

APRIL - 2001

[KD 904]

Sub. Code : 5117

BACHELOR OF PHYSIOTHERAPY DEGREE  
EXAMINATION.

Second Semester

(Revised/Modified Regulations)

Paper II — PHYSIOLOGY

(Common to B.P.T. and B.O.T.)

Time : Three hours

Maximum : 100 marks

1. Write an essay on any ONE of the following : (20)

(a) Describe the composition, functions and regulation of salivary secretion.

Or

(b) What is normal blood sugar level? Describe how it is maintained in the man.

2. Write short notes on any SIX : (6 × 5 = 30)

- (a) Vital capacity.
- (b) Pathway for smell.
- (c) Functions of white blood corpuscles.
- (d) Electrocardiogram.

(e) Functions of Testosterone.

(f) Sarcomere.

(g) Oxytocin.

(h) Neurone.

3. (a) Define and describe the pathway for pain and add a note on Referred Pain. (20)

Or

(b) Define and describe the cardiac cycle.

4. Write short notes on any SIX : (6 × 5 = 30)

- (a) Anticoagulants.
- (b) Heart sounds.
- (c) Parathyroid hormone.
- (d) Menstrual cycle.
- (e) Functions of Hypothalamus.
- (f) Baroreceptors.
- (g) Innervation of urinary bladder.
- (h) Blood groups.

APRIL - 2001

[KD 906]

Sub. Code : 5312

BACHELOR OF PHYSIOTHERAPY DEGREE  
EXAMINATION.

Second Semester

(New/Modified Regulations)

Paper II — PHYSIOLOGY

(Common to B.P.T. and B.O.T.)

Time : Three hours

Maximum : 100 marks

1. Write an essay on any ONE of the following : (20)

(a) What are the hormones produced by the Anterior pituitary gland? Describe the normal functions of growth hormone.

Or

(b) Define cardiac output and describe the factors maintaining it. Explain one method for measuring the cardiac output.

2. Write short notes on any SIX : (6 × 5 = 30)

- (a) Antidiuretic hormone.
- (b) Glomerular filtration rate.
- (c) Basal ganglia.

(d) Movements of small intestines.

(e) Ovulation.

(f) Visual pathway.

(g) Hypoxia.

(h) Types of nerve fibres.

3. Write an essay on any ONE of the following : (20)

(a) Describe the origin, course, termination and functions of pyramidal tracts. What are the differences between upper motor neurone lesion and lower motor neurone lesion.

Or

(b) Explain how oxygen is carried from the lungs to the tissues. Describe the oxygen dissociation curve.

4. Write short notes on any SIX : (6 × 5 = 30)

- (a) Nephron.
- (b) Functions of liver.
- (c) Heart sounds.
- (d) Chemoreceptors.
- (e) Vital capacity.
- (f) Functions of Insulin.
- (g) Functions of Hypothalamus.
- (h) Spermatogenesis.

NOVEMBER - 2001

[KE 904]

Sub. Code : 5117

BACHELOR OF PHYSIOTHERAPY DEGREE  
EXAMINATION.

Second Semester

(Revised/Modified Regulations)

Paper II — PHYSIOLOGY

(Common to B.P.T. and B.O.T.)

Time : Three hours

Maximum : 100 marks

1. Write an essay on any ONE of the following :  
(1 × 20 = 20)

(a) Define cardiac cycle and explain all the phases of cardiac cycle.

Or

(b) Name the descending tracts of the spinal cord and explain the pyramidal tract.

2. Write short notes on any SIX : (6 × 5 = 30)

(a) Menstrual cycle.

(b) Myxedema.

(c) Anticoagulants.

(d) Isometric contraction.

(e) Pancreatic enzymes.

(f) Vital capacity.

(g) Auditory pathway.

(h) Micturition.

3. Write an essay on any ONE of the following :  
(1 × 20 = 20)

(a) Name the hormones of adrenal cortex. Describe the actions of any one of the hormones.

Or

(b) What are the parts of nephron and describe the formation of urine?

