

August 2009

[KV 070]

Sub. Code: 1453

D.M. DEGREE EXAMINATION

(Super Specialities)

(Revised Regulations)

Branch I –Neurology

(Candidates admitted from 2006-07 onwards)

**Paper III– NEURO RADIOLOGY, ELECTRO PHYSIOLOGY, NEURO
OTOLOGY, NEURO OPHTHALMOLOGY AND OTHER
INVESTIGATORY PROCEDURES**

Q.P. Code: 161453

Time: Three hours

Maximum: 100 Marks

ANSWER ALL QUESTIONS

Draw suitable diagrams wherever necessary.

I. Essays:

2 x 20 = 40 Marks

1. Discuss the merits and demerits of CT and MRI in neurological conditions.
2. Discuss the clinical and electro physiological approach to a patient with vertigo.

II. Write short notes on:

10 x 6 = 60 Marks

1. Contingent negative variation.
2. P₃₀₀
3. Supra nuclear control of eye movements.
4. Ophthalmo dynamometry.
5. Intra cranial pressure monitoring.
6. Tarsal tunnel syndrome.
7. Anti ACHR antibody.
8. Hyperdense MCA sign.
9. Cherry red spot.
10. Ossification of the posterior longitudinal ligament (OPLL).

February 2010

[KW 070]

Sub. Code: 1413

D.M. DEGREE EXAMINATION

(Super Specialities)

Branch I –Neurology

(Candidates admitted from 2006-07 onwards)

**Paper III– NEURO RADIOLOGY, ELECTRO PHYSIOLOGY, NEURO
OTOLOGY, NEURO OPHTHALMOLOGY AND OTHER
INVESTIGATORY PROCEDURES**

Q.P. Code: 161413

Time: Three hours

Maximum: 100 Marks

ANSWER ALL QUESTIONS

Draw suitable diagrams wherever necessary.

I. Essays:

2 x 20 = 40 Marks

1. Discuss on Magnetic Resonance Imaging (MRI) based approach to white matter disorders.
2. Discuss role of eletrophysiological tests in the evaluation and management of carpal tunnel syndrome.

II. Write short notes on:

10 x 6 = 60 Marks

1. Paroxysmal Vertigo.
2. Acute unilateral visual loss.
3. Transcranial doppler.
4. Laboratory diagnosis of tuberculous meningitis.
5. Sympathetic skin response.
6. Dynamic posturography.
7. Photic stimulation.
8. Laboratory diagnosis of Eaton Lambert Syndrome.
9. Electro-oculography.
10. Magneto encephalography.

August 2011

[KZ 070]

Sub. Code: 1413

**DOCTORATE OF MEDICINE (D.M.) DEGREE EXAMINATION
(SUPER SPECIALITIES)**

BRANCH I – NEUROLOGY

**NEURO RADIOLOGY, ELECTRO PHYSIOLOGY, NEURO OTOTOLOGY,
NEURO OPHTHALMOLOGY AND OTHER INVESTIGATORY
PROCEDURES**

Q.P. Code: 161413

**Time : 3 hours
(180 Min)**

Maximum : 100 marks

Answer ALL questions in the same order.

I. Elaborate on :

	Pages (Max.)	Time (Max.)	Marks (Max.)
1. Discuss the principles of MRV and discuss the role of CT, MRI and MRV in cerebral venous thrombosis.	11	35	15
2. Discuss the EEG artifacts and usefulness of EEG in Neurological disorders.	11	35	15

II. Write notes on :

1. Digital Subtraction Angiography.	4	10	7
2. Intracranial calcifications.	4	10	7
3. Burst suppression pattern.	4	10	7
4. H reflex.	4	10	7
5. Single fibre EMG.	4	10	7
6. Muscle biopsy.	4	10	7
7. Interventional procedures in carotid artery diseases.	4	10	7
8. Sleep EEG.	4	10	7
9. Consecutive Optic Atrophy.	4	10	7
10. Rinne's test.	4	10	7

[LB 070]

AUGUST 2012

Sub. Code: 1413

D.M – NEUROLOGY

**Paper – III NEURO RADIOLOGY, ELECTRO PHYSIOLOGY, NEURO
OTOLOGY, NEURO OPHTHALMOLOGY AND OTHER INVESTIGATORY
PROCEDURES**

Q.P. Code: 161413

**Time: 3 hours
(180 Min)**

Maximum: 100 marks

Answer ALL questions in the same order.

