



AMALA INSTITUTE OF MEDICAL SCIENCES, THRISSUR

Affiliated to Kerala University of Health Sciences (KUHS)

**SYLLABUS FOR
PG SUPER SPECIALITY
PROGRAMME**

**DOCTORATE OF MEDICINE(DM)/
MASTER OF CHIRURGIAE(MCh)**

Syllabus

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

Thrissur 680596



SUPER SPECIALITY COURSE IN MEDICINE

M Ch. Neurosurgery

Course Code 231

(2016-17 admission onwards)

2016

2. COURSE CONTENT

2.1 Title of course:

MCh Neurosurgery

2.2 Objectives of course

Goal

The goal of postgraduate medical education shall be to produce competent specialists and/or Medical teachers.

- i. Who shall recognize the health needs of the community, and carry out professional obligations ethically and in keeping with the objectives of the national health policy
- ii. Who shall have mastered most of the competencies, pertaining to the speciality, that are required to be practiced at the secondary and the tertiary levels of the health care delivery system;
- iii. Who shall be aware of the contemporary advances and developments in the discipline concerned.
- iv. Who shall have acquired a spirit of scientific inquiry and is oriented to the principles of research methodology and epidemiology
- v. Who shall have acquired the basic skills in teaching , medical and paramedical professionals.

General objectives of Super Speciality training

At the end of the super speciality training in the discipline concerned, the student shall be able to:

- i. Recognize the importance to the concerned speciality in the context of the health needs of the community and the national priorities in the health section.
- ii. Practice the speciality concerned ethically and in step with the principles of primary health care.
- iii. Demonstrate sufficient understanding of the basic sciences relevant to the concerned speciality.

- iv. Identify social, economic, environmental, biological and emotional determinants of health in a given case, and take them into account while planning therapeutic, rehabilitative, preventive and promotive measure/strategies.
- v. Diagnose and manage majority of the conditions in the speciality concerned on the basis of clinical assessment, and appropriately selected and conducted investigations.
- vi. Plan and advice measures for the prevention and rehabilitation of patients suffering from disease and disability related to the speciality.
- vii. Demonstrate skills in documentation of individual case details as well as morbidity and mortality rate relevant to the assigned situation.
- viii. Demonstrate empathy and humane approach towards patients and their families and exhibit interpersonal behaviour in accordance with the societal norms and expectations.
- ix. Play the assigned role in the implementation of national health programme, effectively and responsibly.
- x. Organize and supervise the chosen/assigned health care services demonstrating adequate managerial skills in the clinic/hospital or the field situation.
- xi. Develop skills as a self-directed learner, recognize continuing education needs; select and use appropriate learning resources.
- xii. Demonstrate competence in basic concepts of research methodology and epidemiology, and be able to critically analyze relevant published research literature.
- xiii. Develop skills in using educational methods and techniques as applicable to the teaching of medical/nursing students, general physicians and paramedical health workers.
- xiv. Function as an effective leader of a health team engaged in health care, research or training.

OBJECTIVES- MCh NEUROSURGERY

At the end of the training period for the degree of M.Ch. in Neurosurgery, a candidate should be able give advanced specialist training in the field of Neurosurgical disease and investigations.

2.3 Medium of Instruction

The medium of instruction for the course shall be English.

2.4 Course outline

Present in 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 M Ch in the subjects shall pursue a regular course as a full time student, in the concerned Department under the guidance of a recognized super speciality teacher for a period of three years.

2.6 Syllabus

Present in clause "Content of each subject in each year" of the curriculum

The concept of Health Care Counselling shall be incorporated in all relevant areas

2.7 Total number of hours

Present in clause "Content of each subject in each year" of the curriculum

2.8 Branches if any with definition

Not Applicable

2.9 Teaching learning methods

TRAINING PROGRAM

The training program will aim to give the candidate a sound training of neurologic diagnosis and management. 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.

All candidates shall work as full time residents during the period of training.

The training program shall be updated as and when required. The training shall include:-

- a) Active involvement in the diagnosis and management of patients both in the outpatient, casualty, neurosurgery intensive care unit and the wards.
- b) Participation in lectures, seminars, journal clubs, clinical group discussions etc.
- c) Participation in research work in neurosurgery.
- d) Exposure to basic and advanced diagnostic, therapeutic and laboratory techniques.
- e) Exposure to biomedical statistics as applicable to basic research methodology
- f) Post graduate students shall maintain log books of the work carried out by them. The log books shall be checked and assessed every 6 months by the faculty members, with a view to assure the progress the candidate has made and spot the inadequacies if any.

