.
- 10. Homoeostasis.

### **III. Short Answers on:**

- 1. Heart sounds.
- 2. Cyanosis.
- 3. Immunoglobulins.
- 4. Hypothermia.
- 5. Atonic bladder.
- 6. Functions of neutrophils.
- 7. Hemostasis.
- 8. Anticoagulants.
- 9. Myosin.
- 10. Functions of spleen.

(10 x 2 = 20)

## DECEMBER 2016

### FIRST B.H.M.S. DEGREE EXAMINATION - SUPPLEMENTARY (New Regulation – From 2015-2016 Batch onwards)

## PAPER IV – PHYSIOLOGY - I

Q.P. Code: 581504

**Time: Three Hours** 

#### **Answer All questions**

 $(2 \times 15 = 30)$ 

### I. Essay Questions:

- 1. Define cardiac output. Explain the variations factors regulating the cardiac output.
- 2. Define Anaemia. Explain in detail about the classification of anaemia and give a note on megaloblastic anaemia.

### II. Write Notes on:

- 1. Elecro Cardio Gram.
- 2. Respiratory centre.
- 3. Rennin angiotensin mechanism.
- 4. Blood transfusion.
- 5. Renal failure.
- 6. Rh factor.
- 7. Clotting mechanism.
- 8. Oxygen dissociation curve.
- 9. Arterial pulse.
- 10. Plasma proteins.

### **III. Short Answers on:**

- 1. Apnea.
- 2. Respiratory membrane.
- 3. Pulmonary edema.
- 4. Lysosomes.
- 5. Erythroblastosis fetalis.
- 6. Lymph.
- 7. Layers of skin.
- 8. SA Node.
- 9. Bainbridge reflex.
- 10. Thrombosis.

 $(10 \times 5 = 50)$ 

 $(10 \ge 2 = 20)$ 

Maximum : 100 Marks

- 1. What is Spirometer, explain in detail about the different volumes and capacities of lung?
- 2. Define Heart rate and its variations and mechanism of regulation of heart rate.

## **II. Write Notes on:**

**Time: Three Hours** 

I. Essay Questions:

- 1. Plasma proteins.
- 2. Surfactant.
- 3. Juxtaglomerular apparatus.
- 4. Basal Metabolic Rate.
- 5. Caisson's disease.
- 6. Erythroblastosis fetalis.
- 7. Organ of Corti.
- 8. ABO blood groups.
- 9. Renal failure.
- 10. Structure of skin.

## **III. Short Answers on:**

- 1. SCUBA.
- 2. Lysosomes.
- 3. Tight junction.
- 4. Wallerian degeneration.
- 5. Arterial pulse.
- 6. Erythrocyte Sedimentation Rate.
- 7. Hypothermia.
- 8. Webbers test.
- 9. Specific dynamic action.
- 10. Types of antibodies.
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FIRST B.H.M.S. DEGREE EXAMINATION (New Regulation – From 2015-2016 Batch onwards)

PAPER IV – PHYSIOLOGY - I

Q.P. Code : 581504

**Answer All questions** 

Maximum : 100 Marks

 $(10 \times 5 = 50)$ 

 $(10 \ge 2 = 20)$ 

 $(2 \times 15 = 30)$ 

FIRST B.H.M.S. DEGREE EXAMINATION (Supplementary Examination)

# PAPER IV – PHYSIOLOGY - I

**JULY 2017** 

Q.P. Code : 581504

**Answer All questions** 

Maximum : 100 Marks

## I. Essay Questions:

**Time: Three Hours** 

- 1. Write in detail about regulation of respiration and mechanism of respiration.
- 2. Define Juxtra glomerular apparatus, explain about the structure and function of Juxtra glomerular apparatus.

## **II. Write Notes on:**

- 1. Blood groups.
- 2. Natural killer cell.
- 3. Counter current multiplier.
- 4. Neuro muscular junction.
- 5. Surface tension.
- 6. Renal Function Test.
- 7. Structure of skin.
- 8. Micturation.
- 9. Heart block.
- 10. Electro Cardio Gram.

## **III. Short Answers on:**

- 1. Anticoagulants.
- 2. Organ of Corti.
- 3. Pacemaker.
- 4. DNA.
- 5. Lymph.
- 6. Tidal volume.
- 7. Nerve of emptying.
- 8. Cyanosis.
- 9. Rigor mortis.
- 10. Immunoglobulins.

## (10 x 2 = 20)

Sub.Code :1504

 $(2 \times 15 = 30)$ 

 $(10 \times 5 = 50)$ 

FIRST B.H.M.S. DEGREE EXAMINATION (New Regulation – From 2015-2016 Batch onwards)

# PAPER IV – PHYSIOLOGY - I

Q.P. Code : 581504

**Answer All questions** 

**Maximum : 100 Marks** 

# I. Essay Questions: 1. Define Erythropoiesis. List the different stages of Erythropoiesis and explain in detail. 2. Define cardiac cycle. Explain various events during each cardiac cycle. **II. Write Notes on:** $(10 \times 5 = 50)$ 1. Spirometry. 2. Micturition reflex. 3. Erythroblastosis Foetalis. 4. Peculiarities of renal circulation. 5. Functions of spleen. 6. Surfactant 7. Colour blindness.