I. Elaborate on:

1. Discuss the presurgical evaluation and various surgical options in Intractable epilepsy.

16 35 15

2. Discuss the principles of Positron Emission Tomography (PET) and give an account of the role of PET in Neurological disorders.

16 35 15

II. Write notes on:

1. Role of Thrombolytic therapy in Acute Ischemic Stroke.

4 10 7

2. Vestibular Evoked Myogenic Potential (VEMP) and its usefulness in evaluation of Vertigo.

4 10 7

3. Principles and uses of Blink Reflex study.

4 10 7

4. Management of Single contrast enhancing CT lesions.

4 10 7

5. Somato Sensory Evoked Potential and its role in neurological diagnosis.

4 10 7

6. Hypsarrhythmia and its clinical significance.

4 10 7

7. Clinical features and diagnosis of Myotonic Dystrophy.

4 10 7

8. Neuroimaging of Cerebral Venous sinus thrombosis.

4 10 7

9. TransCranial Doppler and its role in stroke.

4 10 7

10. Clinical features and diagnosis of Neuronal Ceroid Lipofuscinosis.

4 10 7

(LD 070)

AUGUST 2013

Sub. Code:1413

D.M. – NEUROLOGY

**Paper – III NEURO RADIOLOGY, ELECTRO PHYSIOLOGY, NEURO
OTOLOGY, NEURO OPHTHALMOLOGY AND OTHER
INVESTIGATORY PROCEDURES**

Q.P.Code: 161413

Time: Three Hours

Maximum: 100 marks

I. Elaborate on:

(2X15=30)

1. Define Computed tomogram angiography, role of Computed tomogram angiography in neurological disorders.
2. Discuss visual evoked potentials and its application in neurological disorders.

II. Write notes on:

(10X7=70)

1. H Reflex.
2. Magneto encephalography.
3. Central retinal vein occlusion.
4. Otitic hydrocephalus.
5. Recurrent meningitis.
6. Rapid Eye Movement sleep behavioral disorders.
7. Supra nuclear eye movement pathways.
8. Hyper dense middle cerebral artery sign.
9. Alpha wave.
10. Periodic lateralized epileptiform discharges.

D.M. – NEUROLOGY

**Paper – III NEURO RADIOLOGY, ELECTRO PHYSIOLOGY, NEURO
OTOLOGY, NEURO OPHTHALMOLOGY AND OTHER
INVESTIGATORY PROCEDURES**

Q.P.Code: 161413

Time: Three Hours

Maximum: 100 marks

I. Elaborate on:

(2X15=30)

1. Discuss the role of magnetic resonance imaging in the diagnosis of various leukodystrophies.
2. Discuss the clinical features and laboratory diagnosis of mitochondrial disorders of the nervous system.

II. Write notes on:

(10X7=70)

1. Sympathetic skin response.
2. Diagnosis of toxoplasmosis.
3. Skin biopsy in neurological disorders.
4. Quantitative sensory testing.
5. Brain stem auditory evoked potential.
6. Single fibre electromyography.
7. Superior orbital fissure syndrome.
8. Dynamic posturography.
9. Urodynamic study in neurological disorders.
10. Enzyme histochemistry in muscle disorders.

