

QP Code: 101505

Reg. No.:.....

**M.Ch. (Neuro Surgery) Degree Supplementary Examinations  
January 2018**

**Paper I – Basic Sciences**

Time: 3 hrs

Max marks:100

- *Answer all questions*
- *Draw diagrams wherever necessary*

**Essay:**

**(20)**

1. Describe the gross anatomy of the basal ganglia and their connections. Also indicate the neurotransmitters involved in each circuit.

**Short essays:**

**(8x10=80)**

2. Draw and label a section of the midbrain at the inferior colliculus level.
3. Describe the pathology of anaplastic oligoastrocytomas (WHO grade III).
4. Describe the pathophysiology of flexor spasms.
5. Describe the cellular events during a seizure.
6. Describe the connections of the deep cerebellar nuclei.
7. Discuss the mechanism of action of carbamazepine.
8. Describe the blood supply to the internal capsule.
9. Describe the anatomy of the cranio vertebral junction.

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