4. Write short notes on any SIX : (6 × 5 = 30)

(a) Heart sounds

(b) Plasma proteins

(c) CSF

(d) Dehydration

(e) Transport of O<sub>2</sub> in blood

(f) Visual pathway

(g) Pregnancy tests

(h) Functions of cardiac muscle.

NOVEMBER - 2001

[KE 906]

Sub. Code : 5312

BACHELOR OF PHYSIOTHERAPY DEGREE  
EXAMINATION.

Second Semester

(New/modified Regulations)

Paper II — PHYSIOLOGY

(Common to B.P.T. and B.O.T.)

Time : Three hours

Maximum : 100 marks

1. Write an essay on any ONE of the following : (20)
- (a) Draw the respiratory centres and explain the regulation of respirations.

Or

(b) Describe the effects of muscular exercise on the cardio vascular and respiratory system, how are these effects brought about.

2. Write short notes on any SIX : (6 × 5 = 30)
- (a) ECG
- (b) Contraceptives
- (c) Blood groups
- (d) Neuromuscular transmission.
- (e) Taste buds

(f) Deglutition

(g) Hemisection of spinal cord

(h) Body temperature regulation.

3. Write an essay on any ONE of the following :  
(1 × 20 = 20)

(a) Define blood pressure. Discuss in detail how the blood pressure is regulated.

Or

(b) Name the clotting factors and describe the mechanism of coagulation of blood.

4. Write short notes on any SIX : (6 × 5 = 30)

(a) Lymph

(b) Functions of thalamus

(c) Cyanosis

(d) Ovulation

(e) Functions of saliva

(f) Pupillary reflexes

(g) Muscle tone.

(h) Growth hormone.

MARCH - 2002

[KG 906]

Sub. Code : 5312

BACHELOR OF PHYSIOTHERAPY DEGREE  
EXAMINATION.

Second Semester

(New Modified Regulations)

Paper II — PHYSIOLOGY

(Common to B.P.T. and B.O.T)

Time : Three hours

Maximum : 100 marks

1. Write an essay on any ONE of the following : (20)

(a) Describe the structure of a Nephron and give an account of the mechanism of urine formation.

(b) Describe the structure of Adrenal cortex and name the hormones secreted by it and describe the actions of gluco corticoids.

2. Write short notes on any SIX of the following :

(6 × 5 = 30)

(a) Factors for Erythropoiesis

(b) Hypoxia

(c) Leukocytes and their functions

(d) Tetany

(e) Myasthenia gravis

(f) Corpus luteum

(g) Movements of small intestine

(h) Refractive errors of eye.

3. Write an essay on any ONE of the following : (20)

(a) Describe the organisation of autonomic nervous system and give an account of the functions of sympathetic nervous system.

(b) Describe how oxygen is transported in the blood.

4

Write short notes on any SIX of the following :

(6 × 5 = 30)

(a) Micturition

(b) Cardiac cycle

(c) Deglutition

(d) Vestibular apparatus

(e) Decerebrate rigidity

**MARCH - 2002**

**(f) Aldosterone**

**(g) Visual pathway**

**(h) Plasma proteins.**

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**APRIL - 2003**

KT 904

Sub Code: 5117

**BACHELOR OF PHYSIOTHERAPY  
DEGREE EXAMINATION.**

**Second Semester**

**Revised Regulations/Modified Regulations  
(Common to BPT/BOT)**

**Paper II – PHYSIOLOGY**

**Time: Three hours**

**Maximum: 100 marks**

**All questions are compulsory  
Draw diagrams wherever necessary**

1. Write essay on any ONE of the followings: (20)
  - a) Classify white blood corpuscles and give an account of their functions.
  - b) Describe the mechanism of skeletal muscle contraction..
  
2. Write short notes on any SIX ( 6 X 5 = 30)
  - a) O<sub>2</sub> Dissociation curve:
  - b) Thalamus
  - c) Cutaneous Receptors
  - d) Platelets
  - e) Testosterone
  - f) Middle Ear
  - g) Edema
  - h) Adrenal Cortical hormones

**APRIL - 2003**

3. Write essay on any ONE of the followings: (20)

- a) Describe the formation of concentrated urine.
- b) What are the hormones of Anterior pituitary gland? Describe their functions.