(LH 070)

AUGUST 2015

Sub. Code:1413

D.M. – NEUROLOGY

**Paper III – NEURO RADIOLOGY, ELECTRO PHYSIOLOGY, NEURO
OTOLOGY, NEURO OPHTHALMOLOGY AND OTHER
INVESTIGATORY PROCEDURES**

Q.P.Code: 161413

Time: Three Hours

Maximum: 100 Marks

I. Elaborate on: **(2 x 15 = 30)**

1. Describe in detail the evaluation of a patient with sudden blindness.
2. Evaluation of restless leg syndrome.

II. Write notes on: **(10 x 7 = 70)**

1. CSF studies in idiopathic intracranial hypertension.
2. Contingent Negative variation.
3. P300 in Parkinson's disease.
4. Intra operative monitoring of BAEP (Brainstem Auditory Evoked Potential).
5. EEG in Sub acute sclerosing pan encephalitis.
6. Visual fields.
7. Non convulsive status epilepticus.
8. Basic principles of MRI (Magnetic Resonance Imaging).
9. Central motor conduction.
10. MR tractography.

(LJ 070)

AUGUST 2016

Sub. Code:1413

D.M. – NEUROLOGY

**Paper III – NEURO RADIOLOGY, ELECTRO PHYSIOLOGY, NEURO
OTOLOGY, NEURO OPHTHALMOLOGY AND OTHER
INVESTIGATORY PROCEDURES**

Q.P.Code: 161413

Time: Three Hours

Maximum: 100 Marks

I. Elaborate on:

(2 x 15 = 30)

1. Discuss the channelopathies.
2. Mechanical thrombectomy.

II. Write notes on:

(10 x 7 = 70)

1. Brain biopsy.
2. Phase reversal.
3. CT Myelogram.
4. Muscle biopsy.
5. Somatosensory evoked potentials.
6. Paraspinal EMG.
7. Neurosonogram.
8. Anterior ischaemic optic neuropathy.
9. Vestibular Neuronitis.
10. EEG in CJD.

D.M. – NEUROLOGY

**Paper III – NEURO RADIOLOGY, ELECTRO PHYSIOLOGY, NEURO
OTOLOGY, NEURO OPHTHALMOLOGY AND OTHER
INVESTIGATORY PROCEDURES**

Q.P.Code: 161413

Time: Three Hours

Maximum: 100 Marks

I. Elaborate on:

(2 x 15 = 30)

1. Discuss MRI approach to various myelopathies.
2. Discuss the neurological complications of otitis media and outline their management.

II. Write notes on:

(10 x 7 = 70)

1. Neonatal screening for inborn errors of metabolism.
2. Optical coherence tomography.
3. Polysomnography.
4. Laboratory diagnosis of rabies.
5. Quantitative sudomotor axon reflex test (QSART).
6. Intracranial pressure monitoring.
7. Immuno-histochemistry and Limb girdle muscular dystrophies.
8. Laboratory approach to Entrapment neuropathy.
9. Magnetic Resonance Spectroscopy.
10. Retinitis pigmentosa.

D.M. – NEUROLOGY

**Paper III – NEURO RADIOLOGY, ELECTRO PHYSIOLOGY, NEURO
OTOLOGY, NEURO OPHTHALMOLOGY AND OTHER
INVESTIGATORY PROCEDURES**

Q.P.Code: 161413

Time: Three Hours

Maximum: 100 Marks

I. Elaborate on:

(2 x 15 = 30)

1. How do you classify vertigo? Outline the management of a patient with recurrent Vertigo.
2. Discuss the MRI approach to various acquired white matter diseases.

II. Write notes on:

(10 x 7 = 70)

1. Internuclear ophthalmoplegia.
2. Anterior ischemic optic neuropathy.
3. Monitoring in intensive care unit.
4. Diagnostic nerve biopsy.
5. Biomarkers for Alzheimer's Dementia.
6. Electro-corticography.
7. Multiple Sleep Latency Test.
8. Laboratory diagnosis of acute meningitis.
9. Spontaneous activities during electromyography.
10. Neuroimaging in Wilsons disease.

