

SYLLABUS

**For Courses affiliated to the
Kerala University of Health Sciences
Thrissur 680596**



SUPER SPECIALITY COURSE IN MEDICINE

DM PAEDIATRIC NEUROLOGY

Course Code 526

(2019-20 Academic year onwards)

2019

2. COURSE CONTENT

2.1 Title of course:

DM Paediatric Neurology

2.2 Objectives of course

The goal of post graduate medical education in Paediatric Neurology — DM (Doctor of Medicine) Paediatric Neurology — is to provide competent Paediatric Neurologists who shall recognize the health needs of the community and carry out professional obligations ethically and in keeping with the objectives of national health policy. They shall have mastered most of the competencies in Paediatric Neurology that are required for the Pediatric Neurology practice at the tertiary levels of health care system. They shall also have acquired the basic skills in teaching of the medical and paramedical professionals. The major components of the curriculum shall be theoretical knowledge, practical and clinical skills, thesis skills, attitude skills and training in research methodology.

The course of DM Pediatric Neurology is intended to train residents in

- Medical Ethics and Communication skills.
- Basics of Paediatric Neurology.
- Skills to teach paramedical and medical professionals.
- Clinical investigations.
- Management of Neurological illness in neonates and older children.
- Clinical Research.

At the end of the course the student should be able to describe the following:

The trainee should be able to:

- a. Achieve competence in the neurological examination and neurodevelopmental assessment of neonates, infants, and older children.
- b. Independently diagnose and manage all common neurological diseases in children
- c. Diagnose and manage neuro-developmental disorders
- d. Know the utility, limitations, and interpretation of the results of lumbar puncture,

EEG, EMG, evoked potentials, Cranial US& TCD, CT, MRI, MRA, MR Spectroscopy, Cerebral Angiography, and Isotope scans

e. Independently develop research projects/treatise relevant to discipline of Pediatric Neurology.

2.3 Medium of instruction:

The medium of instruction for the course shall be English.

2.4 Course outline

As given under clause “Content of each subject in each year “of the curriculum

2.5 Duration

Every candidate seeking admission to the training programme to qualify for the degree of DM in the subject of Paediatric Neurology shall pursue a regular course as a full time student, in the Department under the guidance of a recognized super speciality teacher for a period of three years.

The course commences from 1st August in each year.

2.6 Syllabus

As given under clause “Content of each subject in each year “of the curriculum.

2.7 Total number of hours

As given under clause “Content of each subject in each year “of the curriculum.

2.8 Branches if any with definition

As given under clause “Content of each subject in each year “of the curriculum.

2.9 Teaching learning methods

2.9 (i) Training Program

The training program will aim to give the candidate a sound training of diagnosis and management of neurological disorders in neonates and older children. All candidates shall work as full time residents (residency system) during the period of training. During the initial period they will be under close supervision followed gradually by greater delegation of responsibility. During the period of training they shall take part in all the activities of the department including ward rounds, lectures, seminars, teaching assignments, laboratory studies, surgical session and other duties assigned to them

by the Head of the Department or his representative. These activities are viewed as means of training. The training programme shall be updated as and when required at the discretion of the head of the department or his/her representative. The training shall include:-

- Active involvement in the diagnosis and management of patients both in the outpatient, intensive care unit, and the wards.
- Exposure to basic and advanced diagnostic, therapeutic and laboratory techniques.
- Participation in Lectures, seminars, Journal clubs, clinical group discussions etc.
- Participate in teaching of medical and paramedical students.
- Exposure to biomedical statistics as applicable to basic research methodology.
- Participation in research work in Pediatric Neurology.
- The consultations coming from the other sister departments, including Pediatrics and Neonatology, Child Psychiatry, Physical Medicine and Rehabilitation, Pediatric Nephrology, Pediatric Cardiology, Pediatric Gastroenterology, Pediatric Oncology, Neuroradiology, Genetics, Developmental Paediatrics and Neurosurgery can be utilized to train the candidates.
- They should be trained in emergency care in Pediatric Neurology particularly in the care of status epilepticus and raised intracranial tension with exposure to casualty services.
- Post graduate students shall maintain log books of the work carried out by them. The log books shall be checked and assessed (internal assessment) every 6 months by the faculty members, with a view to assure the progress the candidate has made and spot the inadequacies if any. The Progress and deficiencies of the student should be communicated at the end of each six months so that the students will get an opportunity to improve.