4. Write short notes on any SIX (6 X 5 = 30)

- a) Blood Groups.
- b) Parathormone
- c) Pancreatic juice
- d) Cardiac output
- e) Rhodopsin cycle
- f) Sensation of taste
- g) Functions of blood
- h) Contraceptives



APRIL - 2003

[KI 906]

Sub. Code : 5312

**BACHELOR OF PHYSIOTHERAPY  
DEGREE EXAMINATION.**

**Second Semester**

**( New Modified Regulations)**

**(Common to BPT and BOT)**

**Paper II — PHYSIOLOGY**

**Time : Three hours**

**Maximum : 100 marks**

1. Write an essay on any ONE of the following :

(1 × 20 = 20)

(a) Describe the various nuclei, connections and functions of Thalamus with suitable diagram.

Or

(b) What are the hormones of the thyroid gland write in detail their actions and regulation and write a note on Myxoedemia.

2. Write short notes on any SIX :

(6 × 5 = 30)

(a) Functions of cerebellum

(b) Composition of saliva

(c) Artificial respiration

(d) Vomiting

(e) Asphyxia

(f) Draw and label a reflex arc

(g) Functions of placenta

(h) Factors affecting Lymph flow.

3. Write an essay on ONE of the following :

(1 × 20 = 20)

(a) Write in detail the uterine and ovarian changes in the menstrual cycle.

Or

(b) Describe the various stages in the development of an RBC and mention the factors essential for erythropoiesis.

4. Write short notes on any SIX :

(6 × 5 = 30)

(a) Physiological variation of Blood pressure

(b) Gigantism

**APRIL - 2003**

- (c) Testosterone**
  - (d) Functions of WBC**
  - (e) Cerebral circulation**
  - (f) E.S.R**
  - (g) Renal circulation.**
  - (h) Regulation of Heart rate.**
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OCTOBER - 2003

[KJ 904]

Sub. Code : 5117

**BACHELOR OF PHYSIOTHERAPY DEGREE  
EXAMINATION.**

Second Semester

(Revised Modified Regulations)

(Common to BPT and BOT)

Paper II — PHYSIOLOGY

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

M.C.Q. must be answered **SEPARATELY** on the answer sheet provided as per the instructions on the first page of M.C.Q. Booklet.

Answer **ALL** questions.

Draw suitable diagrams wherever necessary.

I. Essay questions :                                  (2 × 15)

1. Describe the mechanism of skeletal muscle contraction.
2. Name the thyroid hormones. Discuss the synthesis, functions and regulation of thyroxine secretion.

II. Short notes :                                  (10 × 5)

- (a) Pulmonary function tests
  - (b) Functions of Bile
  - (c) Hemisection of spinal cord
  - (d) Vestibular apparatus
  - (e) Contraceptive methods
  - (f) Juxta-glomerular apparatus
  - (g) Functions of cerebellum
  - (h) Errors of refraction
  - (i) Electro cardiogram
  - (j) Platelets.
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OCTOBER - 2003

[KJ 906]

Sub. Code : 5312

**BACHELOR OF PHYSIOTHERAPY DEGREE  
EXAMINATION.**

Second Semester

(New Modified Regulations)

(Common to BPT and BOT)

Paper II — PHYSIOLOGY

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

M.C.Q. must be answered SEPARATELY on the answer  
sheet provided as per the instructions on the first page  
of M.C.Q. booklet.

Answer ALL questions.

Draw suitable diagrams wherever necessary.

I. Essays : (2 × 15)

1. Discuss the process of coagulation of blood.
2. Define blood arterial pressure. Describe the factors maintaining B.P. and how is it regulated.

II. Short notes :

- (a) Ovulation. (10)
- (b) Artificial respiration.
- (c) Pancreatic juice.
- (d) Visual pathway.
- (e) Referred pain.
- (f) Neuromuscular junction.
- (g) Basal ganglia.
- (h) Nephron.
- (i) Functions of Insulin.
- (j) Cerebro spinal fluid.

