

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

**[DM 0822]**

**AUGUST 2022**

**Sub. Code :1508**

**D.M. – PAEDIATRIC NEUROLOGY**

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

*Q.P. Code: 161508*

**Time: Three Hours**

**Maximum: 100 Marks**

**I. Elaborate on:**

**(2 x 15 = 30)**

1. Discuss brain imaging of newborns with perinatal hypoxic insult.
2. Discuss utility of EEG and patterns in paediatric intensive care.

**II. Short notes on**

**(10X7=70)**

1. Cerebrospinal fluid analysis in CNS infections.
2. Biochemical studies in diagnosis of neurometabolic disorders.
3. MLPA utility in Paediatric Neurology.
4. Central hearing loss.
5. Laboratory testing for Tuberous sclerosis complex.
6. EEG in West syndrome.
7. NCS for diagnosis of Guillain-Barre syndrome.
8. Pharmacogenetics.
9. Retinitis Pigmentosa.
10. CSF oligoclonal bands.

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

**[DM 0124]**

**JANUARY 2024**

**Sub. Code :1508**

**D.M. – PAEDIATRIC NEUROLOGY**

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

*Q.P. Code: 161508*

**Time: Three Hours**

**Maximum: 100 Marks**

**I. Elaborate on:**

**(2 x 15 = 30)**

1. Approach to Auditory Spectrum Disorders.
2. Radiological approach to Leukodystrophy.

**II. Short notes on:**

**(10 x 7 = 70)**

1. Cortical Deafness.
2. Retinitis Pigmentosa.
3. Digenic inheritance (DI).
4. X-linked recessive disorders in girls.
5. Preimplantation genetic testing.
6. Homoplasmy and Heteroplasmy.
7. Reversible splenic lesion syndrome (RESLES).
8. Approach a child with Thalamic hyperdensity.
9. CSF oligoclonal bands.
10. Developmental language disorders.

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

**[DM 0824]**

**AUGUST 2024**

**Sub. Code :1508**

**D.M. – PAEDIATRIC NEUROLOGY**

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

*Q.P. Code: 161508*

**Time: Three Hours**

**Maximum: 100 Marks**

**I. Elaborate on:**

**(2 x 15 = 30)**

1. Multimodal brain death evaluation in children.
2. Comprehensive neuroimaging techniques in evaluation of paediatric arterial ischemic stroke.

**II. Short notes on**

**(10 X 7 = 70)**

1. Neurometabolic studies in CSF.
2. Patterns of brain injury in term HIE using neuroimaging.
3. Laboratory diagnosis of peroxisomal disorders.
4. Prenatal diagnosis of posterior fossa anomalies.
5. MRI findings in MOGAD.
6. Genetics of Duchenne muscular dystrophy.
7. Autonomic function tests.
8. Brainstem Evoked Response Audiometry.
9. Conduction Block.
10. Horner's syndrome.

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

**[DM 0225]**

**FEBRUARY 2025**

**Sub. Code :1508**

**D.M. – PAEDIATRIC NEUROLOGY**

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

*Q.P. Code: 161508*

**Time: Three Hours**

**Maximum: 100 Marks**

**I. Elaborate on:**

**(2 x 15 = 30)**

1. Elaborate normal EEG pattern in wake and sleep from infancy to adolescence.
2. Discuss critical appraisal of a systematic review and guidelines.

**II. Short notes on**

**(10 X 7 = 70)**

1. Diffusion weighted MRI.
2. Utility of Chromosomal microarray in paediatric neurology.
3. Congenital cataract.
4. Audiological evaluation of early hearing loss.
5. MRI finding in cerebral venous sinus thrombosis.
6. Biochemical testes for diagnosis of mitochondrial disorders.
7. Diagnostic evaluation of micturition disorders in children.
8. Pharmacogenetics.
9. Sanger sequencing and relevance in Paediatric Neurology.
10. Laboratory diagnosis of peroxisomal disorders.

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

**[DM 0126]**

**JANUARY 2026**

**Sub. Code :1508**

**D.M. – PAEDIATRIC NEUROLOGY**

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

*Q.P. Code: 161508*

**Time: Three Hours**

**Maximum: 100 Marks**

**I. Elaborate on:**

**(2 x 15 = 30)**

1. Discuss normal encephalographic patterns during infancy through adolescence.
2. Discuss the methods of chromosome analysis and the major chromosomal abnormalities.

**II. Short notes on:**

**(10 x 7 = 70)**

1. Utility of CSF examination of neurometabolic conditions.
2. Likelihood ratio.
3. Electroencephalogram in non-convulsive status epilepticus (NCSE).
4. Evaluation of neurocardiogenic syncope in children.
5. Nocturnal Polysomnography.
6. Apnea testing to determine brain death.
7. Serological testing for diagnosis of all disorders of peripheral nervous system.
8. Approach to a 6-month-old boy with no visual fixation.
9. Laboratory diagnosis of peroxisomal disorders.
10. Prenatal diagnosis of posterior fossa anomalies.

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