2.9 (ii) Out Station Training

The trainee will be posted in basically in the Paediatric Neurology department. Out station posting can be given for a maximum of 2 months. The out station posting will be according to the discretion of the head of the department looking at the deficiencies in the department or centre. Out side department posting may be given for

- Neuropathology
- Developmental Paediatrics
- Electrophysiology
- Child Psychiatry
- Neurosurgery
- Neurology

- Genetics
- Physical Medicine and rehabilitation

2.9 (iii) Teaching

All DM students should take part in the teaching of the post graduate degree students of related subjects, undergraduate medical students and paramedical students and allied health science students posted in the department by rotation.

2.10 Time table

Time table is only a broad outline subject to the discretion of the head of the department or his/her representative under the existing circumstances and need for the community from time to time. Residents are rotated between units.

The clinical and academic programmes are considered most desirable for optimal training:

- Bedside rounds – daily
- Topic discussion (seminar/Practice Parameters/Views & Reviews) – Twice a week
- Journal club - once a week, 3 journals to be presented, one by 1st year SR and 2 by final year SR each week
- Clinical case discussion - once a week
- Radiology meeting - once a week
- Electrophysiology - once a week
- Mortality Audit – once a month

2.11 Content of each subject in each year

Learning in the DM course will eventually be self directed and will take place while working in the Outpatient clinics and through interactions in the ward rounds. Apart from the faculty of the division of Paediatric neurology, members of other departments will also be involved in the didactic teaching of respective fields . The broad course content of subject is as follows.

(I) Development of the Infant and young child

- Anatomy of Neurodevelopment
- Physiology of Neurodevelopment
- Assessment of normal development
- Variations of the normal development
- The abnormal child; Early markers of CP etc
- Approach to a child with developmental delay

(II) CNS malformations

- Normal anatomy of the CNS
- Common CNS malformations
- Surgical management of CNS malformations

(III) Seizure disorders in childhood

- Seizures and non seizures
- Febrile seizures
- Classification /evaluation and management of epilepsy
- Epileptic syndromes
- Status epilepticus
- Intractable epilepsy
- EEG in seizure disorders
- Surgical management of seizure disorders

(IV) Infections of the CNS

- Acute meningitis- viral, bacterial, Tuberculous fungal
- Neonatal meningitis
- Chronic meningitis
- Brain abscess
- Acute encephalitis
- Cerebral malaria
- Acute febrile encephalopathy
- Parasitic infections
- HIV encephalopathy
- SSPE and other slow viral infections
- Congenital infections
- Laboratory diagnosis and management of of CNS infections

(V) Autoimmune and Post infectious diseases

- Primary demyelinating diseases of the CNS
- ADEM, optic neuritis, acute transverse myelitis

- Immunologically mediated diseases affecting the CNS gray matter , peripheral nervous system
- Systemic vasculitides with nervous system manifestations

(VI) Neurodegenerative Disorders

- Classification, Approach to a patient – gray matter, white matter
- Diagnosis (including histopathology and neurogenetics)
- Management
- Antenatal counseling

(VII) Neurometabolic disorders including mitochondrial disorders

Classification, evaluation and approach to a patient

(VIII) Chromosomal anomalies

- Autosomal abnormalities
- Sex chromosomal abnormalities
- Chromosomal abnormalities in various dysmorphic syndromes
- Management including antenatal counseling

(IX) Toxic and nutritional disorders

- Toxic disorders: lead, thallium, arsenic, mercury, aluminum, organic toxins ,alcohol, bacterial toxins
- Nutritional disorders; protein energy malnutrition, Vitamin deficiencies, infantile tremor syndrome

(X) Neurocutaneous syndromes

- Neurofibromatosis, Tuberous Sclerosis, Sturge Weber Syndrome etc.

