

August 2011

[KZ 6253]

Sub. Code : 6253

BACHELOR OF PHYSIOTHERAPY EXAMINATION

FIRST YEAR

Paper III – PHYSIOLOGY AND APPLIED PHYSIOLOGY

Q.P. Code : 746253

Time : Three hours

Maximum : 100 marks

ANSWER ALL QUESTIONS

I. LONG ESSAYS

(2X20=40)

1. Describe the transport of carbon-di-oxide in the blood.
2. Name the various endocrine glands in the body and describe growth hormone and applied physiology.

II. SHORT NOTES

(8X5=40)

1. Endoplasmic Reticulum.
2. Functions of liver.
3. Neuromuscular junction.
4. Functions of pancreas.
5. Hormones of Adrenal Gland.
6. Functions of Leucocytes.
7. Heart sounds.
8. Neuralgia.

III. SHORT ANSWERS

(10X2=20)

1. Define Homeostasis.
2. Define Erythrocyte sedimentation rate.
3. Define Glomerular Filtration Rate.
4. Types of muscles.
5. Define Ovulation.
6. Types of bone cells.
7. Define tidal volume.
8. Glands of the skin.
9. Composition of the blood.
10. Properties of Platelets.

February 2012

[LA 6253]

Sub. Code : 6253

BACHELOR OF PHYSIOTHERAPY EXAMINATION

FIRST YEAR

Paper III – PHYSIOLOGY AND APPLIED PHYSIOLOGY

Q.P. Code: 746253

Time: Three Hours

Maximum: 100 marks

Answer ALL questions

I. Elaborate on: (2X20=40)

1. Discuss the mechanism of Skeletal Muscle Contraction.
2. Define Erythropoiesis. Discuss the factors influencing erythropoiesis.

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

1. Functions of Thyroxine.
2. Electrocardiogram.
3. Oxygen Dissociation Curve.
4. Cerebrospinal Fluid.
5. Visual Pathway.
6. Micturition Reflex.
7. Lung Volume and Capacities.
8. Properties of Synapse.

III. Short Answers: (10X2=20)

1. List any four functions of Cerebellum.
2. Cyanosis.
3. Slow and fast Muscle Fibre.
4. Reflex Arc.
5. Functions of Bile.
6. Heart Sounds.
7. Name the Cardio –Vascular Reflexes.
8. Erythroblastosis Foetalis.
9. Taste Pathway.
10. Functions of Testosterone.

[LB 6253]

AUGUST 2012

Sub. Code: 6253

FIRST YEAR BPT EXAM

Paper III – PHYSIOLOGY AND APPLIED PHYSIOLOGY

Q.P. Code: 746253

Time: Three hours

Maximum : 100 marks

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

I. Elaborate on:

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

- | | | | |
|--|----|----|----|
| 1. Define Neuro- Muscular Junction.
Describe the transmission of impulses across Neuro-
Muscular Junction. | 19 | 33 | 20 |
| 2. Discuss the mechanism of Blood Clotting. | 19 | 33 | 20 |

II. Write notes on:

- | | | | |
|-------------------------------|---|---|---|
| 1. Electrocardiogram. | 3 | 8 | 5 |
| 2. Muscle Spindle. | 3 | 8 | 5 |
| 3. Bile. | 3 | 8 | 5 |
| 4. Oxygen Dissociation Curve. | 3 | 8 | 5 |
| 5. Functions of Thyroxine. | 3 | 8 | 5 |
| 6. Micturition. | 3 | 8 | 5 |
| 7. Motor Unit. | 3 | 8 | 5 |
| 8. Menstrual Cycle. | 3 | 8 | 5 |

III. Short Answers:

- | | | | |
|---------------------------------------|---|---|---|
| 1. Functions of Cerebro Spinal fluid. | 1 | 5 | 2 |
| 2. Tetanus and Clonus. | 1 | 5 | 2 |
| 3. Erythroblastosis Foetalis. | 1 | 5 | 2 |
| 4. List the functions of Kidney. | 1 | 5 | 2 |
| 5. Hypoxia. | 1 | 5 | 2 |
| 6. Functions of Placenta. | 1 | 5 | 2 |
| 7. Saltatory Conduction. | 1 | 5 | 2 |
| 8. Heart Sounds. | 1 | 5 | 2 |
| 9. List Four functions of Cortisol. | 1 | 5 | 2 |
| 10. All or none Law. | 1 | 5 | 2 |

[LC 6253]

FEBRUARY 2013
FIRST YEAR BPT EXAM

Sub. Code : 6253

Paper III – PHYSIOLOGY AND APPLIED PHYSIOLOGY

Q.P. Code: 746253

Time : Three hours
(180 Min)

Maximum : 100 marks

I. Elaborate on:

(2X20=40)

1. Define arterial blood pressure and describe any five factors that determine blood pressure. Explain the Renin Angiotensin mechanism in regulation of blood pressure.
2. What is the normal fasting blood glucose level? Describe the hormonal regulation blood. Glucose level in the body. Add a note on diabetes mellitus.

(8X5=40)

II. Write notes on:

1. Properties of skeletal muscle.
2. Pain pathway.
3. Anticoagulants.
4. Contraception.
5. Deglutition.
6. Glomerular filtration rate.
7. Artificial respiration.
8. Peculiarities of coronary circulation.

III. Short answers:

(10X2=20)

1. What is gravindex test?
2. Draw a neat diagram of a Nephron and label its parts.
3. What is haemophilia ? and what is the cause for it ?
4. What are heart sounds and what are they due to?
5. List any four functions of gastric juice.
6. What is the role of basal ganglia in voluntary movement?
7. What are the hormones involved in regulation of water balance in the body?
8. Define stroke volume and what is the normal value?
9. What is timed vital capacity and its significance?
10. What is Wallerian degeneration?

[LD 6253]

AUGUST 2013

Sub. Code : 6253

FIRST YEAR BPT EXAM

Paper III – PHYSIOLOGY AND APPLIED PHYSIOLOGY

Q.P. Code: 746253

Time: Three hours

Maximum : 100

I. Elaborate on:

(2 x 20 = 40)

1. Define cardiac cycle. Describe in detail the changes that occur in different phases of cardiac cycle with a suitable diagram.
2. Name the ascending tracts of spinal cord. Explain in detail the pain pathway and types of pain.

II. Write notes on:

(8 x 5 = 40)

1. Glomerular filtration rate
2. Functions of liver
3. Placental hormones
4. Chemical regulation of respiration
5. Parturition
6. Upper motor neuron(UMN) and Lower motor neuron lesion(LMN)
7. Carbohydrate metabolism
8. Spermatogenesis

III. Short Answers:

(10 x 2= 20)

1. Uses of Electrocardiogram
2. Salivary glands
3. Draw structure of cell
4. Cretinism
5. Define cardiac output
6. Acid base balance
7. Types of jaundice
8. What is anemia
9. Taste receptors
10. Regulation of pancreatic juice
