

FIRST B.N.Y.S. DEGREE EXAMINATION

PAPER IV – HUMAN PHYSIOLOGY - II

Q.P. Code : 821506

Time: Three Hours

Maximum: 100 marks

Answer ALL Questions

I. Essay Questions:

(2 x 15 = 30)

1. Define Menstrual Cycle. Explain the Ovarian changes during the Menstrual cycle.
2. Explain the functions and regulation of Thyroid Hormone.

II. Write notes on:

(10 x 5 = 50)

1. Visual Pathway.
2. Cerebrospinal Fluid.
3. Neuromuscular Junction.
4. Errors of Refraction.
5. Fatigue.
6. Extra Pyramidal Tract.
7. Physiology of Sleep.
8. Excitation Contraction Coupling.
9. Functions of Inner Ear.
10. Functions of Thalamus.

III. Short Answers on:

(10 x 2 = 20)

1. Brown Sequard Syndrome.
2. Cryptorchidism.
3. Sarcolemma.
4. Filiform Papillae.
5. Virilism.
6. Spike Potential.
7. Properties of Semen.
8. Gigantism.
9. Protanopia.
10. Reflex Arc.

FIRST B.N.Y.S. DEGREE EXAMINATION

PAPER IV – HUMAN PHYSIOLOGY - II

Q.P. Code : 821506

Time: Three Hours

Maximum: 100 marks

Answer ALL Questions

I. Essay Questions:

(2 x 15 = 30)

1. Explain in detail about the mechanism of hearing and add a note on hearing tests.
2. Menstrual cycle and its changes in the ovaries and uterus and add a note on physiology of pregnancy.

II. Write notes on:

(10 x 5 = 50)

1. Origin and termination of Ascending tracts.
2. Neuromuscular Junction.
3. Functions of testes.
4. Functions of thalamus.
5. Physiology of Sleep.
6. Functions of Cerebro Spinal Fluid.
7. Functions of beta cells of Pancreas.
8. Brown Sequard Syndrome.
9. Explain Anterior Spinothalamic Tract.
10. Draw the components of reflex Arc.

III. Short Answers on:

(10 x 2 = 20)

1. Define Tetanus.
2. Name 4 Neurotransmitters.
3. Define spike potential.
4. Functions of oxytocin.
5. What is myasthenia gravis?
6. Define ovulation.
7. Draw a neat labelled diagram of the visual pathway.
8. What is 'blind spot'?
9. Name the auditory ossicles.
10. What is ageusia?

FIRST B.N.Y.S. DEGREE EXAMINATION

PAPER IV – HUMAN PHYSIOLOGY - II

Q.P. Code : 821506

Time: Three Hours

Maximum : 100 Marks

Answer All questions

I. Essay Questions:

(2 x 15 = 30)

1. List the various changes taking place during muscular contraction. Write the properties of nerve fibres.
2. Describe the synthesis, storage, functions and regulation of secretion of thyroid hormone.

II. Write Notes on:

(10 x 5 = 50)

1. Define Accommodation. Write detail about accommodation reflex and its Pathway.
2. Write detail about course of the visual pathway.
3. Functions of testosterone in adult life.
4. Define ovulation. Process and hormonal regulation of ovulation.
5. Physiology of lactation.
6. Write in detail about actions of calcitonin and regulation of calcitonin secretion.
7. Write detail about development of corpus luteum, functions and fate of corpus luteum.
8. Theories of hearing.
9. Brown-Sequard Syndrome.
10. Write in detail about the functions of oxytocin.

III. Short Answers on:

(10 x 2 = 20)

1. Babinski sign.
2. Benefits of pain sensation.
3. Audiometry.
4. Dichromatism.
5. Infertility.
6. Oligozoospermia.
7. Osteoporosis.
8. Functions of rods and cons.
9. Optic chiasm.
10. Composition of semen.

FIRST B.N.Y.S. DEGREE EXAMINATION

PAPER IV – HUMAN PHYSIOLOGY - II

Q.P. Code: 821506

Time : Three hours

Maximum: 100 Marks

Answer **ALL** questions.