(XI) Movement disorders

- Movement disorders including cerebellar dysfunction Ataxias, chorea, dystonias, Tics etc

(XII) Cerebrovascular disorders

- Arterial thrombosis
- Venous thrombosis/embolism
- Intracranial bleed
- Neonatal Stroke
- Role of Radioimaging

(XIII) Neonatal neurology

- Neonatal seizures
- Hypoxic encephalopathy
- Intraventricular Hemorrhage
- Clinical neurological assessment
- Role of EEG, Ultrasonography, CT , MRI scan
- ICH
- Brain edema
- Neuromuscular disorders
- Degenerative disorders
- CNS malformations

(XIV) Brain tumors

Various brain tumors , features , classification, evaluation and management including medical management surgical management and Radiotherapy

(XV) Spinal cord disorders

Including congenital anomalies and acquired disorders

(XVI) Neuromuscular disorders

- Evaluation and investigation
- Histopathological changes in different disorders
- Developmental disorders of muscle
- Muscular dystrophies
- Endocrine and metabolic myopathies
- Inflammatory myopathies
- Disorders of Neuromuscular transmission
- Spinal muscle atrophy
- Motor neuron disease
- Autonomic neuropathies
- Guillain Barre syndrome

(XVII) Mental Retardation

- Assessment of intelligence quotient
- Causes, Evaluation
- Prevention / Role of antenatal counseling

(XVIII) Behavioral and Pervasive disorders (in co-ordination with the Departments of Psychiatry , NHM and NGO's in the schools and field)

- (a) Attention Deficit Hyperactivity disorders (ADHD), Autistic spectrum Disorder
(b) Learning disability

(XIX) Coma in Pediatric Patient /Brain Death

- Intensive care (posting in PICU and lectures by Consultant PICU)
- Monitoring of a comatose child
- Coma in Paediatric population/ metabolic coma
- Brain death

(XX) Neurological manifestations of systemic diseases

- Metabolic encephalopathies
- Disorders of acid/base / electrolyte disturbances
- Neurological complications of Pulmonary, Gastrointestinal, Hepatic, Renal, Cardiac, hematological, Neoplastic and Endocrine diseases

(XX) Neurological and Neurosurgical emergencies

(XXII) Clinical Epidemiology

- research methodology
- biostatistics

(XXIII) Ethics in Medicine

(XXIV) Neuro-informatics

Use of media in education, computer information and technology, internet

(XXV) Rehabilitation in Paediatric Neurology

- Principles of physiotherapy
- Assistive devices
- Treatment of spasticity
- Occupational therapy

(XXVI) Community Paediatrics

- National Programmes
- AFP surveillance

(XXVII) Non epileptiform paroxysmal disorders , and sleep disorders

(XXVIII) Head ache

Classification, Types, features , management

(XXIX) Neuroendocrine and autonomic nervous system disorders

- disorders of Hypothalamus & Pituitary gland in Childhood and Adolescence
- disorders of micturition and defecation
- disorders of autonomic nervous system

(XXIX) Neuroimaging

2.12 No: of hours per subject

Not applicable as the course is a Residency programme

2.13 Practical training

Mandatory posting for DM Paediatric Neurology student:

First year:

After 9 months of Paediatric Neurology posting, each candidate should have rotational posting as follows

2 months in EEG (Own Institute)

1 month in EMG lab)

Second year:

2 months posting in Adult Neurology

3 months posting in EEG Lab (1 month Outside dept for VEEG , PSG & intraoperative monitoring)

3 Months posting in EMG lab (2 weeks Outside dept to learn EMG ,RNS ,TMS)

2 weeks in Neuropathology

2 weeks posting in Child Psychiatry

1 month posting in Neurosurgery

2 weeks in Genetics

2 weeks in Neuro-radiology

2 weeks in Developmental Paediatrics

2 weeks in Physical Medicine and Rehabilitation

Third year:

During third year, student should be in parent department and should be involved in teaching of 1st year and second year DM trainees and MD Paediatrics and Neuro-technology students. They should also present Scientific papers / posters in International , National or State level conferences and complete their thesis work and prepare manuscript for its publication in Indexed scientific journals

2.14 Records

As given in clause "Logbook " (2.22)

2.15 Dissertation: As per Dissertation Regulations of KUHS

Thesis is an absolute requirement for DM course and the candidate has to register the thesis synopsis in the University through proper channel within 6 months of admission. Thesis has to be

submitted to the University for Evaluation at least 6 months prior to the conduct of final examination. Modifications and resubmission should be done before writing the examination. Even if the guide is transferred/ retired, the thesis has to be continued under his/her guidance or entrust to another guide in case the original person is not willing to continue. In extra ordinary situations change of guide and change of thesis topic is permissible with prior permission from the University. Only after accepting the thesis, the candidate will be eligible for writing the examination. In addition to this, the student has to present at least one paper/poster in a regional /national / international conference of the concerned speciality during his three year course or at least one publication in a peer reviewed journal. Research paper should be approved by the Institutional Review Board/ Institutional Ethical Committee.