- 8. Artificial respiration.
- 9. Lymph its composition and function.
- 10. Homoeostasis.

## **III. Short Answers on:**

- 1. Nitrogen Narcosis.
- 2. Pneumothorax.
- 3. Name the respiratory centres.
- 4. Acidosis.
- 5. Bence Jones protein.
- 6. Hypothermia.
- 7. Cyanosis.
- 8. Lymph.
- 9. Deoxyribo Neuclic acid.
- 10. Thrombocytopenic Purpura.

Sub. Code: 1504

**Time: Three Hours** 

 $(2 \times 15 = 30)$ 

 $(10 \ge 2 = 20)$ 

Q.P. Code : 581504

FIRST B.H.M.S. DEGREE EXAMINATION (Supplementary Examination)

PAPER IV – PHYSIOLOGY - I

Maximum : 100 Marks

## I. Essay Questions:

**Time: Three Hours** 

- 1. Give the definition and normal values of lung volumes and lung capacities and explain the measurement of the same.
- 2. Define arterial Blood Pressure. Describe the nervous regulation of arterial Blood Pressure.

## **II. Write Notes on:**

- 1. Define Cardiac output and Measurement of C.O. using Fick's Principle.
- 2. Heart sounds.
- 3. Sliding Theory of Muscular Contraction.
- 4. Diffusion.
- 5. Cell mediated immunity.
- 6. ECG.
- 7. Erythropoiesis.
- 8. Oxygen Hemoglobin dissociation Curve.
- 9. Juxta Glomerular Apparatus.
- 10. Regulation of Body Temperature.

## **III. Short Answers on:**

- 1. Sodium Potassium pump.
- 2. Bainbridge Reflex.
- 3. Lifespan of RBCS with its fate.
- 4. Hering Breuer Reflex.
- 5. Functions of WBC's.
- 6. Latent period.
- 7. Counter Current Exchanger.
- 8. Stokes Adams syndrome.
- 9. Motor Unit.
- 10. Dialysis.

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 $(2 \times 15 = 30)$ 

## $(10 \times 5 = 50)$

## $(10 \ge 2 = 20)$

**Answer All questions** 

2. Explain mechanism of respiration and explains ventilation and transport of respiratory gases.

## **II. Write Notes on:**

**Time: Three Hours** 

I. Essay Questions:

for the same.

[LM 1504]

- 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. Blood Transfusion.
- 10. Glomerular filtration rate.

## **III. Short Answers on:**

- 1. Platelets.
- 2. Myosin.
- 3. Cyanosis.
- 4. Define pulse.
- 5. Tissue macrophages.
- 6. Weber's test.
- 7. Megaloblastic anemia.
- 8. Renal threshold.
- 9. Heart sounds.
- 10. Respiratory membrane.

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### FIRST B.H.M.S. DEGREE EXAMINATION (New Regulation – From 2015-2016 Batch onwards)

## PAPER IV – PHYSIOLOGY - I

Q.P. Code : 581504

**Answer All questions** 

Maximum : 100 Marks

1. Explain in detail about Hematopoiesis. Mention the factors necessary

 $(2 \times 15 = 30)$ 

 $(10 \times 5 = 50)$ 

 $(10 \ge 2 = 20)$ 

Sub. Code: 1504

2. Write an essay about heart sounds.

II. Write Notes on:

**Time: Three Hours** 

I. Essay Questions:

- 1. Functions of Plasma Proteins.
- 2. Functions of Reticulo-Endothelial system.

1. Describe about the process of formation of urine.

- 3. Basal metabolic Rate.
- 4. Radial pulse.
- 5. Hypoxia.
- 6. ABO blood groups.
- 7. Lewis triple response.
- 8. Iron deficiency anemia.
- 9. Periodic breathing.
- 10. Nephron and its functions.

## III. Short Answers on:

- 1. Innate immunity.
- 2. Sweat gland.
- 3. AV Node.
- 4. All or None law.
- 5. Define thrombosis.
- 6. Balanced diet.
- 7. Astigmatism.
- 8. Heart block.
- 9. SCUBA.
- 10. ESR.

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 $(10 \times 5 = 50)$ 

 $(2 \times 15 = 30)$ 

(10 x 2 = 20)

FIRST B.H.M.S. DEGREE EXAMINATION

OCTOBER 2018

(New Regulation – From 2015-2016 Batch onwards) PAPER IV – PHYSIOLOGY - I

Q.P. Code: 581504

**Answer All questions** 

Sub. Code: 1504

Maximum: 100 Marks

## [LN 1504]