

(LR 033)

NOVEMBER 2020  
(AUGUST 2020 SESSION)

Sub. Code: 1564

**M.Ch. – NEURO SURGERY**

**THREE YEARS COURSE**

**Paper I – NEUROANATOMY, NEUROPHYSIOLOGY  
NEUROCHEMISTRY AND NEUROPATHOLOGY**

*Q.P. Code: 181564*

**Time: Three Hours**

**Maximum: 100 Marks**

**I. Elaborate on:**

**(2 x 15 = 30)**

1. Discuss in detail with diagrams about all the basal cisterns along the course of anterior cerebral arteries, their boundaries, contents and applied surgical anatomy of each basal cistern with relevance to pathology specific to the respective basal cisterns.
2. Describe with relevant diagrams the various cerebral circuits that are connected with higher mental functions. Discuss in detail with neatly labelled diagrams the applied anatomy of the Peri-sylvian network and the clinicopathological correlation of the language deficits caused by dysfunctions of the peri-sylvian circuit.

**II. Write notes on:**

**(10 x 7 = 70)**

1. Anatomical variations of vertebral artery in and around the region of Foramen magnum.
2. Clinico-imaging correlation of various stages of uncal herniation.
3. Optic nerve sheath diameter and its relevance to neurosurgery.
4. Neurophysiology of opisthotonus posturing
5. Substantia nigra and its connections
6. Circadian rhythm and sleep cycle
7. Gelastic seizure
8. Prof.T.S.Kanaka
9. Hypertonic saline and its use in neurosurgery
10. Trans cranial doppler and its uses in neurosurgery.

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