

504-A-FIRST M.B.B.S. DEGREE EXAMINATION – JULY, 2013-PHYSIOLOGY-PAPER-II

Time : 2 ½ Hours-Max. Marks : 50-Answer all questions

- 1..Define pain. Describe the pathway for pain sensation with neat diagram. Explain referred pain=1+6+3
- 2..Name the hormones produced by supra renal glands. Describe the secretion regulation and action of any one of them.

WRITE SHORT NOTES ON: 5 x 4=20m

- 3..Colour blindness
- 4..Hyperglycemic hormones
- 5..Excitation contraction coupling
- 6..Spermatogenesis
- 7..Contraceptive methods in females

WRITE BRIEFLY ON: 5 x 2=10m

- 8..Tests for hearing
9. REM sleep
10. Corpus luteum
11. Myopia
12. Cretinism

504-A-FIRST M.B.B.S. DEG. EXAMINATION-NOVEMBER, 2012-PHYSIOLOGY-PAPER-II

- 1..Name the anterior pituitary hormones. What are the functions and mechanism of action of growth hormone?=4+4+2=10m

2. Draw a labelled diagram of corticospinal tracts. Explain the effect of decerebration on their function=5+5=10m

Write Short Notes On: 5 x 4=20m

3. Types of muscle fibers
4. Thyroid function tests
5. Functions of thalamus
6. Neuromuscular junction
7. Signs of ovulation

Write Briefly On: 5 x 2=10m

8. Mention the functions of middle ear
9. Name the Contraceptive methods in females
10. Taste buds
11. Aphasia – Definition and types
12. Milk ejection reflex

504-A-FIRST M.B.B.S. DEG. EXAM – JULY, 2012-PHYSIOLOGY-PAPER-II

- 1..Draw a labelled diagram of neuromuscular junction. Enumerate the events which occur during its transmission and add a note on myasthenia gravis=10m

- 2..Name the functional divisions of cerebellum. Explain the connections and functions of it and add a note on cerebellar disease=10m

Write Short Notes On: 5 x 4=20m=3. Spermatogenesis

4. Features of Cushing's syndrome

5. Role of hypothalamus in regulation of food intake
6. Parkinsonism and physiological basis of a drug used in its treatment
7. Colour vision

Write Briefly On: 5 x 2=10m

8. Flight or fight reaction
9. Actions of gonadotropic hormone in males and females
10. Renshaw cell inhibition
11. Functions of blood testis barrier
12. Physiological basis of anovulatory menstrual cycle

504-A-FIRST M.B.B.S. DEG. EXAMINATION – JANUARY, 2012-PHYSIOLOGY-PAPER-II

1. Explain the physiological actions of Insulin=10m
2. Describe the actions of ovarian hormones=10m

Write Short Notes On: 5 X 4=20m

- 3..What is blood brain barrier? What is its functions and clinical importance?
4. What is Referred pain? Explain suitably
5. Draw a neat diagram of Light reflex pathway and label it
- 6..Functions of Limbic system.
- 7..Family planning methods in males.

Write Briefly On: 5 x 2=8. Draw a diagram of sarcomere and label it. 9. Refractory period

10. Where is area number 44 located? What is its functions?
11. Functions of middle ear.
12. Adrenogenital syndrome

504-A-FIRST M.B.B.S. DEGREE EXAMINATION – JULY, 2011-PHYSIOLOGY-PAPER-II

- 1..What is Puberty? Mention the changes that occur during puberty in females=2+8=10m

- 2..Mention the formation, composition and functions of Cerebro Spinal Fluid (C.S.F).=3 + 3 + 4 =`0m

Write Short Notes On: 5 x 4=20m

- 3..Define Resting Membrane Potential. What is its ionic basis?
- 4..List the differences between upper motor neuron lesion (UMN) & lower motor neuron lesion (LMN).
- 5..List the important effects of Adrenaline on different tissues.
- 6..Addison's disease
7. Mention common errors of Refraction, its causes and their corrections.

