[LC 031]

FEBRUARY 2013

Sub.Code:1561

M.Ch-NEUROSURGERY

THREE YEARS COURSE – PART –I

Paper – I NEUROANATOMY & NEUROPHYSIOLOGY

Q.P. Code:181561

Time: 3 hours (180 Min)

I.Elaborate on:

(2x15marks=30marks)

- 1. The Microscopic anatomy of a muscle Fiber and Muscle Spindle. Discuss the process of muscle contraction and the role of the muscle spindle.
- 2. The Factors which play a role in the control and Maintenance of normal Intracranial pressure. Describe the changes which occur in case of a gradually increasing space occupying lesion in the brain.

II.Write Notes on:-

- 1. The Nuclei which contribute to the facial nerve
- 2. Thalamus- connections and lesions
- 3. Blood Brain Barrier
- 4. Importance of Caudate Nucleus
- 5. Anatomy of Third Ventricle
- 6. Acetyl Choline and its actions
- 7. Decorticate versus Decerebrate Rigidity
- 8. Blood Supply of Internal Capsule
- 9. Rods and Cones
- 10. Middle Cerebral Artery-Course and its importance

(10x7marks=70marks)

Maximum :100 marks

(LD 031)

M.Ch. – NEURO SURGERY THREE YEARS/FIVE YEARS/SIX YEARS COURSE – PART – I/PART – II Paper – I NEUROANATOMY AND NEUROPHYSIOLOGY *Q.P.Code: 181561*

AUGUST 2013

Time: Three Hours

I. Elaborate on:

- 1. Describe the anatomy of the third ventricle and its recesses.
- 2. Describe the anatomical pathways for the pupillary light reflex and accommodation. Add a note on the pathophysiology of light near dissociation.

II. Write notes on:

- 1. Foramen of Monro.
- 2. Internal cerebral vein.
- 3. Ligaments of the atlanto axial joint.
- 4. Inferior cerebellar peduncle.
- 5. Supplementary motor area.
- 6. Spasticity.
- 7. Intracranial pressure volume curve.
- 8. Blood brain barrier.
- 9. Spinothalamic tract.
- 10. Monosynaptic stretch reflex.

Sub. Code: 1561

Maximum: 100 marks

(2X15=30)

(**10X7=70**)

(=1110-01

M.Ch. – NEURO SURGERY THREE YEARS/FIVE YEARS/SIX YEARS COURSE – PART – I/PART – II Paper – I NEUROANATOMY AND NEUROPHYSIOLOGY *Q.P.Code: 181561*

Time: Three Hours

I. Elaborate on:

- 1. Describe the anatomy of the floor of the fourth ventricle and its importance in surgical approaches.
- 2. Describe the pathway for perception of pain.

II. Write Notes on:

- 1. Draw a labelled diagram of the coronal section of the cavernous sinus.
- 2. Brachial plexus.
- 3. Abducens nerve.
- 4. Innervation of urinary bladder.
- 5. Ligamentum flavum.
- 6. Broca's area.
- 7. Cushing's reflex.
- 8. Frontal eye field.
- 9. Subthalamic nucleus.
- 10. Foramen magnum.

Maximum: 100 marks

(2X15=30)

(10X7=70)

[LF 031]

AUGUST 2014

Sub. Code: 1561

M.Ch. – NEURO SURGERY THREE YEARS / FIVE YEARS / SIX YEARS COURSE PART – I / PART – II Paper I – NEUROANATOMY AND NEUROPHYSIOLOGY

$O D C_{2} I_{2} 1015(1)$

Time: Three Hours

Q. P. Code: 181561

Maximum: 100 Marks

Answer ALL questions in the same order.

I. Elaborate on: (2 x 15 = 30) 1. Discuss the hypothalamic –pituitary axis in detail. 2. Discuss the deep venous system of the brain. II. Write notes on: (10 x 7 = 70) 1. Parapontine reticular formation. 2. Relative afferent pupillary defect. 3. Rigidity. 4. Tentorial incisura. 5. Diaphragma sella. 6. Liliequist membrane. 7. Circumventricular organs. 8. Supplementary motor area. 9. Amygdala.

10. Floor of anterior third ventricle.