Out station training

Outstation training may be given if required. It should not exceed 2 months, the duration, center etc: - will be at the discretion of the Head of the department.

Teaching

All M Ch students should take part in the teaching of the post graduate degree students of related subjects, CRRRI trainees and paramedical students and allied health science students posted in the department by rotation.

2.10 Content of each subject in each year

1. Clinical Neuroanatomy:

- a) Dissection of whole brain & spinal cord, cranial nerves
- b) Histology of brain and Spinal cord
- c) Peripheral nerves
- d) Spine and skull osteology
- e) NeuroEmbryology
- f) Microneuroanatomy.

2. Clinical Neurophysiology:

- a) Peripheral nerves and muscles
 - Receptor
 - Nerve functions

Conductive studies

b) Spinal cord localisation

c) Individual studies of:

Cerebellum

Cerebral lobes

Limbic system

Brain stem

C. S. F.

d) Posture, Tone etc.

3. Clinical Electrophysiology:

Basic principles of EEG, EMG, cranial nerve monitoring techniques, intraoperative electrophysiologic monitoring with specific reference to Nerve injuries. Epilepsy with special reference to neurosurgical conditions.

4. Neuropathology

Pathology of Brain Tumours, Histology of all tumours and tumor like conditions, spine and brain infections, congenital anomalies.

Essentials of tumours & histochemistry, gene markers and cytogenetics.

5. Neuroradiology:

Normal skull & spine, changes in skull and spine due to trauma, Space Occupying Lesions, special views.

Contrast studies – Myelography , Pneumoencephalography , Ventriculography
Angiography, Isotopic scanning.

Newer diagnostic procedures – C.T. Scan, M.R.I & P.E.T . Scan and latest technological advances in neuroimaging.

6. Clinical Neurology-

Methods of clinical examination, General diagnostic principles, Localisation

With specific reference to function, Principles of Neuroendocrinology & spinal cord Levels and localisation.

7.a) Neuropharmacology and b) Neurobiochemistry

8. Neurophthalmology and Neurotology

9. Neurosurgery:

Congenital anomalies of C. N. S

Infections of CNS- brain and spine

Pyogenic |

Tuberculous | Meningitis Brain Abscess

Fungal

HIB –AIDS and neurological system

Cerebrovascular Diseases: stroke care and management, Vascular anomalies, aneurysms, Intracerebral hemorrhage.

Neurotraumatology- Head Injuries, spine injuries:

Basic principles in diagnosis and management at various stages- casualty, ICU, operation theatre and Post traumatic sequelae.

Modern trends, Preventive aspects.

Neurocritical care-

Brain Tumours: Localisation, Pathology, Principles in management, Approaches to space occupying lesions, surgical techniques, and surgical approaches, avoidance of complications. (Brain tumors, spine tumors, tumor like conditions, cysts and similar lesions in the cranium)

Skull base surgery

Surgery of spine and Spinal cord – Laminectomy & Disc Surgery

Spinal instrumentation procedures and Spinal fusions

CV junction surgeries

Psychosurgery.

Functional neurosurgery- epilepsy surgery, surgery for movement disorders, pain management and spasticity.

Stereotaxy and Stereotactic neurosurgery- radiosurgery

Peripheral nerve surgeries- trauma, tumors and infections.

Neuronavigation and image guided neurosurgery.

Radiotherapy and chemotherapy.

Pediatric neurosurgery- hydrocephalus, surgeries for congenital anomalies of brain and spine, In-utero neurosurgical procedures.

Use of operating instruments-Loupe, Operating microscopes, Stereotactic device, CUSA, LASER. Neuroendoscopy, intraoperative ultrasonography, intraoperative neuromonitoring devices.

Neuroanesthesiology with basics in anesthetic instruments, drugs and chemicals, monitoring devices.

Minimally invasive neurosurgery and its applications in various aspects of neurology- Spine and brain surgery, Endoscopy in neurosurgery and its applications, Endovascular interventions.

Brain death, Coma and organ transplantation.

SYLLABUS PRACTICALS

The postgraduate students work as full time residents and will not be allowed private practice. An amount will be provided as stipend every month. They are required to be residents and be 'in service' all 24 hrs, to attend emergency cases. More responsibility would be assigned as they gain more experience and they will be responsible for the primary care of the admitted cases, in steps of increasing levels of responsibility.