I. Essay Questions:

(2 x 15 = 30)

1. Describe uterine changes occurring during menstrual cycle.
Add a note on hormonal regulation of the menstrual cycle.
2. Draw and explain visual pathway.
Explain the effects of lesions at different levels of the visual pathway.

II. Write Notes on:

(10 x 5 = 50)

1. Tests for hearing.
2. List of descending tracts of spinal cord. Write detail about pyramidal tracts.
3. Milk ejection reflex.
4. Functions of Glucocorticoids.
5. Define Cerebro Spinal fluid, composition and functions of CSF.
6. Excitation-Contraction-Coupling.
7. Notes on Neuro muscular junction.
8. Write any 10 functions of thyroid hormones.
9. Explain in detail about Spermatogenesis.
10. Physiology of sleep.

III. Short Answers on:

(10 x 2 = 20)

1. Vasectomy.
2. Cryptorchidism.
3. Dwarfism.
4. Graves disease.
5. Nystagmus.
6. Glaucoma.
7. Kinins.
8. Acetylcholine.
9. Sarcomere.
10. Anosognosia.

[LK 1506]

MAY 2017

Sub.Code :1506

FIRST B.N.Y.S. DEGREE EXAMINATION

PAPER IV – HUMAN PHYSIOLOGY - II

Q.P. Code : 821506

Time: Three Hours

Maximum : 100 Marks

Answer All questions

I. Essay Questions:

(2 x 15 = 30)

1. Explain the different parts and functions of the cerebellum? Write note on cerebellar lesions.
2. Describe the synthesis, secretion, storage, release, transport, functions and regulation of thyroid hormones.

II. Write Notes on:

(10 x 5 = 50)

1. Properties of skeletal muscle.
2. Regulation and secretion of ovarian hormones.
3. Uterine changes during menstrual cycle.
4. Lactation.
5. Lateral spinothalamic tract.
6. Syringomyelia.
7. Basal ganglia.
8. Reticular formation.
9. Functions of CSF.
10. Errors of refractions.

III. Short Answers on:

(10 x 2 = 20)

1. Sarcoplasm.
2. Myasthenia gravis.
3. Functions of oxytocin.
4. Nystagmus.
5. Hormones secreted by heart.
6. Menopause.
7. What are neurotransmitters?
8. Satiety center.
9. Proprioceptors.
10. Types of sleep.

FIRST B.N.Y.S. DEGREE EXAMINATION

PAPER IV – HUMAN PHYSIOLOGY - II

Q.P. Code : 821506

Time: Three Hours

Maximum : 100 Marks

Answer All questions

I. Essay Questions: (2 x 15 = 30)

1. Write about the types, pathways, and physiology of pain.
2. Enlist the hormones secreted by the pancreas. Explain the functions and regulations of insulin.

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

1. Changes during muscular contraction.
2. Mode and action of steroid hormones.
3. Functions of posterior pituitary hormones.
4. Regulation of blood calcium level.
5. Functions of testis.
6. Ventral spinocerebellar tract.
7. Brown-sequard syndrome
8. Pathway for taste.
9. Colour blindness.
10. Synapse.

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

1. What are muscle proteins?
2. Dwarfism.
3. Normal sugar level-fasting and postprandial.
4. Accommodation reflex.
5. Narcolepsy.
6. Broca's area.
7. Motion sickness.
8. Dichromatism.
9. Renne's test.
10. Field of vision.

[LM 1506]

MAY 2018

Sub. Code: 1506

FIRST B.N.Y.S. DEGREE EXAMINATION

PAPER IV – HUMAN PHYSIOLOGY - II

Q.P. Code : 821506

Time: Three Hours

Maximum : 100 Marks

Answer All questions

I. Essay Questions:

(2 x 15 = 30)

1. Name the hypothalamic nuclei, explain the functions and lesions of hypothalamus?
2. Explain the mechanism of hearing?

II. Write Notes on:

(10 x 5 = 50)

1. Physiology of reproduction.
2. Mode and action of protein hormone.
3. Stages in synthesis of thyroid hormone.
4. Ovarian changes during menstrual cycle.
5. Composition of Semen.
6. Tabes dorsalis.
7. Functions of vestibular apparatus.
8. Motor areas of cerebral cortex.
9. Mechanism of hormones.
10. Myasthenia gravis.

