

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.

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) Basoreceptors.

(g) Innervation of urinary bladder.

(h) Blood groups.

[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) Micturation.

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 O₂ in blood
(f) Visual pathway
(g) Pregnancy tests
(h) Functions of cardiac muscle.

[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.

[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.

(f) Aldosterone

(g) Visual pathway

(h) Plasma proteins.

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

**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) O₂ Dissociation curve
- b) Thalamus
- c) Cutaneous Receptors
- d) Platelets
- e) Testosterone
- f) Middle Ear
- g) Edema
- h) Adrenal Cortical hormones

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

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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

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

[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.

[KJ 904]

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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.
- (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.

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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.
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