(LM 070)

FEBRUARY 2018

Sub. Code: 1413

D.M. – NEUROLOGY

**Paper III – NEURO RADIOLOGY, ELECTRO PHYSIOLOGY, NEURO
OTOLOGY, NEURO OPHTHALMOLOGY AND OTHER
INVESTIGATORY PROCEDURES**

Q.P.Code: 161413

Time: Three Hours

Maximum: 100 Marks

I. Elaborate on:

(2 x 15 = 30)

1. Discuss the clinical, radiological and electrophysiological evaluation of brachial plexus injuries.
2. Role of neuroimaging in acute stroke.

II. Write notes on:

(10 x 7 = 70)

1. Activation procedures in EEG.
2. Aquaporin-4.
3. Magnetic Resonance Spectroscopy (MRS).
4. Deep brain stimulation.
5. Electronystagmography.
6. Caloric test in neurology.
7. Jitter.
8. Opsoclonus myoclonus syndrome.
9. Optic atrophy.
10. Amaurosis fugax.

D.M. – NEUROLOGY

**Paper III – NEURO RADIOLOGY, ELECTRO PHYSIOLOGY, NEURO
OTOLOGY, NEURO OPHTHALMOLOGY AND OTHER
INVESTIGATORY PROCEDURES**

Q.P.Code: 161413

Time: Three Hours

Maximum: 100 Marks

I. Elaborate on: (2 x 15 = 30)

1. Approach to a patient with dizziness.
2. Interventional neurology in stroke.

II. Write notes on: (10 x 7 = 70)

1. PET scan in neurology.
2. PLEDs.
3. JITTER.
4. Vestibular evoked myogenic potentials.
5. Artifacts in EEG.
6. Nerve biopsy.
7. Intra cranial pressure monitoring.
8. Trans cranial doppler in neurology.
9. MRV.
10. Macro EMG.

(LP 070)

AUGUST 2019

Sub. Code: 1413

D.M. – NEUROLOGY

**Paper III – NEURO RADIOLOGY, ELECTRO PHYSIOLOGY, NEURO
OTOLOGY, NEURO OPHTHALMOLOGY AND OTHER
INVESTIGATORY PROCEDURES**

Q.P. Code: 161413

Time: Three Hours

Maximum: 100 Marks

I. Elaborate on:

(2 x 15 = 30)

1. Role of Fundus examination in neurological disorders.
2. Abnormalities of urinary bladder control in neurological conditions and their management.

II. Write notes on:

(10 x 7 = 70)

1. P 300.
2. EEG in Metabolic encephalopathy.
3. Fahr's Disease.
4. Cortical dysplasia.
5. Brain stem auditory evoked potential and its role in neurology.
6. Diffusion tensor imaging.
7. Assessment of dysphagia.
8. Periodic complexes.
9. Electrophysiological evaluation of sciatic nerve.
10. Radiography in cranio vertebral anomalies.

(LR 070)

NOVEMBER 2020
(AUGUST 2020 SESSION)

Sub. Code: 1413

D.M. – NEUROLOGY

**Paper III – NEURO RADIOLOGY, ELECTRO PHYSIOLOGY, NEURO
OTOLOGY, NEURO OPHTHALMOLOGY AND OTHER
INVESTIGATORY PROCEDURES**

Q.P. Code: 161413

Time: Three Hours

Maximum: 100 Marks

I. Elaborate on:

(2 x 15 = 30)

1. Discuss the clinical, electrophysiological and radiological evaluation of brachial plexus injury.
2. Neuro imaging in central nervous system demyelinating disorders

II. Write notes on:

(10 x 7 = 70)

1. Electrophysiological analysis of tremors.
2. Skew deviation.
3. CT cisternography.
4. Calorie test.
5. Carotid plaque imaging.
6. Twitch convulsive syndrome.
7. TRODAT scan.
8. Optical coherence tomography.
9. Reverse transcription polymerase chain reaction.
10. Aspects scoring

(DM 0221)

FEBRUARY 2021

Sub. Code: 1413

D.M. – NEUROLOGY

**Paper III – NEURO RADIOLOGY, ELECTRO PHYSIOLOGY, NEURO
OTOLOGY, NEURO OPHTHALMOLOGY AND OTHER
INVESTIGATORY PROCEDURES**

Q.P. Code: 161413

Time: Three Hours

Maximum: 100 Marks

I. Elaborate on: (2 x 15 = 30)

1. Autonomic function tests and its clinical applications in Neurology.
2. Describe in detail the pre-surgical evaluation of an Epilepsy patient.