III. Short Answers on:

(10 x 2 = 20)

1. Optic chiasma.
2. Chorea.
3. Isotonic contraction.
4. Coupling reaction of thyroid gland.
5. Functions of seminiferous tubules.
6. Cataract.
7. Petit mal epilepsy.
8. Define neuroglia.
9. Secretion of adrenal medulla.
10. End plate potential.

[LN 1506]

OCTOBER 2018

Sub. Code: 1506

FIRST B.N.Y.S. DEGREE EXAMINATION

PART - II

PAPER IV – HUMAN PHYSIOLOGY - II

Q.P. Code : 821506

Time: Three Hours

Maximum : 100 Marks

Answer All questions

I. Essay Questions: (2 x 15 = 30)

1. Hormones of adrenal gland, its secretion function and lesion.
2. Explain in detail about Ovarian cycle its events and hormonal regulation.

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

1. Cushing Syndrome.
2. Colour blindness and test for colour blindness.
3. Reticular formation of brain.
4. Synapse and its function.
5. Pain pathway.
6. Female sex hormones.
7. Corticospinal tract.
8. Sympathetic nervous system.
9. Memory and its classification.
10. Mechanism of hearing.

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

1. Neurons.
2. Classification of Muscle.
3. Fertilization.
4. Properties of Reflex.
5. Spermatogenesis.
6. Neurotransmitter.
7. Hearing Test.
8. Testosterone.
9. Releasing Hormones of Hypothalamus.
10. Myasthenia gravis.

[LO 1506]

MAY 2019

Sub. Code: 1506

FIRST B.N.Y.S. DEGREE EXAMINATION

PART – II

PAPER IV – HUMAN PHYSIOLOGY - II

Q.P. Code : 821506

Time: Three Hours

Maximum : 100 Marks

Answer All questions

I. Essay Questions:

(2 x 15 = 30)

1. Enlist the hormones secreted by the thyroid gland. Explain the functions and regulations of its hormones.
2. Explain in detail about Spermatogenesis stages. Add a note on semen and its composition.

II. Write Notes on:

(10 x 5 = 50)

1. Female sex hormones and its regulation.
2. Pyramidal tract and its lesion.
3. Olfactory pathway.
4. Write a note on pain, classification of pain and its clinical importance.
5. Renin Angiotensin Mechanism.
6. Endocrine function of Pancreas.
7. Function and lesion of Basal Ganglion.
8. Properties of skeletal Muscle.
9. Body temperature and its regulation.
10. Neuroglial cells.

III. Short Answers on:

(10 x 2 = 20)

1. Gonads.
2. Function of Prostaglandin.
3. Hypothalamus- hypophyseal system.
4. Action Potential.
5. Saltatory conduction.
6. Power stroke.
7. Function of Thalamus.
8. Synapse.
9. Stereognosis.
10. Types of muscle contraction.

[LP 1506]

OCTOBER 2019

Sub. Code: 1506

FIRST B.N.Y.S. DEGREE EXAMINATION

PART – II

PAPER IV – HUMAN PHYSIOLOGY - II

Q.P. Code : 821506

Time: Three Hours

Maximum : 100 Marks

Answer All questions

I. Essay Questions:

(2 x 15 = 30)

1. Menstrual cycle its stages and Hormonal regulation.
2. Mechanism of Muscle contraction and add a note on Neuro Muscular junction.

II. Write Notes on:

(10 x 5 = 50)

1. Cerebro spinal fluid its formation, circulation and function.
2. Upper and lower motor neuron and its lesion.
3. Function and lesion of Hypothalamus.
4. Mechanism of Hearing.
5. Physiology of sleep.
6. Refractive errors.
7. Hormones of posterior pituitary and its function.
8. Myasthenia gravis.
9. Classification and properties of nerve fibers.
10. Physiology of Lactation.

