February 2012

[LA 6153] **Sub. Code: 6153**

BACHELOR OF OCCUPATIONAL THERAPY EXAMINATION

FIRST YEAR

Paper III – PHYSIOLOGY

Q.P. Code: 786153

Time: Three Hours **Maximum: 100 marks**

Answer ALL questions

I. Elaborate on: **(2X20=40)**

1. Define blood pressure. Discuss the factors maintaining and regulating blood pressure.

2. Discuss the molecular mechanism of muscular contraction.

II. Write notes on : **(8X5=40)**

1. Blood grouping.
2. Lung volumes and lung capacities.
3. Hypoxia.
4. Functions of thyroxine.
5. Glomerular Filtration Rate (GFR)
6. Visual pathway.
7. Functions of Basal Ganglia.
8. Cerebrospinal fluid. (CSF)

III. Short Answers : **(10X2=20)**

1. Tetany.
2. Refractory period.
3. Myasthenia Gravis.
4. Oxygen dissociation curve.
5. Any four functions of cerebellum.
6. Functions of platelets.
7. List any three contraceptive methods.
8. Reflex Arc.
9. Isotonic and Isometric contraction.
10. Heart sounds.

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[LB 6153] **AUGUST 2012** **Sub. Code: 6153**

FIRST YEAR BOT EXAM

PAPER – III PHYSIOLOGY

Q.P. Code: **786153**

Time: Three Hours **Maximum: 100 marks**

(180 Min) Answer ALL questions in the same order.

I. Elaborate on:	**Pages (Max.)**	**Time (Max.)**	**Marks (Max.)**
1. What is haemostasis? Name the clotting factors. Explain the instrinsic mechanism of clotting?	19	33	20
2. Name the descending tracts. Describe the origin, course and termination of them with their functions?	19	33	20
II. Write notes on:			
1. Structure of skin.	3	8	5
2. Blood groups.	3	8	5
3. Heart sounds.	3	8	5
4. Cell and its parts.	3	8	5
5. Functions of thalamus.	3	8	5
6. Micturition.	3	8	5
7. Factors affecting muscle endurance.	3	8	5
8. Taste pathway.	3	8	5
III. Short Answers:			
1. Functions of haemoglobin.	1	5	2
2. Oxygen debt.	1	5	2
3. Muscle fatigue.	1	5	2
4. Structure of neurons.	1	5	2
5. Chemoreceptors.	1	5	2
6. Two factors affectting foetal growth.	1	5	2
7. Uses of ECG.	1	5	2
8. Myxoedema.	1	5	2
9. Bile secretion.	1	5	2
10. Name two neurotransmitters of ANS (Autonomic Nervous System).	1	5	2

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[LC 6153] **FEBRUARY 2013** **Sub. Code: 6153**

FIRST YEAR BOT EXAM

PAPER – III PHYSIOLOGY

Q.P. Code: **786153**

Time: Three Hours **Maximum: 100 marks**

(180 Min)

I. Elaborate on: **(2X20=40)**

1. Define neuro-Muscular function. Discuss the mechanism of transmission of impulses across NMJ.
2. How is the process of respiration regulated?

II. Write notes on: **(8X5=40)**

1. Lung volumes & Capacities.
2. Isotonic & Isometric Contractions.
3. Bile
4. Functions of cerebellum.
5. Cerebro-Spinal Fluid (CSF).
6. Micturition Reflex.
7. Function of thyroxine.
8. Properties of skeletal muscle.

III. Short Answers: **(10X2=20)**

1. Rheobase and chronaxie.
2. Heart sounds.
3. Functions of red blood cell.
4. Tetany.
5. Name the ovarian hormones.
6. Functions of lymph.
7. Saltatory conduction.
8. Classification of leucocyte
9. Hypoxia.
10. List any four functions of salivary juice.

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[LD 6153] **AUGUST 2013** **Sub. Code : 6153**

FIRST YEAR BOT EXAM

Paper III – PHYSIOLOGY

Q.P. Code: 786153

Time: Three hours **Maximum : 100 marks**

I. Elaborate on: **(2x20 = 40)**

1. Describe in detail exercise and postural changes on cardiovascular system.
2. Write in detail about the gastric juice composition, phases of secretion and regulation of it.

II. Write Notes on: **(8x5 = 40)**

1. Normal Electrocardiogram (ECG) and its uses
2. Mechanics of respiration
3. Functions of placenta
4. Lymph & factors affecting its flow
5. Regulation of respiration
6. Factors that affect foetal growth
7. Structure of cell and functions of cell organelles
8. Neuromuscular junction

III. Short Answers on: **(10x2 = 20)**

1. Three steps involved in formation of urine
2. Functions of cerebrospinal fluid
3. Rods and cones
4. Jaundice
5. Structure of sperm
6. Pregnancy tests
7. Define stroke volume
8. Name the anterior pituitary hormones
9. Functions of bile
10. Parathormone

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[LE 6153] **FEBRUARY 2014** **Sub. Code : 6153**

FIRST YEAR BOT EXAM

Paper III – PHYSIOLOGY

Q.P. Code: 786153

Time: Three hours **Maximum : 100 marks**

I. Elaborate on: **(2x20 = 40)**

1. Name the clotting factors. Write in detail the intrinsic and extrinsic regulation of coagulation
2. Draw the structure of nephron. Describe the steps involved in formation of urine.