II. Write notes on: (10 x 7 = 70)

1. Functional MRI.
2. Immuno Histo Chemistry.
3. Electronystagmography.
4. EEG monitoring in critical care.
5. Cortical Ribbon Sign.
6. Montreal cognitive assessment.
7. Diagnostic tests for assessing sleep disorders.
8. Muscle MRI.
9. Repetitive nerve stimulation.
10. Orbital Pseudotumor.

(DM 0821)

AUGUST 2021

Sub. Code: 1413

D.M. – NEUROLOGY

**Paper III – NEURO RADIOLOGY, ELECTRO PHYSIOLOGY, NEURO
OTOLOGY, NEURO OPHTHALMOLOGY AND OTHER
INVESTIGATORY PROCEDURES**

Q.P. Code: 161413

Time: Three Hours

Maximum: 100 Marks

I. Elaborate on: (2 x 15 = 30)

1. Define Nystagmus. Discuss the mechanisms, clinical evaluation and various Nystagmus syndromes.
2. Discuss about Functional MRI, PET and SPECT and its clinical applications.

II. Write notes on: (10 x 7 = 70)

1. Diffusion tractography.
2. Visual evoked potential.
3. Continuous EEG monitoring in non convulsive seizures.
4. Magnetoencephalography.
5. Martin – Gruer anastomosis.
6. Complex repetitive discharges.
7. Blink reflex.
8. Single fibre EMG.
9. Mucle biopsy findings in steroid myopathy.
10. EEG findings in hepatic encephalopathy.

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[DM 0222]

FEBRUARY 2022

Sub.Code :1413

D.M. – NEUROLOGY

**Paper III – NEURO RADIOLOGY, ELECTRO PHYSIOLOGY, NEURO
OTOLOGY, NEURO OPHTHALMOLOGY AND OTHER
INVESTIGATORY PROCEDURES**

Q.P. Code: 161413

Time: Three Hours

Maximum: 100 Marks

I. Elaborate on:

(2 x 15 = 30)

1. Discuss MRI based approach to various myelopathies
2. Discuss the clinical and electro physiological approach to a patient with vertigo.

II. Write notes on:

(10 x 7 = 70)

1. Hypsarrhythmia
2. Transcranial doppler and its role in stroke
3. Burst suppression pattern
4. Photic stimulation
5. Supra nuclear eye movement pathways
6. Brain stem auditory evoked potentials
7. Superior orbital fissure syndrome
8. Myotonic dystrophy
9. Intra cranial calcifications
10. Auto antibodies in neuromuscular junction disorders

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[DM 0822]

AUGUST 2022

Sub. Code :1413

D.M. – NEUROLOGY

**Paper III – NEURO RADIOLOGY, ELECTRO PHYSIOLOGY,
NEURO OTOTOLOGY, NEURO OPHTHALMOLOGY AND
OTHER INVESTIGATORY PROCEDURES**

Q.P. Code: 161413

Time: Three Hours

Maximum: 100 Marks

I. Elaborate on: (2 x 15 = 30)

1. Discuss Cerebral Vessel Wall imaging and its uses in Neurology.
2. Repetitive Nerve Stimulation and its applications in Neurology.

II. Write notes on: (10 x 7 = 70)

1. Triphasic Waves.
2. Motor ban sign.
3. Phase reversal.
4. Late response.
5. Para spinal EMG.
6. Ophthalmodynamometry.
7. Carotid Doppler Scan.
8. High intensity Transient signals in TCD.
9. Fibrillation potentials.
10. Nerve Biopsy in Neurology.