1 month to be spent in Neuropathology. 1 month to be spent in studying Electrophysiology and neurology which will be guided by the Head of the Neurology. The candidates are to be sent to 2 reputed outstation neuro surgical centres for a period of one month each. The candidates will publish at least one article on an original work in any of the recognised journals, and present papers compulsorily in at least- one national conference or two state conferences during the three year course.

They keep a log book regarding the operative procedures they have done independently and have assisted. They take part in the teaching of M. S. General

Surgery students, B. Sc/ M.SC Nursing Students, CRRRI trainees posted in the Department by rotation. They are encouraged to take part in institutional Research Projects. They must be responsible for proper record keeping of the department, to the satisfaction of the HOD.

Three internal assessments will be conducted.

1st - covering basic sciences neurology (neuro anatomy, Neurophysiology, neuro pharmacology) in relation to Neurosurgery – at the end of first year

2nd – above + covering investigations – at the end of second year.

3rd - covering full subject – at the end of 3 years.

2.11 No: of hours per subject

Not applicable as the course is a Residency programme

2.12 Practical training

Supervised skill training as part of residency programme.

2.13 Records

Operation notes, case sheet writing, record and register maintenance of OP, IP, and Operation theatre in addition to 2.21

2.14 Dissertation: As per Dissertation Regulations of KUHS

Thesis is an absolute requirement for M Ch 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 one external expert, 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 one expert, 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.

2.15 Speciality training if any-

Present in clause 2.10 of the curriculum

2.16 Project work to be done if any

Present in clause 2.10 of the curriculum

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

- Preferably 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)

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).

2.18 Prescribed/recommended textbooks for each subject

1. Youman's Neurological Surgery
2. Wilkin's Rengachary Neurosurgery
3. Schmidek and Sweet operative neurosurgical technique
4. Hand book of Neurosurgery
5. De Jong's Neurological Examinations
6. Paul Brazis Localizations in Clinical Neurology
7. Appuzzo Avoidance of Complications in Neurosurgery
8. Appuzzo Surgery of The third Ventricle
9. Clinical Neuro Anatomy Richard S Snell
10. Rhoton Text Book of Microneurosurgery

2.19 Reference books

To be decided by the BoS from time to time.

2.20 Journals

- Journal Of Neurosurgery- AANS, British,
- Journal of spine surgery-AANS
- Neurology India.

2.21 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 (6 months interval). 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*).

3.EXAMINATIONS

3.1 Eligibility to appear for exams

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

- i. A minimum of 80% attendance during each year of the course separately.
- ii. Successful Submission of completed Logbook.
- iii. Submission of Dissertation and its approval by the University.
- iv. Should have attended minimum of two International/ National/ Zonal/State conferences or workshops concerned with the area of specialization.
- v. 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).

- vi. 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 examination 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.

EXAMINATION PATTERN- MCH NEUROSURGERY

UNIVERSITY EXAMINATION includes a written, clinical examinations, and oral examination

Written: Four papers each of three hours duration

- 1 - Basic Sciences
- 2 - General Principles and Applied Neurosurgery
- 3 - Cerebro spinal trauma and peripheral nerve injuries
- 4 - Recent Advances

Marks- 400 for all the papers together

Clinical examinations

Long case – 1 hour

Short cases -2 cases 15 minutes each to be picked at random.

Ward / ICU rounds and clinical scenario discussion.

Oral examinations (Viva voce)

Neuropathology slides, Neuroradiology specimens, Instruments, pharmacology etc.

3.4 Papers in each year

Not applicable as the course is a residency programme.

3.5 Details of theory exams

Present in clause 2.10

3.6 Model question paper for each subject with question paper pattern

QP Code:

Reg.No.:.....

M.Ch (Neuro Surgery) Degree Examinations

(Model Question Paper)

Paper I – Basic Sciences

Time: 3 hrs Max marks:100

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

Essays: (20)

1. Draw the visual pathway and discuss the field defects at different levels

Short essays: (8x10=80)

2. Prolactinoma
3. Pathophysiology of cerebral oedma
4. Optic nerve glioma
5. Draw a labelled diagram of brachial plexus
6. Harvey cushing
7. Pathogenesis of syringomyelia
8. Mode of actions of antioedema drugs
9. Brain death

QP Code:

Reg.No.:.....