**AUGUST - 2004**

**[KL 906]**

**Sub. Code : 5312**

**BACHELOR OF PHYSIOTHERAPY DEGREE  
EXAMINATION.**

**Second Semester**

**(New Modified Regulations)**

**(Common to BPT and BOT)**

**Paper II — PHYSIOLOGY**

**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**

**Answer ALL questions.**

**Draw suitable diagrams wherever necessary.**

**I. Essays : (2 × 15 = 30)**

**(1) Describe the clotting pathway. Explain why circulating blood does not clot in health. (12 + 3 = 15)**

**(2) Describe the two neuron pathway for voluntary contraction of skeletal muscle. Explain the observed differences in muscle tone in lesions of each set of neurons. (12 + 3 = 15)**

**II. Short notes : (10 × 5 = 50)**

**(a) Functions of skin**

**(b) Blood groups**

**(c) Renin–angiotension–aldosterone mechanism for regulation of blood pressure**

**(d) Hypoxia**

**(e) Digestion and absorption of carbohydrates**

**(f) Micturition**

**(g) Actions of thyroid hormones**

**(h) Ovarian cycle in health**

**(i) Referred pain**

**(j) Properties of cardiac muscle.**

FEBRUARY - 2005

[KM 906]

Sub. Code : 5312

BACHELOR OF PHYSIOTHERAPY DEGREE  
EXAMINATION.

Second Semester

(New Modified Regulations)

(Common to BPT and BOT)

Paper II — PHYSIOLOGY

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

Answer ALL questions.

Draw suitable diagrams wherever necessary.

I. Write essay on :                      (2 × 15 = 30)

(1) Draw a neat labeled diagram of the Cortico Spinal tract. Trace the path way and mention the effects at different level of lesion.

(2) Define Tone. How is Tone regulated and what are its variations in hemiplegia, poliomyelitis and cerebellar lesion?

II. Write short notes :                      (10 × 5 = 50)

- (a) Active transport.
- (b) Stages of erythropoiesis.
- (c) Rh incompatibility.
- (d) Long term regulation of blood pressure.
- (e) What is Hypoxia? Write the different types with examples.
- (f) What is Glomerular Filtration Rate? How is it measured?
- (g) Diabetes mellitus.
- (h) Normal blood calcium level and the hormones regulating it.
- (i) Name the different pregnancy tests. Explain immunological test.
- (j) Draw a diagram of myoneural junction. What is myasthenia gravis?

**AUGUST - 2005**

**[KN 906]**

**Sub. Code : 5312**

**BACHELOR OF PHYSIOTHERAPY DEGREE  
EXAMINATION.**

(Common to All Regulations)

(New modified/Revised Non Semester Regulations)

(Common to BPT and BOT Examinations)

**PHYSIOLOGY**

**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**

**Answer ALL questions.**

**Draw suitable diagrams wherever necessary.**

**I. Write Essay on:                                  (2 × 15 = 30)**

**1. Describe the cardiovascular and respiratory changes which occur as a result of exercise in a healthy adult.**

**2. Describe the origin, course, termination and functions of pyramidal tracts mention the effects of Upper Motor Neuron (U.M.N.) type of Paralysis.**

**II. Write short notes on :                                  (10 × 5 = 50)**

**(a) Role of skin in temperature regulation.**

**(b) Blood group.**

**(c) Heart sounds.**

**(d) Vital capacity.**

**(e) Cretinism.**

**(f) Pregnancy tests.**

**(g) Withdrawal reflex.**

**(h) Colour vision.**

**(i) Cerebrospinal fluid.**

**(j) Saltatory conduction and significance.**

FEBRUARY - 2006

[KO 906]

Sub. Code : 6112

BACHELOR OF PHYSIOTHERAPY DEGREE  
EXAMINATION.

(Common to All Regulations)

(Common to BPT and BOT Examinations)

PHYSIOLOGY

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

Answer ALL questions.