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[DM 0223]

FEBRUARY 2023

Sub. Code: 1413

D.M. – NEUROLOGY

**PAPER III – NEURO RADIOLOGY, ELECTRO PHYSIOLOGY,
NEURO OTOLOGY, NEURO OPHTHALMOLOGY AND
OTHER INVESTIGATORY PROCEDURES**

Q.P. Code: 161413

Time: Three Hours

Maximum: 100 Marks

I. Elaborate on:

(2 x 15 = 30)

1. Discuss the principles and uses of Perfusion CT scan in acute stroke.
2. Neuro imaging in Demyelinating disorders.

II. Write notes on:

(10 x 7 = 70)

1. Optical Coherence Tomography (OCT).
2. Vestibular Evoked Myogenic Potentials (VEMP).
3. Jitter.
4. Complex repetitive discharges.
5. Alpha coma.
6. TCD in stroke.
7. Brain biopsy in Neurology.
8. Somatosensory evoked potentials.
9. Activation Procedures in EEG.
10. Magnetic Resonance Spectroscopy (MRS) in Neurology.

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[DM 0823]

AUGUST 2023

Sub. Code: 1413

D.M. – NEUROLOGY

**PAPER III – NEURO RADIOLOGY, ELECTRO PHYSIOLOGY,
NEURO OTOLOGY, NEURO OPHTHALMOLOGY AND
OTHER INVESTIGATORY PROCEDURES**

Q.P. Code: 161413

Time: Three Hours

Maximum: 100 Marks

I. Elaborate on: **(2 x 15 = 30)**

1. Discuss the clinical features and laboratory diagnosis of Mitochondrial disorders of Nervous system.
2. Discuss the principles of PET and give an account of role of PET in Neurological disorders.

II. Write notes on: **(10 x 7 = 70)**

1. Deep brain stimulation.
2. Tarsal tunnel syndrome.
3. Cherry red spot.
4. Caloric test.
5. H reflex.
6. Interventional procedures in carotid artery diseases.
7. Sleep EEG.
8. Neuronal ceroid lipofuscinosis.
9. Management of single contrast enhancing lesions.
10. Acute unilateral visual loss.

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[DM 0124]

JANUARY 2024

Sub. Code: 1413

D.M. – NEUROLOGY

**PAPER III – NEURO RADIOLOGY, ELECTRO PHYSIOLOGY,
NEURO OTOLOGY, NEURO OPHTHALMOLOGY AND
OTHER INVESTIGATORY PROCEDURES**

Q.P. Code: 161413

Time: Three Hours

Maximum: 100 Marks

I. Elaborate on:

(2 x 15 = 30)

1. Electrophysiological evaluation of Brachial plexus lesion.
2. Discuss the Causes, Clinical features, Pathology of Optic Neuritis and Electro Physiological evaluation of the Optic Neuritis.

II. Write notes on:

(10 x 7 = 70)

1. PLEDS. Periodic Lateralized Epileptiform Discharges.
2. P300.
3. Hand knob area.
4. DAT (Dopamine active Transporter) Scan.
5. Diffusion Tractography.
6. Nerve Biopsy.
7. Artifacts in EEG.
8. Autoimmune panel.
9. Muscle MRI.
10. Brainstem auditory Evoked Potentials.

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[DM 0824]

AUGUST 2024

Sub. Code: 1413

D.M. – NEUROLOGY

**PAPER III – NEURO RADIOLOGY, ELECTRO PHYSIOLOGY,
NEURO OTOLOGY, NEURO OPHTHALMOLOGY AND
OTHER INVESTIGATORY PROCEDURES**

Q.P. Code: 161413

Time: Three Hours

Maximum: 100 Marks

I. Elaborate on:

(2 x 15 = 30)

1. Discuss the clinical and electrophysiological evaluation of brachial plexus injuries.
2. Role of neuroimaging in dementia.