II. Write Notes on: **(8x5 = 40)**

1. Movements of intestine
2. Posterior pituitary hormones
3. Temperature regulation
4. Properties of cardiac muscle
5. Cerebral circulation
6. Lactation
7. Functions of liver
8. Pancreatic secretion

III. Short Answers on: **(10x2 = 20)**

1. Define cardiac output
2. Blood indices
3. Structure of skin
4. Uses of Electrocardiogram(ECG)
5. Muscles of expiration
6. Blood volume
7. Taste receptors
8. Layers of retina
9. Functions of bile
10. Types of hypoxia

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[LF 6153] **AUGUST 2014** **Sub. Code : 6153**

FIRST YEAR BOT EXAM
PAPER III – PHYSIOLOGY

Q.P. Code: 786153

Time: Three hours **Maximum : 100 marks**

I. Elaborate on: **(2x20 = 40)**

1. Define Blood Pressure. Write in detail the various factors influencing Blood Pressures.

2. Write in detail the intrinsic mechanism of coagulation.

II. Write Notes on: **(8x5 = 40)**

1. Structure and functions of skin
2. Neural regulation of respiration
3. Events of cardiac cycle
4. Hypoxia and its types
5. Micturation reflex
6. Functions of placenta
7. Properties of skeletal muscle
8. Stages of deglutition

III. Short Answers on: **(10x2 = 20)**

1. Mention any four functions of blood
2. What is active transport and give an example?
3. Draw the waves of ECG
4. Name the muscles of respiration
5. What is cretinism and give the cause for it?
6. What is Rh incompatibility?
7. Mention the stages of spermatogenesis
8. Define GFR. Give its normal value
9. List the enzymes required for digestion of proteins
10. Mention any two tests for ovulation

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[LG 6153] **FEBRUARY 2015** **Sub. Code : 6153**

FIRST YEAR BOT EXAMINATION
PAPER III – PHYSIOLOGY

Q.P. Code: 786153

Time: Three hours **Maximum : 100 marks**

I. Elaborate on: **(2 x 20 = 40)**

1. Define Cardiac cycle. Explain the events in different phases of cycle with illustrative diagram.
2. Name the hormones of Anterior Pituitary and Posterior Pituitary gland. Write about their actions in detail.

II. Write notes on: **(8 x 5 = 40)**

1. Chemical regulation of respiration
2. Types of muscle
3. Pyramidal tract
4. Heart rate
5. What is Glomerular filtration rate and factors regulating it?
6. Cushing's syndrome
7. Intrinsic mechanism of coagulation
8. Functions of Thalamus

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

1. Enzymes in pancreatic juice
2. Testicular hormones
3. Acquired immunity
4. Blood groups
5. Neuroglia
6. Sarcomere
7. Functions of skin
8. Cyanosis
9. Gigantism
10. Define Stroke volume

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[LH 6153] **AUGUST 2015** **Sub. Code: 6153**

B.O.T. DEGREE EXAMINATION

FIRST YEAR

PAPER III – PHYSIOLOGY

Q.P. Code: 786153

Time : Three Hours **Maximum : 100 marks**

Answer ALL questions

I. Elaborate on: **(2 x 20 = 40)**

1. Write in detail about the gastric juice composition, phases of secretion and regulation of it.
2. Name the descending tracts. Describe the origin, course and termination of them with their functions?

II. Write notes on: **(8 x 5 = 40)**

1. Homeostasis and feed back mechanism.
2. Electrocardiogram.
3. Factors affecting cardiac output.
4. Oxygen dissociation curve.
5. Blood groups.
6. Oral contraceptive pills.
7. Erythroblastosis fetalis.
8. Conduction system of heart.

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

1. Apoptosis.
2. Landsteiner law.
3. Stroke volume.
4. What is surfactant?
5. Hormones which rise Blood sugar level.
6. Myopia.
7. Tetany.
8. Isotonic and Isometric contraction.
9. Name two neurotransmitters of ANS (Autonomic Nervous System).
10. Three steps involved in formation of urine.

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[LI 6153] FEBRUARY 2016 **Sub. Code : 6153**

FIRST YEAR BOT EXAMINATION
PAPER III – PHYSIOLOGY

Q.P. Code: 786153

Time: Three hours **Maximum : 100 Marks**

I. Elaborate on: **(2 x 20 = 40)**

1. Define Erythropoiesis. Explain the stage of Erythropoiesis and factors controlling Erythropoiesis. Add a note on Iron deficiency Anemia.

2. Name the Ascending tracts of the Spinal Cord. Describe the origin, course and termination of the Ascending tracts in the dorsal white column of the Spinal Cord. What are the sensations carried by these tracts?

II. Write notes on: **(8 x 5 = 40)**

1. Primary active transport.
2. Factors affecting Cardiac output.
3. Heart sounds.
4. Lung volumes and Lung capacities.
5. Juxtaglomerular apparatus.
6. Functions of growth hormone
7. Role of Pancreatic juice in digestion.
8. Functions of Placenta.

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

1. Functions of platelets.
2. Myasthenia Gravis.
3. Oxygen debt.
4. Mention the stages of Spermatogenesis.
5. Cardiac index.
6. Receptors for vision.
7. Atonic bladder.
8. Uses of Electrocardiogram (ECG).
9. Functions of Bile.
10. Myxedema.

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