Draw suitable diagrams wherever necessary.

I. Essay questions : (2 × 15 = 30)

(1) Draw a neat labelled diagram of connections of cerebellum. Discuss its connections and functions.

(2) How is the process of breathing regulated? Add a note on Artificial respiration.

II. Write Short notes :

(10 × 5 = 50)

- (a) Lymph
  - (b) ECG (Electro cardiogram)
  - (c) Oxygen debt
  - (d) Contraceptive devices
  - (e) Micturition
  - (f) Synaptic transmission
  - (g) Neuro muscular junction
  - (h) Tetany
  - (i) Biliary secretion
  - (j) Visual pathway.
-



**AUGUST - 2006**

**[KP 906]**

**Sub. Code : 6112**

**BACHELOR OF PHYSIOTHERAPY DEGREE  
EXAMINATION.**

(Common to All Regulations)

(Common to BPT and BOT Examinations)

**PHYSIOLOGY**

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

Draw suitable diagrams wherever necessary.

Answer ALL questions.

I. Write essay :

1. Describe the mechanism of skeletal muscle contraction. Add a note on isometric and isotonic contraction. (20)

2. Define cardiac output. Discuss the factors regulating cardiac output and methods to measure it. (15)

3. Describe the neural control of respiration. (15)

II. Write short notes :

(6 × 5 = 30)

(a) Structure and functions of platelets

(b) Gastric emptying

(c) Types of Nephrons

(d) Heart sounds

(e) Functions of estrogen

(f) Spinothalamic tract

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FEBRUARY - 2007

[KQ 906]

Sub. Code : 6112

BACHELOR OF PHYSIOTHERAPY DEGREE  
EXAMINATION.

(Common to All Regulations)

(Common to BPT and BOT Examinations)

PHYSIOLOGY

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

Answer ALL questions.

Draw suitable diagrams wherever necessary.

I. Write Essay :

(1) What is Erythropoiesis? Describe the various stages and factors regulating erythropoiesis. (20)

(2) Describe the blood clotting mechanism. Name a natural anticoagulant in the body. How does it act? (15)

(3) Name the hormones of thyroid gland. What are the functions of thyroxine. Write a note on cretinism. (15)

II. Write short answers on : (6 × 5 = 30)

- (a) Chemical regulation of respiration
- (b) Types and functions of synapse
- (c) Effect of exercise on cardiovascular system
- (d) Glomerular filtration rate (GFR)
- (e) Cerebellar functions
- (f) Composition and functions of Bile.

AUGUST - 2007

[KR 906]

Sub. Code : 6112

BACHELOR OF PHYSIOTHERAPY DEGREE  
EXAMINATION.

(Common to All Regulations)

(Common to BPT and BOT Examinations)

PHYSIOLOGY

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

Answer ALL questions.

Draw suitable diagrams wherever necessary.

I. Write Essay :

(1) How is the process of breathing regulated?  
(15)

(2) Discuss Neuro-Muscular junction. (15)

II. Write Short notes : (10 × 5 = 50)

(a) Functions of thyroxine

(b) Hypoxia

(c) Functions of bile

(d) Contraceptive devices

(e) Reflex action

(f) Effect of exercise on cardio-respiratory  
system

(g) Micturition reflex

(h) Composition and functions of pancreatic  
juice

(i) Functions of white blood corpuscles

(j) Functions of placenta.

**FEBRUARY 2008**

**[KS 906]**

**Sub. Code : 6112**

**BACHELOR OF PHYSIOTHERAPY DEGREE  
EXAMINATION.**

(Common to All Regulations)

(Common to BPT and BOT Examinations)