III. Short Answers on:

(10 x 2 = 20)

1. Test for Ovulation.
2. Syringomyelia.
3. Normal body temperature.
4. Function of Cerebral cortex.
5. Circulation of tears.
6. Colour blindness.
7. Light adaptation.
8. Electro encephalogram.
9. Lesion of cerebellum.
10. Reflex Arc.

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[BNYS 0321]

MARCH 2021

Sub. Code: 1506

(MAY 2020 & AUGUST 2020 SESSION)

B.N.Y.S. DEGREE EXAMINATION

FIRST YEAR (From the academic year 2013-14) – PART II

PAPER IV – HUMAN PHYSIOLOGY II

Q.P. Code : 821506

Time: Three Hours

Answer ALL questions

Maximum : 100 Marks

I. Essay Questions:

(2 x 15 = 30)

1. Explain in detail about the mechanism of hearing and add a note on hearing tests.
2. Explain the different parts and functions of the cerebellum? Write note on cerebellar lesions.

II. Write Notes on:

(10 x 5 = 50)

1. Origin and termination of Ascending tracts.
2. Neuromuscular Junction.
3. Functions of testes.
4. Functions of thalamus.
5. Physiology of Sleep.
6. Functions of Cerebro Spinal Fluid.
7. Functions of beta cells of Pancreas.
8. Explain functions of spermatogenesis.
9. Explain Anterior Spinothalamic Tract.
10. Draw the components of reflex Arc.

III. Short Answers on:

(10 x 2 = 20)

1. Vasectomy.
2. Cryptorchidism.
3. Dwarfism.
4. Graves disease.
5. Nystagmus.
6. Glaucoma.
7. Kinins.
8. Acetylcholine.
9. Sarcomere.
10. Anosognosia.

B.N.Y.S. DEGREE EXAMINATION
FIRST YEAR – PART II
(For the candidates admitted from the academic year 2013-14)
PAPER IV – HUMAN PHYSIOLOGY II
Q.P. Code : 821506

Time: Three Hours

Answer ALL questions

Maximum : 100 Marks

I. Essay Questions: (2 x 15 = 30)

1. List the various changes taking place during muscular contraction. Write the properties of nerve Fibres.
2. Describe the synthesis, storage, functions and regulation of secretion of thyroid hormone.

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

1. Define Accommodation. Write in detail about accommodation reflex and its Pathway.
2. Write in detail about course of the visual pathway.
3. Functions of testosterone in adult life.
4. Define ovulation. Write about the hormonal regulation of ovulation.
5. Physiology of lactation.
6. Write in detail about actions of calcitonin and regulation of calcitonin secretion.
7. Write in detail about development of corpus luteum, functions and fate of Corpus luteum.
8. Theories of hearing.
9. Brown-Sequard Syndrome.
10. Write in detail about the functions of oxytocin.

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

1. Babinski's sign.
2. Benefits of pain sensation.
3. Audiometry.
4. Dichromatism.
5. Infertility.
6. Oligozoospermia.
7. Osteoporosis.
8. Functions of rods and cones.
9. Optic chiasma.
10. Composition of semen.

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[BNYS 0322]

**MARCH 2022
(FEBRUARY 2021 & MAY 2021 SESSIONS)**

Sub. Code: 1506

**B.N.Y.S. DEGREE EXAMINATION
FIRST YEAR – PART II
(For the candidates admitted from the academic year 2011-12)
PAPER IV – HUMAN PHYSIOLOGY II
Q.P. Code : 821506**

Time: Three Hours

Answer ALL questions

Maximum : 100 Marks

I. Essay Questions: (2 x 15 = 30)

1. Describe the origin, course termination and functions of pyramidal tract. Write a note on Upper Motor lesions.
2. Describe in detail the photochemical mechanism of Vision and mechanism of dark adaptation.

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

1. Brown sequard syndrome.
2. Note on taste pathway.
3. Note on functions of Middle ear.
4. Composition and functions of CSF.
5. Note on Growth hormone.
6. Note on test of Hearing.
7. Note on structure of Skeletal muscle.
8. Note on actions of adrenaline and noradrenaline.
9. Note on properties of Reflexes.
10. Note on classification of Synapse.