Write Briefly On: 5 x 2 =10m

8. Motor end plate.
9. Mention the properties of Receptors
10. Functions of Iris.
11. Myxoedema.
12. Taste buds.

504-A-FIRST M.B.B.S. DEG. EXAMINATION-JANUARY, 2011-PHYSIOLOGY=PAPER-II

1. What is Referred Pain? Explain the theories of Referred Pain and mention few examples=2+5+3
2. Mention normal blood calcium level. Explain how it is regulated=2+8=10m

Write Short Notes On: 5 x 4 =20m

3. What is spermatogenesis? Mention factors which regulate spermatogenesis. 4. Visual pathway.
5. Mention the actions of chemicals at Neuro-muscular junctions.

a) Cholinesterase b) Curare c) Physostigmine

6. Milk ejection reflex. 7. Light and dark adaptation of eyes.

Write Briefly On: 5 X =10m

8. Corpus luteum. 9. Vibration sense 10. Functions of middle ear 11. Aldosterone. 12. Hearing Tests.

504-A-FIRST MBBS. DEG. EXAMINATION – JULY, 2010=PHYSIOLOGY=PAPER-II

1. What are the actions of Thyroid Hormones on metabolism? Give an account of hyposecretion of thyroid hormone=10m

2. Name the different parts of the Ear. Explain the mechanism of hearing=10m

Write Short Notes On: 5 x 4 =20m

3. Accommodation reflexes 4. Ovulation 5. Diabetes mellitus and diabetes Insipidus
6. Contraceptive methods 7. Resting membrane potential

Write Briefly On: 5 x 2 =10m

8. Menarche, Menopause 9. Gigantism 10. Astigmatism 11. Waves of EEG 12. Babinski Sign

504-A=FIRST M.B.B.S. DEG. EXAMINATION=JANUARY, 2010=PHYSIOLOGY=PAPER-II

1. Give an account of the connections and functions of Hypothalamus=5 +5=10m

2. Describe the functions of Placental Hormones. Discuss the diagnostic importance of Human

Chorionic Gonadotropins?=7+3=10m

Write Short Notes On: 5 x 4 =20m

3. Parkinsonism 4. Molecular basis of skeletal muscle contraction 5. Myasthenia gravis
6. Vestibular apparatus 7. Brown-Sequard syndrome

Write Briefly On: 5 x 2 =10m

8. Depolarization and repolarization 9. Wallerian degeneration 10. Stretch reflex

11. Hemiplegia 12. Tremor

504-A-FIRST M.B.B.S. DEGREE EXAMINATION – JULY, 2009-PHYSIOLOGY-PAPER-II

1. Discuss origin, distribution and functions of the Sympathetic and Parasympathetic Nerves.

2+3+2½+2½=10

2. Describe the synthesis, transport and regulation of secretion of Thyroid hormones. Discuss about cretinism=2+2+2+4=10

Write Short Notes On: 5x4=20

3. hCG. 4. Diagrammatic representation of visual Path way 5. Hearing tests.

6. Four differences between smooth muscle and cardiac muscle. 7. Cerebrospinal fluid

Write Briefly On: 5x2=10

8. Near response of Eye. 9. Milk ejection reflex 10. Triple response 11. Plantar reflex.

12. Actin and Myosin.

504-A-FIRST MBBS. DEG. EXAMINATION – FEBRUARY, 2009-PHYSIOLOGY-PAPER-II

1. Describe the hormonal control of menstrual cycle. Add a note on rhythm method of family Planning=2+8=10

2. What is synapse? Describe the important features of synapse= 2+8=10

Write Short Notes On:= 5x4=3. Anti inflammatory effect of Glucocorticoids. 4. Olfactory cells.

5. Anterograde amnesia. 6. Brown sequard syndrome. 7. Thyroid function tests.

Write Briefly On=5x2=8. Tympanic Reflex. 9. Presbyopia. 10. Dark adaptation. 11. Rigor mortis.

12. Alfa block in Electroencephalogram.

504-A-FIRST M.B.B.S. DEGREE EXAMINATION – DECEMBER, 2008-PHYSIOLOGY-PAPER-II

1. Classify white blood corpuscles. Explain their functions and variations=3+4+3

2. Name the hormones produced by supra renal glands. Describe the action of any one of them.= 3+7=10

Write short notes on:= 5x4=3. Role of Hypothalamus in Blood volume regulation. 4. Types of muscle fibers.