Evaluation of Thesis

The thesis shall be evaluated by a minimum of two experts; one internal and two external experts, who shall not be the examiners for the Theory and Clinical examination of the concerned candidates and it may be accepted/ accepted with modifications/rejected. Only on the acceptance of the thesis by two experts out of three, the candidate shall be permitted to appear for the University examination. If the thesis is not accepted on evaluation by at least two experts, it shall be resubmitted with suggested modifications along with prescribed fees within the prescribed time stipulated by the University from time to time and it shall be re-evaluated by the same experts. If thesis is rejected by two experts, the candidate will lose first chance for appearing in the University examination and has to redo a fresh thesis for further evaluation.

2.16 Speciality training if any

As given in clause 2.9 (ii).

2.17 Project work to be done if any

As stipulated by the Head of the Department

2.18 Any other requirements [CME, Paper Publishing etc.]

- Should have attended minimum of two International/ National/ Zonal/State conferences or workshops concerned with the area of specialization.
- Should have presented at least one paper/poster in International/ National/ Zonal/State conferences concerned with the area of specialization.(as per MCI norms)
- At least one publication in a peer reviewed journal or at least two research papers or original works should be submitted for publication in peer reviewed journals (as per MCI norms).

2.19 Prescribed/Recommended textbooks

- Pediatric Neurology Principles and practice: Kenneth F Swaimann, S Ashwal, M Ferreiro (latest Edition)
- Nelson Textbook of Pediatrics, Kleigmann, Behrman, Jenson, Stanton (latest Edition)
- Fenichel's Pediatric neurology text book of symptoms and signs (latest Edition)
- EEG in Clinical Practice; K Radhakrishnan, J M K Murthy, C Rathore
- Clinical Neurophysiology: Nerve Conduction, Electromyography and Evoked Potentials : U. K. Misra, J. Kalita
- Parks Text Book of Preventive and Social Medicine ; K Park (latest edition)

2.20 Reference books

- Neurology in clinical practice. W G Bradley, R B Daroff, G M Fenichel, J Jankovic (latest edition)
- Neonatal Neurology J J Volpe (latest edition)
- Fisch and Spehlmann's EEG Primer: Basic Principles of Digital and Analog EEG
- Localization in Clinical Neurology ; Brazis
- Niedermeyer's Electroencephalography: Basic Principles, Clinical Applications, and Related Fields: Donald L. Schomer (Editor), Fernando Lopes da Silva
- Pediatric Neuroimaging; A. James Barkovich, Charles Raybaud
- Magnetic Resonance of Myelination and Myelin Disorders; Marjo S. van der Knaap, Jaap Valk
- Rutter's Text Book of Child and Adolescent Psychiatry
- Where There Is No Child Psychiatrist : A Mental Healthcare Manual; Valsamma Eapen, Philip Graham, Shoba Srinath
- Daniels and Worthingham's Muscle Testing: Techniques of Manual Examination and Performance Testing

2.21 Journals

1. Journal of Child Neurology
2. Paediatric Neurology
3. Journal of Paediatric Neurology
4. European Journal of Paediatric Neurology
5. Journal of Paediatric Neurosciences
6. Indian Paediatrics
7. Annals of Neurology

8. Neurology Journal
9. Annals of Indian Academy of Neurology
10. Journal Of Neurogenetics
11. Journal of Neuroradiology
12. Paediatric Clinics of North America
13. Neurology Clinics of North America
14. Clinical Neurophysiology
15. Muscle and Nerve
16. Epilepsia
17. Seizures
18. Epileptic Disorders

2.22 Logbook

A log book is mandatory and has to be maintained by all students and this has to be reviewed by HOD / Unit Chief of the department regularly (at least quarterly). Minimum number of each of the academic activities to be performed by the candidate should be outlined for each speciality. Model check list for journal review/seminars/topic presentation/ teaching skill etc: - is shown in the appendix. Periodic formative assessment has also to be done in the department by the super speciality teachers. Log book will be evaluated during the University examination by all the four examiners with a maximum total mark of 20 in the viva component (Check Lists appended).