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

1. Major role of Leptin.
2. What is Virilism?
3. Difference between cretinism and dwarfism.
4. Clonus.
5. Name the sleep disorders.
6. What is presbyopia?
7. What is Blind spot?
8. What is Satiety centre?
9. What is Somatic pain?
10. What are Astrocytes?

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[BNYS 0522]

MAY 2022

Sub. Code: 1506

(AUGUST 2021 & OCTOBER 2021 SESSIONS)

B.N.Y.S. DEGREE EXAMINATION

FIRST YEAR – PART II

(For the candidates admitted from the academic year 2011-12)

PAPER IV – HUMAN PHYSIOLOGY II

Q.P. Code : 821506

Time: Three Hours

Answer ALL questions

Maximum : 100 Marks

I. Essay Questions:

(2 x 15 = 30)

1. Explain in detail about Limbic System. Enumerate the functional anatomy, Connections and functions.
2. Classify the hormones secreted by adrenal cortex. Explain the action and regulation of secretion of cortisol.

II. Write Notes on:

(10 x 5 = 50)

1. Function of Antidiuretic hormone.
2. What are the Female sex hormones and their actions?
3. Note on Colour blindness.
4. Note on Errors of Refraction.
5. Functions of Parathormone.
6. Properties of Smooth muscle.
7. Note on type Contraction of Muscle.
8. Functions of Cerebro-Spinal fluid.
9. Functions of Basal ganglia.
10. Note on Anterior Spino-thalamic tract.

III. Short Answers on:

(10 x 2 = 20)

1. Melatonin.
2. Simmond disease.
3. Sheehan Syndrome.
4. Menopause.
5. Composition of Semen.
6. Choroid – plexus.
7. Type of Deafness.
8. Spike Potential.
9. Name the Hormones of Adrenal medulla.
10. What is Goitre?

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[BNYS 1022]

**OCTOBER 2022
(FEBRUARY 2022 & MAY 2022 SESSIONS)**

Sub. Code: 1506

**B.N.Y.S. DEGREE EXAMINATION
FIRST YEAR – PART II
(For the candidates admitted from the academic year 2011-12)
PAPER IV – HUMAN PHYSIOLOGY II
Q.P. Code : 821506**

Time: Three Hours

Answer ALL questions

Maximum : 100 Marks

I. Essay Questions: (2 x 15 = 30)

1. Give an account of Menstrual cycle and explain the hormonal regulations of menstrual cycle.
2. Write about Electrical changes during Muscular contraction.

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

1. Write a note on Oogenesis.
2. Define adaptation in Eye and write about it.
3. Pathway of Pain.
4. Difference between actions of Adrenalin and Noradrenalin.
5. Note on Lower Motor neuron lesions.
6. Note on Sarcotubular system.
7. Smell pathway.
8. Functions of Frontal lobe.
9. Explain the Mechanism of Hearing.
10. Mechanism of actions of hormones on Target cells.

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

1. Starlings law of Muscle.
2. Acromegaly.
3. Vitreous humor.
4. Rheobase.
5. What is Dwarfism?
6. Name the Muscle Proteins.
7. Name the different stages of Spermatogenesis.
8. Explain the Lumbar puncture.
9. Exophthalmos.
10. Babinski's sign.

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[BNYS 0323]

MARCH 2023

Sub. Code: 1506

(AUGUST 2022 & OCTOBER 2022 EXAM SESSIONS)

B.N.Y.S. DEGREE EXAMINATION

FIRST YEAR – PART II

(For the candidates admitted from the academic year 2011-12)

PAPER IV – HUMAN PHYSIOLOGY II

Q.P. Code: 821506

Time: Three Hours

Answer ALL questions

Maximum: 100 Marks

I. Essay Questions:

(2 x 15 = 30)

1. Write in detail about the electron microscopic structure of skeletal muscle and the molecular mechanism of muscular contraction.
2. Explain in detail about physiology of reticular formation and add a note on EEG.

