

# SYLLABUS D.M. COURSES

## BRANCH – D.M. NEUROLOGY

1. **Neuro Anatomy:** It includes anatomy of central and peripheral nervous system and muscles including microscopic appearance, relevant embryology and its application to be related developmental disorders.
2. **Neuro Physiology:** Physiology of central and peripheral nervous system and muscles.
3. **Neuro Biochemistry:** The normal biochemistry of the nervous system and muscles; and its application in different neurological disorders.
4. **Neuro Pathology:** Pathology of different diseases affecting the nervous system and muscles, including macroscopic appearances.
5. **Neuro-bacterio-virology:** with special reference to the various neurological Disorders.
6. **Neuro Genetics:** Normal as well as the abnormalities in different genetically inherited neurological disorders.
7. **Biostatistics and Clinical Epidemiology:** Fundamentals of biostatistics, ability to conduct a clinical trial independently and interpret the final reports.
8. **Neuro Immunology:** Normal and various abnormalities, seen in neuro Immunological disorders.
9. **Neuro Psychiatry:** Related neuropsychiatric disorders such as non-epileptic Seizure etc.
10. **Neuro Psychology.**
11. **Pediatric Neurology.**
12. Neuro Radiology including plain X-ray, CT scan, Angiogram, Magnetic Resonance Imaging, Myelogram etc.
13. **Electrophysiology:** Electrophysiology, nerve conduction studies, EEG including sleep EEG and Video EEG, evoked potentials etc.
14. Other Neurology oriented investigatory procedures in relation to neurology / Neuro ophthalmology etc.
15. **Neurosurgery.**
16. **Clinical Neurology.**
17. Neuro Pharmacology of various neurological disorders.

## **I st YEAR:**

During the first year, the student will be working fully in the Development of Neurology. In the morning time, he / she will be familiarized with clinical neurology, neurological examination, localization and differential diagnosis, relevant laboratory and radiological investigations and pharmacotherapeutics. He / she will attend all the outpatient services and get himself / herself aware of the common neurological problems. In addition, he / she will work in the electrophysiology laboratories and get himself / herself fully with EMG, evoked potential and electroencephalography (EEG). He / she should be competent to handle the equipments and report independently. In the afternoon, he / she will concentrate on the basic sciences and will undertake the research study within three months after admission.

## **II nd YEAR:**

The candidate may be sent to the best centre for training and learning the following subjects; This comes under 'visit to other centres'. The total period is for three months or four months depending on the centre.

### **Following will be the subject and duration of training:-**

Neuropathology – 15 days.

Neuro-radiology (including interventional radiology) – 15 days.

Intensive Care in Neurology – 15 days.

Psychiatry – 15 days.

Paediatric Neurology – 30 days.

Neurosurgery – One month.

The Neurosurgery posting is applicable only to those where neurology and neurosurgery department are separate and with independent H.O.Ds functioning independently. For example, Madras Institute of Neurology in Madras Medical College is a single department consisting of neurology and neurosurgery. Out-patient department and teaching programmes like Clinical meetings and journal clubs are common to both neurologists and neurosurgeons. Neurosurgery problems and doubts are cleared then and there for the postgraduate students by senior Neurosurgery Faculty Members. Similarly, Neurosurgery postgraduates are attending the operation theatre to do minor procedures like muscle biopsy and nerve biopsy. There is no restriction for neurology postgraduates to follow, observe and learn neurosurgery then and there when necessity arises. The Head of the department is common to both Neurologists and Neurosurgeons. This is being practiced since Prof. B. Ramamurthi's period when he started the department 54 years ago. So the posting of D.M. Neurology postgraduates to neurosurgery may be relevant only to the Centers where Neurosurgery and Neurology departments are functioning separately. So in those centers where neurology and neurosurgery departments are functioning separately, the posting of neurology postgraduates to neurosurgery and vice versa will be decided by the corresponding Head of the department.

### **III rd YEAR:**

During the period, the candidate will work in the Neurology department concentrating on clinical and theoretical neurology, clinical psychiatric relevant investigations and medical as well as Para medical management of the patients. Besides, he shall handle and report the EEG and EMG by himself.

Examination will be conducted at the end of third year.

### **Research Study:-**

All candidates during the first year within three months of admission into the D. M. Post Graduate Higher speciality degree course shall be assigned a topic for dissertation by the Head of Neurology Department in consultation with the concerned Unit Chief. The title of the topics assigned to the candidates should be intimated to the Controller of Examinations of the University by the Head of the Department through the Head of the Institution before the end of first year. Four copies of dissertation shall be submitted five months prior to the commencement of examination, as in the prescribed date to the controller of Examinations of the University.