Hand written log book should be maintained by the postgraduate during the entire course. It should include

- Bio –Data
- Details of Posting
- Part I- Academic Activities
 - Thesis/ Research work done during the course
 - Abstract of thesis
 - Publications
 - Oral Presentation in Conferences
 - Poster presentation in Conferences
 - Conference/CME Participations
 - Evaluation of postings
 - Evaluation of Clinical case presentation
 - Evaluation of Journal review presentations

Evaluation of teaching Skills

Evaluation of Dissertation Presentation

Details of presentation in Academic Programs

Special Duties

Miscellaneous

Part II- Procedures Performed

Major Procedures

Minor Procedures

Electrophysiology procedures

- Summary

Log book should be duly signed by head of the department and should be presented to the examiners at the time of final examination.

3. EXAMINATIONS

3.1 Eligibility to appear for examination

The examinations shall be organised on the basis of marking system to evaluate and certify candidate's level of knowledge, skill and competence at the end of the training.

A candidate should appear for all the theory examinations and obtaining a minimum aggregate of 50% marks in theory part and practical part (Practical & Viva) separately shall be mandatory for passing the whole examination.

Eligibility for appearing in Final Examination

1. A minimum of 80% attendance during each year of the course separately.
2. Successful Submission of completed Logbook.
3. Submission of Dissertation and its approval by the University.
4. Should have attended minimum of two International/ National/ Zonal/State conferences or workshops concerned with the area of specialization.
5. Should have presented at least one paper/poster in International/ National/ Zonal/State conferences concerned with the area of specialization.(as per MCI norms).

or

At least one publication in a peer reviewed journal or at least two research papers or original works should be submitted for publication in peer reviewed journals (as per MCI norms).

6. The prescribed form (annexure 3) for each candidate should be filled up by concerned department and sent to KUHS for issuing hall ticket for the candidate to appear for the examination. If the candidate fails to meet the criteria, he will not be permitted to appear for the examination.

3.2 Schedule of Regular/Supplementary exams

Generally there shall be two university examinations in a year, one regular and one supplementary examinations with a usual gap of six months.

3.3 Scheme of examination showing maximum marks and minimum marks

There shall be theory, practical examination including viva voce at the end of the three year course. Theory examination shall consist of four papers (3 hours duration) including one on recent advances and each paper will carry a maximum of 100 marks. Each question paper shall consist of one essay question of 20 marks and 8 short essays of 10 marks each. There shall be a multiple evaluation of theory papers by two internal examiners and two external examiners and the average mark for each paper is taken as the final marks.

Sl.No.	Subject	Theory		Theory Group		Practical				Practical Group		Total	
		University				University		Viva					
		Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min
1	Paper I	100	-	400	200	300		100		400	200	800	400
2	Paper II	100	-										
3	Paper III	100	-										
4	Paper IV	100	-										

3.4 Papers in each year

Not Applicable

3.5 Details of theory exams

As per clause 3.3

Theory papers: There shall be 4 theory papers with the following titles:

Paper – I: Basic Sciences – (consisting of Neuro anatomy, Neuro physiology, Neurochemistry, Neuropathology, Neuro Microbiology, Parasitology, Immunology, Epidemiology and Genetics.)

Paper – II: Clinical Pediatric Neurology and Developmental Paediatrics

Paper III: Electrophysiology, Neurogenetics, Neurosurgery, Neuro Psychiatry

Paper – IV: Recent advances in Pediatric Neurology , Neuro-rehabilitaion & National programmes

Practical/Clinical and Oral examination

- One long case, 2 short cases stressing the relevant allied specialities

- **Structured viva voce**
 - (a) Patient management problems
 - (b) General viva (including radio imaging investigations, interpretation of genetic/metabolic investigations, Neuro-physiological records etc)

3.6 Model question paper for each subject with question paper pattern

Model question paper for each subject with question paper Pattern

QP Code:

Reg.No:

(Paediatric Neurology DM Degree Examination (Model Question Paper)

Paper I – Basic Sciences

Time: 3 hrs

Max marks:100

- Answer all questions
- Draw diagrams wherever necessary

Essays: (20)

1. Discuss briefly the gross structure of Spinal Cord and congenital malformations of spinal cord

Short essays: (8 x10=80)

2. Physiology of muscle tone and posture and neuropathology of cerebral palsy
3. Neurotransmitters and related disorders
4. Histopathology in Medulloblastoma
5. Epileptogenesis
6. Pathophysiology of migraine
7. Discuss neuro anatomy of basal Ganglia and pathophysiology of childhood movement disorders
8. Pons
9. Pathophysiology of stroke in children
10. Neuronal migration disorders

QP Code:

Reg.No.:.....