5. Excitatory post synaptic potential. 6. Signs of ovulation. 7. Pregnancy test.

Write briefly on:=5x2=10

8. Oral contraceptives. 9. Taste buds. 10. Dwarfism. 11. Functions of middle ear. 11. Intra ocular pressure.

504-A-FIRST MBBS. DEG. EXAM- JULY, 2008-PHYSIOLOGY-PAPER-II

1. Enumerate the hormones of anterior Pituitary gland. 2+8=10
2. Explain the secretion and function of any one of them. What is decerebrate rigidity? Explain its manifestation
Write short notes on:= 5x4=20
3. Saltatory conduction 4. Visual pathway 5. Seminal fluid 6. Oestrogen 7. Organ of Corti
Write briefly on: 5x2=10
8. Referred pain 9. Progesterone 10. Paradoxical sleep 11. Motor aphasia 12. Conditioned Reflex

504-A-M.B.B.S. DEG. EXAM-MAR/APRIL, 2008-FIRST M.B.B.S-PHYSIOLOGY-PAPER-II

1. Discuss the function of reticular formation. (10)
2. What is tetany? Describe one hormone which is the causative factor, in detail.-(1+1+8)
Write short notes on=(5x4) 1. Factors influencing spermatogenesis
2. Role of ADH in fluid balance of the body 3. Otolith organs 4. Functions of C.S.F 5. Taste pathway
Write briefly on: -(5x2) 1. Myopia 2. Function of Glucagon 3. Saltatory conduction
4. Lower Motor Neurone Paralysis 5. Adrenal Medullary Hormones

504-A-MBBS. FIRST Yr. DEG. EXAMINATION-SEPT/OCT, 2007-PHYSIOLOGY-PAPER-II

1. Name the Hormones of Posterior Pituitary. Explain their functions=2+8
2. What are the nuclei of the Hypothalamus. Describe their connections and functions of Hypothalamus=10m
Write short notes on: 5 x 4 =20m; 3. Neuromuscular Junction 4. Diabetes Insipidus
5. Feed Back Mechanism 6. Functions of middle ear 7. Taste pathway
Write briefly on: 5 x 2 =10m; 8. Functions of Cerebellum 9. Oral contraceptive pills
10. Babinski sign 11. Cretinism 12. Aphasia

PAPER-II - MAY, 2007

1. Describe briefly the functions of hypothalamus. =10
2. Give an account of the physiological actions of growth hormones and mechanism of these actions=10m
3. Write Short Notes On:= 5x4=a) Mention refractory errors. How can they be corrected ?
b) Draw a diagram showing the pathway for epicritic touch sensation and label.
c) What is spinal shock? What is it due to ?
d) What are cochlear micro phonic potentials? How are they produced? How do they differ from action potentials of nerves ?
e) Draw and label the electron microscopic structure of a Sarcomere.
4. Write Briefly On: =5x2=a) Oxtocin b) What are the effects of tying the vas deferens
c) ACTH d) Synaptic delay e) Cretinism

SEPTEMBER-2006-N.R. - PAPER-II

1. What is decerebrate rigidity? Explain its manifestations =2+8=10m
2. Give an account of the various errors of refraction in the eyes. How can they be corrected? = 8+2=10m
Write short notes on: 5 x 4 =20m; 3. Thyroid functions tests 4. Oestrogens 5. Golgi-Tendon reflex
6. Organ of Corti 7. Brown-Sequard syndrome
Write briefly on: 5 x 2 =10m; 8. Seminal fluid 9. Alpha Block in Electroencephalogram
10. Tympanic reflex 11. Referred pain 12. Conditioned reflex

PHYSIOLOGY-PAPER-II. APRIL-2006 (N.R.)