**PHYSIOLOGY**

**Q.P. Code : 746112**

**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**

**Answer ALL questions.**

**Draw suitable diagrams wherever necessary.**

**I. Essay : (2 × 15 = 30)**

**(1) Describe the ovarian and uterine (menstrual)  
cycles. (15)**

**(2) Describe the functions of the hormones  
secreted by the pituitary gland. (15)**

**II. Write short answers on : (10 × 5 = 50)**

- (a) Cardiac cycle**
  - (b) Reflex Arc**
  - (c) Hypoxia**
  - (d) Lung volumes and capacities**
  - (e) Hemolytic disease of the New born**
  - (f) Deglutition**
  - (g) Blood groups**
  - (h) Cerebrospinal fluid**
  - (i) Neuromuscular junction**
  - (j) Micturition.**
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**AUGUST 2008**

**[KT 906]**

**Sub. Code : 6112**

**BACHELOR OF PHYSIOTHERAPY DEGREE  
EXAMINATION.**

(Common to All Regulations)

(Common to BPT and BOT Examinations)

**PHYSIOLOGY**

**Q.P. Code : 746112**

**Time : Three hours**

**Maximum : 100 marks**

**Answer ALL questions.**

**Draw suitable diagrams wherever necessary.**

**I. Essay : (2 × 15 = 30)**

**1. Define cardiac output. Describe one method of determining the cardiac output. How the cardiac output is regulated? (2 + 3 + 10 = 15)**

**2. Describe the neuro-muscular junction. Explain the physiology of the neuro-muscular junction. Add a note on the neuro-muscular blocking agents. (3 + 8 + 4 = 15)**

## AUGUST 2008

II. Write short notes on : (10 × 5 = 50)

1. Nerve supply of the urinary bladder.
2. Functions of plasma proteins.
3. Muscle spindle.
4. Heart sounds.
5. Oxygen dissociation curve.
6. Composition of gastric juice.
7. Tetany.
8. Corpus luteum.
9. Upper motor neurone lesion.
10. Accomodation Reflex for near vision.

III. Write short answers on : (10 × 2 = 20)

1. Anticoagulant.
2. Lung volumes.
3. Glomerular filtration rate.
4. Deglutition.
5. Contractile proteins.

6. Testosterone.

7. Name the factors maintaining blood pressure.

8. Tract carrying the sensation of pain and temperature.

9. Growth hormone.

10. Myasthenia gravis.

February 2009

[KU 906]

Sub. Code: 6112

**BACHELOR OF OCCUPATIONAL THERAPY  
DEGREE EXAMINATION**

**First Year Non-Semester Regulations  
Second Semester New modified Regulations  
(Common to all regulations)**

**(Common to BPT and BOT Examinations)**

**Paper III – PHYSIOLOGY**

***Q.P. Code : 786112***

**Time : Three hours**

**Maximum : 100 marks**

**Answer All questions.**

**Draw suitable diagrams wherever necessary**

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

1. Define Erythropoiesis. Explain the various stages of erythropoiesis and factors influencing the erythropoiesis. Add a note on anaemia.
2. Explain the physiological anatomy of cerebellum and give details about the cerebellar function tests.

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

1. Homeostasis and feed back mechanism.
2. Blood brain barrier.
3. Reticulo endothelial system.
4. Insulin and its functions.
5. Adrenergic receptors.
6. Peripheral vascular resistance.
7. Haemoglobin and haemoglobinopathies.
8. Glucose threshold of kidney.
9. Stress.
10. Hypoxia.

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

1. Physiological apnoea.
2. Law of intestine.
3. Draw diagram of conductive system of heart.
4. Name the tracts of extra pyramidal system.
5. Accomodation reflex.
6. Dysdiadokinesia.
7. CCK- PZ and its function
8. Apoptosis.
9. Define ESR and give normal values of ESR.
10. Wallerian degeneration.

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August 2009

[KV 906]

Sub. Code: 6112

**BACHELOR OF OCCUPATIONAL THERAPY  
DEGREE EXAMINATION**

**First Year Non-Semester Regulations  
Second Semester New modified Regulations  
(Common to all regulations)**

**(Common to BPT and BOT Examinations)**

**Paper III – PHYSIOLOGY**

*Q.P. Code : 786112*

**Time : Three hours**

**Maximum : 100 marks**

**Answer All questions.**

**Draw suitable diagrams wherever necessary**

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

1. Define blood pressure and its various components. Write about the short term and long term regulations of blood pressure. Add a note on Hypertension.
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. Short Notes on :** (10 x 5 = 50)

1. Cytoskeleton of cell.
2. Respiratory centre.
3. Micturition reflex and its control.
4. Functions of thyroid hormone.
5. Contraception.
6. Anaemia.
7. Isometric muscle contraction.
8. Colour vision.
9. Functions of saliva.
10. Cushing's syndrome.

