

QP Code: 101522

Reg. No:

**DM (Paediatric Neurology) Degree Supplementary Examinations
June 2024**

Paper I – Basic Sciences

Time: 3 hrs

Max marks: 100

- *Answer all questions to the point neatly and legibly • Do not leave any blank pages between answers • Indicate the question number correctly for the answer in the margin space*
- *Answer all parts of a single question together • Leave sufficient space between answers*
- *Draw table/diagrams/flow charts wherever necessary*

Essay: (20)

1. Describe the normal cerebral venous system diagrammatically and discuss briefly about the pathophysiology and management of cerebral venous sinus thrombosis in children

Short essays: (8x10=80)

2. Explain with a schematic diagram the action of common anti-seizure medications on excitatory and inhibitory synapses
3. Discuss with help of a diagram the formulation of neural tube and the pathogenesis of neural migration disorders
4. Describe the mTOR (mammalian/mechanistic target of rapamycin) signaling pathway in context of epilepsy and pharmacologic options for mTORopathies
5. Draw a schematic diagram of the neural control of bladder and discuss briefly about disorders of micturition
6. Describe the urea cycle diagrammatically and outline the approach to a child with suspected urea cycle disorder
7. Write a note on mechanism of brain plasticity in developing brain
8. Describe the stages of sleep and enumerate the various sleep disorders in children
9. Write a brief note on muscle spindle and its role in tone management