1. Name the main descending tracts in spinal cord. Describe the cortico spinal tract and effects of lesions in it
2. Classify White Blood Corpuscles. Explain their functions and variations (3+7)
Write short notes on: 5 x 4 =20m; 3. Excitation-Contraction coupling in skeletal muscle
4. Reflex Action 5. Colour Vision 6. Blood Brain Barrier 7. Wallerian Degeneration
Write briefly: 5 x 2 =8) Intra ocular Pressure 9) Neuro-endocrine reflex 10. Myopia 11. Synapse
12. Gigantism

SEPT/OCT-2005 PAPER-II. (New Regulations)

1. Describe briefly the functions of hypothalamus. =10marks
2. Describe the hormonal control of menstrual cycles. Add a note on rhythm method of family planning (2+8)
Write short notes on: 5 x 4 =3. Anti-inflammatory effect of Glucocorticoids 4. Signs of ovulation
5. Saltatory conduction 6. Excitatory post synaptic potential 7. Visual pathway
Write: 5 x 2 =8. Taste buds 9. Rigor Mortis 10. Dwarfism 11. Paradoxical sleep 12. Functions of middle ear

MAR/APR.2005. PAPER-II. (New Regulations)

1. Describe the origin course and termination of corticospinal tract. Mention the effects produced due to lesion of the corticospinal tract at the level in internal capsule (2+2+2+4=10marks)
2. Describe the synthesis, transport and regulation of secretion of Thyroid hormones. What are the

- features of hypo secretion of thyroid hormones in the child (2+2+2+4=10marks)
 Write short notes on: 5 x 4 =20marks; 3) Dark Adaptation 4) Draw and label pain pathway.
 5. When does ovulation occur and how can it be determined? What is its significance
 6. What ionic fluxes occur during excitatory and inhibitory post synaptic potentials.
 7. Define chronaxie and utilization time
 Write briefly on; 5 x 2 =10marks; 8) What are the functions of tensor tympani and stapedius ?
 9. Blood brain barrier 10. Effects and oestrogen on mammary gland
 11. Frequency and voltages of B rhythm of EEG 12. How does Insulin influence the blood sugar level

OCTOBER, 2004. PAPER-II. (New Regulations)

1. Name the hormones secreted by thyroid gland. How is thyroxine synthesized. Describe the physiological actions of thyroxine. (2+4+4=10marks)
 2. Describe the pathways for pain sensation. Add a note on central analgesic system. (5+5=10marks)
- Write short notes on: 5 x 4 =3. Motor unit 4. Types of nerve fibre 5. Functions of hypothalamus
 6. Accommodation reflex 7. Conditioned reflexes.

- Write briefly on: 5 x 2 =8. Sertoli cells 9. Basis for pregnancy Tests 10. Organon of Corti
 11. Functions of C.S.F. 12. Myxoedema

APRIL, 2004. PAPER-II. (New Regulations)

1. Describe the origin and outflow of the sympathetic nervous system. Give examples of stress situation in which sympathetic activity increases. (8+2=10marks)
2. Describe the functions of Placental Hormones. What is the Diagnostic Importance of Human Chorionic Gonadotropins (8=2=10marks)

- Write short notes: 5 x 4 =3. Brown-Sequard syndrome 4. Decerebrate rigidity 5. Blood brain barrier
 6. Visual Pathway 7. REM sleep

- Write briefly on: 5 x 2 =8. Effect of denervation of skeletal muscle 9. Tetany 10. Feto-Placental unit
 11. Actions of Insulin 12. Steroid hormone

OCTOBER, 2003. PAPER-II (New Regulations)

1. What is Synapse? Describe the synaptic transmission in detail. (2+8=10marks)
2. Name the hormones produced by supra renal glands. Describe the action of any one of them. (2+8=10m)

- Write short notes on: 5 x 4 =20marks
 3. Role of Hypothalamus in Blood volume regulation 4. Pregnancy Diagnostic tests
 5. Types of Muscle fibres 6. Olfactory cells 7. Anterograde amnesia

- Write briefly: 5 x 2 =8. Progesterone 9. Presbyopia 10. Motor Aphasia 11. Oral contraceptive
 12. Dark adaptation.

OCTOBER, 2003. PAPER-II (Old Regulation)

Part-A (50marks)

1. Name the ascending tracts of the spinal cord and explain spinothalamic tracts =15marks
2. Write short notes on the following: 7 x 5 =a) Brown-Sequard syndrome b) Wallerian degeneration
 c) Taste Pathway d) Impedance matching e) Diabetes insipidus f) Local Hormones
 g) Endocrine functions of kidney

Part-B (50marks)

3. What are Catecholamines? Explain the synthesis metabolism actions and regulation of secretion of Catecholamines. 15
4. Write short notes on: 7x5=a) Functions of pineal gland b) Aldosterone escape c) Tests for hearing
 d) Light adaptation e) Sertoli cells f) Oral Contraceptives g) Menstrual cycle