II. Write Notes on:

(10 x 5 = 50)

1. Enumerate the hormones secreted by anterior pituitary gland.
2. Actions of Parathormone.
3. Starling's law its applications.
4. Process of Ovulation.
5. Composition of semen.
6. Physiology of Sleep.
7. Auditory pathway.
8. Neuromuscular junction.
9. Functions of Thalamus.
10. Structure of Eye.

III. Short Answers on:

(10 x 2 = 20)

1. What is Trichromatism?
2. Stretch reflex.
3. Nystagmus.
4. What is chronaxie?
5. Types of Troponin.
6. Define Menopause.
7. What is Glaucoma?
8. Law of projection.
9. Schwann cells.
10. What is synaptic delay?

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[BNYS 0923]

**SEPTEMBER 2023
(MAY 2023 EXAM SESSION)**

Sub. Code: 1506

**B.N.Y.S. DEGREE EXAMINATION
FIRST YEAR – PART II
(For the candidates admitted from the academic year 2011-12)
PAPER IV – HUMAN PHYSIOLOGY II**

Q.P. Code: 821506

Time: Three Hours

Answer ALL questions

Maximum: 100 Marks

I. Essay Questions:

(2 x 15 = 30)

1. Explain the functions, storage, synthesis, secretion and regulation of thyroid hormone.
2. Mechanism of muscle contraction and add a note on neuromuscular junction.

II. Write Notes on:

(10 x 5 = 50)

1. Write short note on physiology of sleep.
2. Explain in detail about the functions of testis.
3. Write a short note on errors of refraction.
4. Explain the tests for hearing.
5. Explain milk ejection reflex with diagram.
6. Draw and explain the components of reflex arc.
7. Write a short note on myasthenia gravis.
8. Explain about the ovarian changes during menstrual cycle.
9. Write a short note on functions & lesions of hypothalamus.
10. Define colour blindness & tests for colour blindness.

III. Short Answers on:

(10 x 2 = 20)

1. Define cryptorchidism.
2. Define gigantism.
3. Define sarcomere.
4. Define menopause.
5. What is gravis disease?
6. What are the functions of rods & cones?
7. What is dichromatism?
8. Explain audiometry.
9. What is nystagmus?
10. Define action potential.

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[BNYS 0124]

JANUARY 2024

Sub. Code: 1506

(JUNE 2023 / OCTOBER 2023 EXAM SESSIONS)

B.N.Y.S. DEGREE EXAMINATION

FIRST YEAR PART - II

(For the candidates admitted from the academic year 2011-12)

PAPER IV – HUMAN PHYSIOLOGY II

Q.P. Code: 821506

Time: Three Hours

Answer ALL questions

Maximum: 100 Marks

I. Essay Questions:

(2 x 15 = 30)

1. Write in detail about function of testes and spermatogenesis and composition of semen.
2. Methods of collection of clinical significance of Cerebro Spinal fluid.

II. Write Notes on:

(10 x 5 = 50)

1. Changes during muscular contraction.
2. Ovarian changes during menstrual cycle.
3. Pain pathway.
4. Function and lesion of Hypothalamus.
5. Neuromuscular Junction.
6. Draw the components of reflex Arc and explain.
7. Note on test of Hearing.
8. Describe the actions of progesterone.
9. Note on Growth hormone.
10. Functions of Frontal lobe.

III. Short Answers on:

(10 x 2 = 20)

1. Sheehan Syndrome.
2. Babinski' sign.
3. What is parturition?
4. What is stimulus?
5. What is chronaxie?
6. Schwann cells.
7. What are cross bridges?
8. Name the Hormones of Adrenal medulla.
9. Dichromatism.
10. What is rigour?

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[BNYS 0824]

**AUGUST 2024
(MAY 2024 EXAM SESSION)**

Sub. Code: 1506

**B.N.Y.S. DEGREE EXAMINATION
FIRST YEAR PART - II
(For the candidates admitted from the academic year 2011-12)
PAPER IV – HUMAN PHYSIOLOGY II**

Q.P. Code: 821506

Time: Three Hours

Answer ALL questions

Maximum: 100 Marks

I. Essay Questions:

(2 x 15 = 30)

1. Explain in detail about the types of synapses and their structure and properties of neurotransmitters.
2. Draw and explain visual pathway. Explain the effects of lesions at different levels of the visual pathway.