(Paediatric Neurology) DM Degree Examination (Model Question Paper)

Paper II - Clinical Pediatric Neurology and Developmental Paediatrics

Time: 3 hrs

Max marks:100

- **Answer all questions**
- **Draw diagrams wherever necessary**

Essays: (20)

1. Discuss the approach to a 6 year child who presents with progressive ataxia and seizures

Short essays: (8x10=80)

2. Autoimmune encephalitis
3. Neurological manifestations of systemic diseases
4. NMOSD
5. Neonatal hypoxic ischemic encephalopathy
6. Brain abscess
7. Congenital myasthenic syndromes
8. Approach to Hypomyelinating Disorders
9. Alternating Hemiplegia of Childhood
10. SSPE

QP Code:

Reg.No.:.....

(Paediatric Neurology) DM Degree Examination (Model Question Paper)

Paper III – Electrophysiology, Neuroimaging , Neurogenetics, Neurosurgery, Neuro Psychiatry

Time: 3 hrs

Max marks:100

- **Answer all questions**
- **Draw diagrams wherever necessary**

Essays: (20)

1. Discuss briefly the various evoked potentials and the clinical application

Short essays: (8x10=80)

2. Neurosonogram
3. EEG in Benign Childhood epilepsies
4. Childhood depression
5. Autism Mimics
6. Surgical management of hydrocephalus
7. Electrophysiology in GBS
8. Surgical management of drug resistant epilepsy
9. Theory of Mind
10. Organic acidemias

QP Code:

Reg.No.:.....

(Paediatric Neurology) DM Degree Examination (Model Question Paper)

Paper IV – Recent Advances in Paediatric Neurology, Neuro- rehabilitation and National Programmes , Medical Statistics

Time: 3 hrsMax marks :100

- **Answer all questions**
- **Draw diagrams wherever necessary**

Essays: (20)

1. Discuss the recent developments in genetic evaluation and management of Neuro- muscular disorders

Short essays: (8x10=80)

- 2.Rehabilitation of CP child
3. Newer Diagnostic Techniques for Diagnosis of CNS Infection
4. MEG
5. Ketogenic diet
6. Critically review SANAD study
7. Gene Replacement Therapy in SMA Type 1 : from clinical trials to clinical practice
8. Copy number variation
9. Management of CNS tuberculosis as per RNTCP guidelines
10. Role of Stem Cells and Gene Therapy in Paediatric Neurology

.....

Details of practical/clinical practicum exams (Total 400marks- Clinical exam+ Viva)

Practical/Clinical examination shall consist of:

- 1 Long case –100 marks
- 2 short cases – 75 marks each - 150 marks
- Ward rounds – 50 marks

Total =300 marks

Structured Viva

- i. Viva voce – 80 marks
- ii. Log Book -20 marks

Total : 100

Number of examiners needed (Internal & External) and their qualifications

Examiners

- 1) All Examiners shall be a recognised super speciality teacher as per MCI norms. There shall be two internal examiners (from affiliated colleges of KUHS) and two external examiners (exclusively from outside the state). In departments where there are more than 2 professors/Additional Professor, the head of the department preferably be a constant member of the board of examiners, and the other professors/Additional Professors shall be posted as internal examiners on rotation basis.
- 2) Under exceptional circumstances, examinations may be held with 3 (three) examiners provided at least two of them are external examiners subject to the ratification of the pass board.
- 3) In the event of there being more than one centre in one city, the external examiners at all the centres in that city shall be the same. Where there is more than one centre of examination, the University shall appoint a Co-ordinator/Convenor to coordinate the examination on its behalf.

4. INTERNSHIP

Not applicable for Medical Superspeciality degree courses.