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

1. Troponin.
2. Ankle Jerk and its applied aspects.
3. Na<sup>+</sup> K<sup>+</sup> pump.
4. Conduction deafness.
5. What is Bile?
6. Polycythemia.
7. Classification of WBCs.
8. Phases of cardiac cycle.
9. Functions of placenta.
10. Functions of Haemoglobin.

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February 2010

[KW 906]

Sub. Code: 6112

**BACHELOR OF OCCUPATIONAL THERAPY**

**DEGREE EXAMINATION**

**First Year Non-Semester Regulations**

**Second Semester New modified Regulations**

**(Common to all regulations)**

**(Common to BPT and BOT Examinations)**

**Paper III – PHYSIOLOGY**

***Q.P. Code : 786112***

**Time : Three hours**

**Maximum : 100 marks**

**Answer All questions.**

**Draw suitable diagrams wherever necessary**

**I. Essays :**

**(2 x 15 = 30)**

1. Define Erythropoiesis. Explain the stages of erythropoiesis and factors controlling erythropoiesis. Add a note on iron deficiency anemia.
2. Describe the microscopic structure of muscle with suitable diagram. Explain in detail the mechanism of skeletal muscle contraction.

**II. Short Notes on :**

**(10 x 5 = 50)**

1. Primary active transport.
2. Juxta Glomerular apparatus.
3. Conduction system of heart.
4. Hypoxic Hypoxia.
5. Effect of exercise on respiration.
6. Factors affecting cardiac output.
7. Menstrual cycle.
8. Blood transfusion.
9. Functions of cerebellum.
10. Properties of synapse.

**III. Short Answers:**

**(10 x 2 = 20)**

1. Define Osmosis.
2. Mention the functions of skin.
3. Neuromuscular Junction.
4. What are the non excretory functions of kidney?
5. What is surfactant?
6. Conditions where neutrophil count is increased.
7. Define blood pressure.
8. What are receptors?
9. Refractory errors.
10. Types of Hypoxia.

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August 2010

[KX 906]

Sub. Code : 6112

**BACHELOR OF OCCUPATIONAL THERAPY DEGREE EXAMINATION**  
**First Year Non-Semester Regulations**  
**Second Semester New Modified Regulations**  
**(Common to all regulations)**  
**(Common to BOT and BPT Examinations)**

**Paper III – PHYSIOLOGY**

*Q.P. Code : 786112*

**Time : Three hours**

**Maximum : 100 marks**

**ANSWER ALL QUESTIONS**

**Draw suitable diagrams wherever necessary.**

**I. Essays:**

**(2x15=30)**

1. Discuss the Origin, Course and Functions of Pyramidal tract. Add a note on Hemiplegia.
2. Discuss the various phases of Cardiac cycle.

**II. Short Notes:**

**(10x5=50)**

1. Lower motor Neuron lesion.
2. Hyperthyroidism.
3. Types of pain and pain pathway.
4. Role of pancreatic juice in digestion.
5. Difference between skeletal muscle and smooth muscle.
6. Functions of Saliva
7. Micturition reflex.
8. Functions of WBC (White Blood Corpuscles).
9. Functions of Cerebellum.
10. Artificial Ventilation.

**III. Short Answers:**

**(10x2=20)**

1. Two effects of exercise on Respiration.
2. Functions of Large Intestine.
3. Functions of Ovary.
4. Functions of Bile.
5. Vital capacity of Lung.
6. Hormones which rise Blood sugar level.
7. Enzymes in Gastric juice.
8. Name the Growth hormone.
9. Diabetes Insipidus.
10. Co-Transport.

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