II. Write Notes on:

(10 x 5 = 50)

1. Explain about brown Sequard syndrome.
2. Write a short note on basal ganglia.
3. Define accommodation. Write in detail about accommodation reflex and its pathway.
4. Explain in detail about anterior spinothalamic tract.
5. Explain in detail about composition of semen.
6. What are female sex hormones and explain its regulation.
7. Write a short note on structure of skeletal muscle.
8. Note on taste pathway.
9. Explain the functions of vestibular apparatus.
10. Functions of testosterone in adult life.

III. Short Answers on:

(10 x 2 = 20)

1. What is spike potential?
2. What is blind spot?
3. Define fertilization.
4. Define proprioceptors.
5. Define Broca's area.
6. Define Starling's law of muscle.
7. Define Rheobase.
8. What is called end plate potential?
9. What are the coupling reactions of thyroid gland?
10. Define narcolepsy.

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[BNYS 0125]

**JANUARY 2025
(OCTOBER 2024 EXAM SESSION)**

Sub. Code: 1506

**B.N.Y.S. DEGREE EXAMINATION
FIRST YEAR - PART - II
(For the candidates admitted from the academic year 2011-12)
PAPER IV – HUMAN PHYSIOLOGY II**

Q.P. Code: 821506

Time: Three Hours

Answer ALL questions

Maximum: 100 Marks

I. Essay Questions:

(2 x 15 = 30)

1. Explain the functions, storage, synthesis, secretion and regulation of Parathyroid.
2. Explain in detail about hypothalamo – hypophyseal axis.

II. Write Notes on:

(10 x 5 = 50)

1. Write a short note on cerebrospinal fluid.
2. Explain about visual pathway.
3. Write a short note on neuromuscular junction with diagram.
4. Explain about excitation contraction coupling.
5. What are the functions of thalamus?
6. Explain in detail about physiology of lactation.
7. Various changes during muscular contraction.
8. Explain the mechanism of hearing.
9. Write a short note on sarcotubular system.
10. Define memory and its classification.

III. Short Answers on:

(10 x 2 = 20)

1. Define Brown sequard syndrome.
2. Define Sarcolemma.
3. Explain the functions of Oxytocin.
4. Define Dwarfism.
5. What are neurotransmitters and name them.
6. Define Vasectomy.
7. Define sleep and its types.
8. Define Glaucoma.
9. Write the composition of semen.
10. Define Anosognosia.

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[BNYS 0725]

**JULY 2025
(MAY 2025 EXAM SESSION)**

Sub. Code: 1506

**B.N.Y.S. DEGREE EXAMINATION
FIRST YEAR – PART II
(For the candidates admitted from the academic year 2011-12)
PAPER IV – HUMAN PHYSIOLOGY II**

Q.P. Code: 821506

Time: Three Hours

Answer ALL questions

Maximum: 100 Marks

I. Essay Questions:

(2 x 15 = 30)

1. Define Menstrual Cycle. Explain the various phases in Menstrual cycle with its hormonal regulation.
2. Pyramidal tract its function and lesion.

II. Write Notes on:

(10 x 5 = 50)

1. Mechanism of hearing.
2. Cerebrospinal Fluid.
3. Receptors and its classification.
4. Neuromuscular junction.
5. Function and lesion of Hypothalamus.
6. Function and applied physiology of thyroid hormones.
7. Physiology of Sleep.
8. Classification and properties of muscle.
9. Male sex hormones and its function.
10. Myelination of nervous system.

III. Short Answers on:

(10 x 2 = 20)

1. Brown Sequard Syndrome.
2. LH surge.
3. Sarcomere.
4. Functions of oxytocin.
5. Hypermetropia.
6. Changes takes place during puberty.
7. Composition of Semen.
8. Acromegaly.
9. Taste buds.
10. Waves of EEG?