5. ANNEXURES

5.1 Check Lists for Monitoring: Log Book, Seminar Assessment etc.

ANNEXURE - 1

CHECK LIST 1 - EVALUATION OF CLINICAL WORK

Name of the Trainee:

Date:

Name of the Faculty:

<i>Sl.No.</i>	<i>Items for observation during evaluation</i>	<i>Poor</i>	<i>Below Average</i>	<i>Average</i>	<i>Good</i>	<i>Very Good</i>
		<i>0</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>
1.	<i>Regularity of attendance</i>					
2.	<i>Punctuality</i>					
3.	<i>Interactionwithcolleagues and supportivestaff</i>					
4.	<i>Maintenanceofcaserecords</i>					
5.	<i>Presentation ofcases</i>					
6.	<i>Investigations work -up</i>					
7.	<i>Bed - side manners</i>					
8.	<i>Rapport with patients</i>					
9.	<i>Counseling patients relatives forinterventionalprocedures</i>					
10.	<i>Overallqualityofclinicalwork</i>					
11	<i>Total score</i>					

ANNEXURE – 2

CHECK LIST 2: EVALUATION OF CLINICAL CASE PRESENTATION

Name of the Trainee:

Date:

Name of the Faculty:

Sl.No	Items for observation during presentation	Poor	Below Average	Average	Good	Very Good
		0	1	2	3	4
1.	Completeness of history					
2.	Whether all relevant points elicited					
3.	Clarity of presentation					
4.	Logical order					
5.	Mentioned all positive and negative points of importance					
6.	Accuracy of general physical examination					
7.	Whether all physical signs elicited correctly					
8.	Diagnosis: whether it follows logically					
9.	Investigations required In Relevant order					
10	Interpretation of Investigations					
11	Ability to discuss differential diagnosis.					
12	Discussion on management					

13	<i>Total score</i>	
-----------	--------------------	--

ANNEXURE 3

CHECK LIST 3: EVALUATION OF SEMINAR PRESENTATION

Name of the Trainee:

Date:

Name of the Faculty:

<i>Sl no</i>	<i>Items for observation during presentation</i>	<i>Poor</i>	<i>Below Average</i>	<i>Average</i>	<i>Good</i>	<i>Very Good</i>
		<i>0</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>
1	<i>Whether other relevant publications consulted</i>					
2	<i>Whether cross - references have been consulted</i>					
3	<i>Completeness of Preparation</i>					
4	<i>Clarity of Presentation</i>					
5	<i>Understanding of subject</i>					
6	<i>Ability to answer the questions</i>					
7	<i>Time scheduling</i>					
8	<i>Appropriate use of Audio-Visual aids</i>					
9	<i>Overall performance</i>					
10	<i>Any other observation</i>					
11	<i>Total score</i>					

ANNEXURE 4

CHECK LIST 4 : EVALUATION OF JOURNAL REVIEW PRESENTATION

Name of the Trainee:

Date:

Name of the Faculty:

Sl. No	Items for observation during presentation	Poor	Below Average	Average	Good	Very Good
		0	1	2	3	4
1.	Article chosen					
2.	Extent of understanding of scope & objectives of the paper by the candidate					
3.	Whether cross-references have been consulted					
4.	Whether other relevant publications consulted					
5.	Ability to respond to questions on the paper/ subject					
6.	Audio - Visual aids used					
7.	Ability to discuss the paper					
8.	Clarity of presentation					
9.	Any other observations					
10	Total score					

ANNEXTURE 5

CHECK LIST 5: EVALUATION OF TEACHING SKILLS

Name of the Trainee:

Date:

Name of the Faculty:

Sl. No.	Items for observation	Strong Points	Weak Points
1.	<i>Communication of the purpose of the talk</i>		
2.	<i>Evokes audience interest in the subject</i>		
3.	<i>The introduction</i>		
4.	<i>The sequence of ideas</i>		
5.	<i>The use of practical examples and / or illustrations</i>		
6.	<i>Speaking style (enjoyable, monotonous, etc. Specify)</i>		
7.	<i>Attempts audience participation</i>		
8.	<i>Summary of the main points at the end</i>		
9.	<i>Ask questions</i>		
10.	<i>Answer questions asked by the audience</i>		
11.	<i>Rapport of speaker with his audience</i>		
12.	<i>Effectiveness of the talk</i>		
13.	<i>Uses AV aids appropriately</i>		