APRIL-2003-PAPER-II (NEW REGULATIONS)

1. Mention various methods employed in Contraception and discuss their merits and demerits. =10m
2. Describe the hormonal regulation of serum calcium level. Add a note on Tetany (8+2=10marks)
3. Write short notes on: 5 x 4 =a) Wallerian degeneration and regeneration b) Muscle tone
 c) Red nucleus d) Physiology of memory e) Cochlea
4. Write briefly on: 5 x 2 =a) Sarco-tubular system b) Classification of nerve fiber
 c) Strength duration curve d) Anti thyroid drugs e) Dec-cerebrate rigidity

APRIL, 2003 PAPER-II (OLD REGULATIONS)

Part-A

1. Classify receptors. Trace the pathway for pain. Write briefly on endogenous pain inhibiting system
2. Write short notes on: 7x5=a) Refractory errors of eye b) Tests for ovulation c) UMN lesion
 d) Functions of C.S.F e) Sleep disorders f) Speech area and its function g) Colour vision

Part-B

3. What are the hormones of Posterior Pituitary. Describe their action and regulation =15marks
4. Write short notes on: 7x5=a) Smooth muscle b) Reflex and their properties c) Motor unit
d) Functions of Hypothalamus e) Ovarian Hormones f) Tetany g) Functions of middle ear

OCTOBER/NOVEMBER, 2002 – PAPER-II (New Regulations)

1. Explain the Auditory pathway with suitable diagram. Add a note on Auditory defects (8+2=10m)
2. Describe the formation, circulation, composition, reabsorption and functions of Cerebro-Spinal fluid. Add a note on Hydro-cephalus (8+2=10marks)

Write short notes on: 5 x 4 =20marks

3. Referred pain
4. Reticular formation
5. Dark adaptation
6. Receptors
7. Goiter

Write briefly on: 5 x 2 =8. Neurologia 9. Effect of physical training on muscle

10. Central connections of trigeminal nerve
11. Red nucleus
12. Role of Hypothalamus in reproduction

OCTOBER/NOVEMBER, 2002 – PAPER-II (OLD REGULATIONS)

Part-A

1. Draw a diagram on cross-section of spinal cord at mid-thoracic level. Identify various tracts =15m
2. Write short notes on: 7x5=a) Diagram of optic pathway b) Decerebrate rigidity
c) Synaptic transmission d) Actions of glucagons e) Temporary endocrine gland
f) Oral pill regimes g) Actions of testosterone

Part-B

3. What are hormones of adrenal medulla? Describe actions of one of them in detail =15marks
4. Write short notes on: 7x5=a) Second messengers b) Actions of parathormone
c) Addison's disease d) Blood tests barrier e) Rhodopsin cycle
f) Family planning methods in male g) Tests for primary sterility

14th August, 2001 - PAPER-II (Old Regulations)

Part-A

1. Name the basal ganglia. What are its connections and functions. What are the signs of Parkinsonism
2. Write short notes on: 7x5=a) Righting reflexes b) Tests for hearing c) CSF and its functions
d) Events of synaptic transmission e) Alpha block f) R.E.M. Sleep g) Colour blindness

Part-B

3. What is normal blood ionic calcium level? Describe how blood calcium is regulated =15marks
4. Write short: 7x5=a) Releasing factors b) Actions of Aldosterone c) Actions of 1,25 DHCC
d) Cretin and pituitary diorases e) Stages of spermatogenesis f) Stages of uterine menstrual cycle
g) Cryptorchidism

9th February, 2001 – PAPER-II (New Regulations)

1. Draw and label the structure of a chemical synapse. Explain the steps involved in synaptic transmission. What is post tetanic potentiation (2+6+2=10marks)
2. Explain with the help of a labelled diagram the visual pathway. Indicate the effects of lesions of the pathway at different levels (6+4=10marks)

Write short notes on: 5 x 4 =3. Thyroid function tests 4. Oxytocin 5. Parkinsonism