II. Write notes on:

(10 x 7 = 70)

1. Visual Evoked potential.
2. Alpha wave.
3. Periodic lateralized epileptiform discharges.
4. Enzyme histochemistry in muscle disorder.
5. Collateral circulation - evolving from time window to tissue window.
6. Quantitative sudomotor axon reflex test.
7. Polysomnography.
8. Mechanical thrombectomy.
9. Magnetic resonance tractography.
10. Electronystagmography.

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[DM 0225]

FEBRUARY 2025

Sub. Code: 1413

D.M. – NEUROLOGY

**PAPER III – NEURO RADIOLOGY, ELECTRO PHYSIOLOGY,
NEURO OTOLOGY, NEURO OPHTHALMOLOGY AND
OTHER INVESTIGATORY PROCEDURES**

Q.P. Code: 161413

Time: Three Hours

Maximum: 100 Marks

I. Elaborate on:

(2 x 15 = 30)

1. Electrophysiological evaluation of carpal tunnel syndrome.
2. Discuss in detail about the evaluation of a patient with sudden onset of Mono ocular blindness.

II. Write notes on:

(10 x 7 = 70)

1. Mu waves.
2. Time constant.
3. High RNS.
4. Burst suppression pattern.
5. Myotonic discharges.
6. Martin- Gruber anastomosis.
7. Triphasic waves.
8. Cortical vein sign.
9. Twitch convulsive syndrome.
10. ASPECTS scoring.

THE TAMIL NADU Dr. M.G.R. MEDICAL UNIVERSITY

[DM 0825]

AUGUST 2025

Sub. Code: 1413

D.M. – NEUROLOGY

**PAPER III – NEURO RADIOLOGY, ELECTRO PHYSIOLOGY,
NEURO OTOLOGY, NEURO OPHTHALMOLOGY AND
OTHER INVESTIGATORY PROCEDURES**

Q.P. Code: 161413

Time: Three Hours

Maximum: 100 Marks

I. Elaborate on:

(2 x 15 = 30)

1. Discuss the clinical, neuroradiological and electrophysiological approach to a patient with vertigo.
2. Discuss the EEG artifacts and usefulness of EEG in neurological disorder.

II. Write notes on:

(10 x 7 = 70)

1. Repetitive transcranial magnetic stimulation.
2. Single Fibre EMG.
3. Tolosa Hunt Syndrome.
4. Motor Unit potential abnormalities in various conditions.
5. Alberta stroke program early CT score.
6. Ischemic optic neuropathy.
7. Neurochemical systems of interest in Positron Emission Tomography.
8. F Wave and its clinical application.
9. Vagal nerve stimulation.
10. Role of neuroimaging in wake up stroke.

THE TAMIL NADU Dr. M.G.R. MEDICAL UNIVERSITY

[DM 0126]

JANUARY 2026

Sub. Code: 1413

D.M. – NEUROLOGY

**PAPER III – NEURO RADIOLOGY, ELECTRO PHYSIOLOGY,
NEURO OTOTOLOGY, NEURO OPHTHALMOLOGY AND
OTHER INVESTIGATORY PROCEDURES**

Q.P. Code: 161413

Time: Three Hours

Maximum: 100 Marks

I. Elaborate on:

(2 x 15 = 30)

1. The role of Neuroimaging in infectious and inflammatory disorders of Spinal cord.
2. Discuss the role of motor nerve conduction, sensory nerve conduction and electromyography in differential diagnosis of Neurological Disorders.

II. Write notes on:

(10 x 7 = 70)

1. Ontogeny of Sleep EEG.
2. Skin biopsy in Neurology.
3. Transcranial Doppler.
4. Intra operative monitoring of neurological functions.
5. Da T Scan.
6. Rasmussen encephalitis.
7. Double-doughnut sign.
8. Polysomnography.
9. Retinitis Pigmentosa.
10. Idiopathic intracranial hypertension.