ANNEXURE - 6

CHECK LIST 6 : EVALUATION OF DISSERTATION PRESENTATION

Name of the Trainee:

Date:

Name of the faculty / Observer:

Sl.No	Pointstobe considered	Poor <i>0</i>	<i>Below Average</i> <i>1</i>	<i>Average</i> <i>2</i>	<i>Good</i> <i>3</i>	<i>Very Good</i> <i>4</i>
1.	<i>Interest shownin selecting topic</i>					
2.	<i>Appropriate review</i>					
3.	<i>Discussion with guide and other faculty</i>					
4.	<i>Quality of protocol</i>					
5.	<i>Preparation of Proforma</i>					
	<i>Total Score</i>					

ANNEXTURE 7

CHECK LIST 7: CONTINUOUS EVALUATION OF DISSERTATION WORK

Name of the Trainee:

Date

Name of the Faculty:

Sl.No.	Items for observation during presentation	Poor	<i>Below Average</i>	<i>Average</i>	<i>Good</i>	<i>Very Good</i>
		0	1	2	3	4
1.	<i>Periodic consultation with guide / co- guide</i>					
2.	<i>Regular collection of case material</i>					
3.	<i>Depth of Analysis / Discussion</i>					
4.	<i>Department presentation of findings</i>					
5.	<i>Quality of final output</i>					
6.	<i>Others</i>					
	<i>Total score</i>					

ANNEXTURE 8
OVER ALL ASSESSMENT SHEET

Name of the Trainee:

Date

Name of the Faculty:

<i>Check list no</i>	<i>Particulars</i>	<i>0</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>
<i>1</i>	<i>Clinical work</i>					
<i>2</i>	<i>Clinical presentation</i>					
<i>3</i>	<i>Seminars</i>					
<i>4</i>	<i>Journal review</i>					
<i>5</i>	<i>Teaching skill</i>					
<i>6</i>	<i>Dissertation work</i>					
<i>7</i>	<i>Continuous Evaluation of Dissertation work</i>					
	<i>TOTAL</i>					

0-Poor

1- Below average

2-Average

3- Good

4- Very good

Signature of HOD

Signature of Principal

ANNEXTURE 9

LOG BOOK

TABLE 1

ACADEMIC ACTIVITIES ATTENDED

Name:

Admission Year:

College:

Date	Type of activity - Specify Seminar, Journal club, Presentation, UG teaching	Particulars

LOG BOOK

TABLE 2

ACADEMIC PRESENTATIONS MADE BY THE TRAINEE

Name :

Admission Year:

College:

Date	Topic	Type of activity - Specify Seminar, Journal club, Presentation, UG teaching

LOG BOOK

TABLE 3

DIAGNOSTIC PROCEDURES PERFORMED

Name

Admission Year:

College:

<i>Date</i>	<i>Name</i>	<i>OP No.</i>	<i>Procedure</i>	<i>Category</i> <i>O, PA, PI</i>

Key:

O - Observed

PA - Performed procedure under supervision

PI - Performed independently

APPENDIX 111 - FINAL EXAMINATION ELIGIBILITY FORM

(To be filled up the candidate)

Name of the candidate :

Date of Joining :

Identification number or registration number of university :

Course :

Institution :

Eligibility criteria :

Sl No	Parameter	Details	Proof enclosure
1.	Attendance	1 st year (minimum 80%) 2 nd year(minimum 80%) 3 rd year(minimum 80%)	
2.	Thesis	Approved/Not Approved by the University	
3.	Log book	Successfully completed and submitted	
5.	Conferences attended	Number and category : Number of presentations:	
6.	Publications	Number published: Number submitted:	

All the information provided above are true to the best of my knowledge and if found contrary, I am clearly aware that strict disciplinary actions will be initiated including debarring from examination.

Date

Signature of the candidate :

Place

Name of the candidate :

Countersigned by:

Faculty as guide:

Name:

Designation:

APPROVAL OF HEAD OF THE DEPARTMENT

I, Dr....., herewith approve that the above candidate is eligible to appear for the final examination as per the documentary evidences provided and best of the knowledge and documents of the department.

Date

Signature :

Place

Name :

Designation :