NEUROLOGY

PAPER- I

Time : 3 hours

Max. Marks : 100

NEURO/D/11/23/I

Attempt all questions in order.
Each question carries 10 marks.

1.	Describe the anatomy of Cavernous sinus.	10
2.	Describe Corpus Callosum and discuss the clinical features of lesions involving Corpus Callosum.	5+5
3.	Discuss the CSF flow dynamics.	10
4.	Describe and discuss the "Circadian Rhythm" in brain.	10
5.	Describe the anatomy of cerebellum and its connections.	5+5
6.	Describe pain sensation and discuss neuropathic pain.	5+5
7.	Describe the anatomy of third cranial nerve. Enumerate signs of lesions of 3rd cranial nerve at different sites.	5+5
8	Draw and describe the anatomy and muscles supplied by Median nerve and enumerate the sites of median nerve entrapment.	6+4
9.	Describe the anatomical structures responsible for "balance". Draw and discuss the vestibular apparatus and its connections.	5+5
10.	Draw and describe the pathways of Olfactory perception. Discuss the categories of Olfactory dysfunction.	5+5

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NEUROLOGY

PAPER- II

Time   : 3 hours
Max. Marks : 100

NEURO/D/11/23/II

Attempt all questions in order.
Each question carries 10 marks.

1. Define status epilepticus. Describe evaluation and management protocol of status epilepticus. — 2+4+4

2. Discuss the teratogenic effects of various anti-epileptic drugs (AEDs) and outline the guidelines of their use in pregnancy. — 5+5

3. Define and describe the pathogenesis of restless legs syndrome (RLS) and outline its management: — 2+4+4

4. Describe the clinical variants of acute inflammatory demyelinating polyneuropathy (AIDP), and discuss their management and prognosis. — 5+3+2

5. Describe the clinical features, pathology, investigations and treatment modalities in a patient with Rasmussen's encephalitis. — 2+2+2+4

6. Describe briefly the principles of various types and limitations of neural transplantation. — 10

7. Describe the pathophysiology, clinical features and treatment of Stiff-Person's syndrome. — 2+4+4

8. Discuss the progressive ataxias of late childhood and adolescence. — 10

9. Define transient ischemic attack (TIA). Give the management protocol. — 1+9

10. Describe the non-motor manifestations of Parkinson's disease. — 10

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NEUROLOGY

PAPER- III

NEURO/D/11/23/III

Time   : 3 hours
Max. Marks : 100

Attempt all questions in order.
Each question carries 10 marks.

1.   Discuss the indications for Positron Emission Tomography (PET) in neurological disorders. What are the different tracers used? Discuss its current role in epilepsy.   3+3+4

2.   Describe the maturation of EEG and discuss the role of EEG in a patient with altered sensorium.   6+4

3.   Discuss electro-diagnostic approach to a patient with wasting of hand muscles.   10

4.   Discuss the role of Magnetic Resonance Imaging (MRI) in differential diagnosis of Dementias.   10

5.   Discuss the utility of Diffusion Tensor Imaging (DTI), Magnetization Transfer (MTR) and Gradient Echo (GRE) sequences in imaging of stroke.   4+3+3

6.   Discuss cognitive potentials under the following headings: 3+3+4
       a. Types of cognitive potentials
       b. Methodology to elicit
       c. Clinical significance

7.   Give the clinical significance of the following EEG abnormalities: 4+3+3
       a) Periodic lateralized epileptiform discharges (PLEDs)
       b) Photomyoclonic response
       c) Burst suppression

8.   Discuss the electro-diagnosis of inflammatory myopathies.   10

9.   Define "Conduction Block". Give its criteria for diagnosis and clinical significance.   1+6+3

10. Discuss the neuroimaging and laboratory tests for Leukodystrophies.   10

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