6. Excitation-contraction coupling
7. Referred pain

Write briefly on: 5 x 2 =8. Mechanism of action of the oral pill 9. Tetany

10. Explain the hyper pigmentation seen in Addison's disease

11. Neurotransmitters in autonomic nerve system
12. Paradoxical sleep

9th February, 2001 - PAPER-II (Old Regulations)

Part-A

1. Describe the origin, course, termination & functions of pyramidal tract. Add a note on Hemiplegia=15m
2. Write short notes: 7x5=a) Tabes dorsalis b) Functions of middle ear
c) Hypothalamic regulation of food intake d) Acromegaly e) Properties of receptors
f) Presbyopia g) Cretinism

Part-B

3. Describe the synthesis and functions of thyroxine. State the effects of Hypersecretion of thyroxine.=15m
4. Write short notes on: 7x5=a) Ovulation b) Dark adaptation c) Cushing's syndrome
d) Taste modalities e) Galactopoiesis f) Paralysis agitans g) Pregnancy diagnosis tests

15th July, 2000 – PAPER-II (Old Regulations)

Part-A

1. Describe the chief connections and functions of Basal ganglia. Add a note on basal ganglia disorders =15m
2. Write short notes on: 7x5=a) Stereogenesis b) Functions of cerebellum
c) Visual pathway and effects of its lesions d) Myxedema e) Spermatogenesis f) Diabetes Insipidus
g) Condition reflexes

Part-B

3. Describe the role of pancreatic hormones in regulation of blood glucose levels. Add a note on diabetes mellitus
4. Write short notes on: 7x5=a) I.U.C.D. b) Functions of Sertoli cells c) Perception of smell
d) Functions of placenta e) Gigantism f) Muscle spindle g) Impedance matching

15th July, 2000 - PAPER-II (NEW REGULATIONS)

Part-A

1. Describe the nuclei, connections and functions of basal ganglia. What are the features of Parkinsonism and how can it be reduced (2+2+2+2+2=10marks)
2. Write short notes on: 5 x 3=a) Referred pain b) Briefly explain what is meant by Argyll-Robertson pupil
c) Outline the olfactory pathway d) Saltatory connection
e) Where are the suppressor areas of the cortex? What is their functional significance

Part-B

3. Give an account of the synthesis and catabolism of adrenal medullary hormones. What is the clinical importance of increased catecholamine production in the body (3+3+4=10marks)
4. Write short notes on: 5x3=a) Draw the sarco-tubular system. What are its functions
b) What is ovulation? What is its significance c) Enumerate the factors that control the secretion of aldosterone
d) Mention the releasing factors of hypothalamus which act on Adenohypophysis e) Functions of Placenta

19th February, 2000 - PAPER-II (New Regulations)

Part-A

1. Trace the pathway for pain sensation. Indicate the lesions which would abolish pain sensation=10marks
2. Write short notes on: 5 x 3 =15marks
a) What changes occur in the eyes during accommodation to near vision
b) What are the neurons of the tympanic membrane, Ossicular chain system
c) What are the causes of resting membrane potential
d) Enumerate the differences between upper motor neurone lesion and lower motor lesion
e) What is the spinal shock? What is the mechanism of spinal shock

Part-B

3. Describe the synthesis, transport and regulation of secretion of thyroid hormones. What are the features of hyposecretion of thyroid hormones in the child =10marks
4. Write short notes on: 5 x 3 =a) Rigor mortis b) Chorionic gonadotropins
c) Role of gluco-corticoids in the resistance of the body to stress
d) Outline the effects of castration in male: 1. Before puberty 2. After puberty
e) What is the mechanism of action of growth hormone in producing skeletal growth?

19th February, 2000 - PAPER-II (Old Regulations)

Part-A

1. Describe the chief connections and functions of pre-frontal lobe. State the effects of pre-frontal functions=15
2. Write short notes on: 7x5=a) Myostatic reflex b) Accommodation of the eye c) Addison's disease
d) Brown-sequard syndrome e) Oxytocin f) Disorders of speech g) Functions of tract of Goll and Burdach

Part-B

3. Describe the functions of hormones of Adrenal cortex. State the effects of hyper functioning of adrenal cortex
4. Write short notes on; 7x5=a) Endometrial cycle b) Functions of cerebro spinal fluid
c) Oral contraception d) Tetany e) Decerebrato rigidity f) Organ of corti g) Errors of refraction