**M.Ch (Neuro Surgery) Degree Examinations
(Model Question Paper)**

Paper II – General Principles and Applied Neurosurgery

Time: 3 hrs Max marks:100

- Answer all questions
- Draw diagrams wherever necessary

Essays: (20)

1. Classification and pathology of pineal tumours with surgical approaches

Short essays: (8x10=80)

2. Neurocysticercosis
3. Empty sella syndrome
4. Desmoplastic medulloblastoma
5. Moya moya disease
6. Diabetes insipidus
7. Aetiopathogenesis and classification of ACM
8. Carotico cavernous fistula (CCF)
9. Transcranial Doppler

QP Code:

Reg.No.:.....

**M.Ch (Neuro Surgery) Degree Examinations
(Model Question Paper)**

Paper III – Cerebrospinal Trauma and Peripheral Nerve Injuries

Time: 3 hrs Max marks:100

- Answer all questions
- Draw diagrams wherever necessary

Essays: (20)

1. Post traumatic CSF rhinorrhoea – diagnosis, management and complication

Short essays: (8x10=80)

2. Post traumatic epilepsy
3. Odontoid fracture
4. Gama knife in neurosurgery
5. Spiral neurenteric cyst
6. Arachnoid cyst
7. Colloid cyst anterior 3rd ventricle
8. Carotid endarterectomy
9. Stages of brain abscess – Radiology and management

QP Code:

Reg.No.:.....

M.Ch (Neuro Surgery) Degree Examinations

(Model Question Paper)

Paper IV – Recent Advances

Time: 3 hrs Max marks:100

- Answer all questions
- Draw diagrams wherever necessary

Essays: (20)

1. Classification of vascular malformation of CNS. Discuss various treatment options.

Short essays: (8x10=80)

2. Magnetic response spectroscopy(MRS)
3. Neuro navigation
4. Cervical disc replacements
5. Tumour markers in brain tumour
6. Cerebral salt wasting syndrome
7. Cerebral revascularization
8. Simpson grading of meningioma excision. Modern principles to know assessment of recurrences
9. DBS in Parkinson disease

3.7 Internal assessment component

Not applicable.

3.8 Details of practical/clinical practical exams

Practical/Clinical examination shall consist of:

- i. 1 long case – 100 marks
- ii. 2 short cases – 80 marks each = 160 marks

- iii. Ward rounds – 40 marks
- iv. Viva voce – 80 marks
- v. Log book -20

Total Marks Practicals & Viva Voce - 400

Long case discussion may take a maximum of 1 hr, short cases (total cases 2) - maximum 1 hr, ward rounds – maximum 30 minutes and Viva voce maximum of 1 hr. Maximum number of candidates that can be examined per day may be restricted to 3.

3.9 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, the head of the department preferably be a constant member of the board of examiners, and the other 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.

3.10 Details of viva

Viva Voce : 80 marks

Viva –to include specimens, imaging, instruments, drugs and other equipments routinely used.

4. INTERNSHIP

4.1 Eligibility for internship

Not applicable for Medical Superspeciality degree courses.

4.2 Details of internship

Not applicable for Medical Superspeciality degree courses.

4.3 Model of Internship Mark lists

Not applicable for Medical Superspeciality degree courses.

4.4 Extension rules

As per the existing KUHS rules.

4.5 Details of Training given

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:

Sl.No.	Items for observation during evaluation	Poor 0	Below Average 1	Average 2	Good 3	Very Good 4
1.	Regularity of attendance					
2.	Punctuality					
3.	Interaction with colleagues and supportive staff					

4.	Maintenance of case records					
5.	Presentation of cases					
6.	Investigations work -up					
7.	Bed - side manners					
8.	Rapport with patients					
9.	Counseling patients relatives for interventional procedures					
10.	Overall quality of clinical work					
	Total score					

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					
	Grand Total					

ANNEXURE 3

CHECK LIST 3

EVALUATION OF SEMINAR PRESENTATION

Name of the Trainee:

Date:

Name of the Faculty:

Sl no	Items for observation during presentation	<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	Overall performance					
10	Any other observation					
	<i>Total score</i>					

ANNEXURE - 4

CHECK LIST 4

EVALUATION OF JOURNAL REVIEW PRESENTATIONS

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.	<i>Article chosen</i>					
2.	<i>Extent of understanding of scope & objectives of the paper by the candidate</i>					
3.	<i>Whether cross-references have been consulted</i>					
4.	<i>Whether other relevant publications consulted</i>					
5.	<i>Ability to respond to questions on the paper/ subject</i>					
6.	<i>Audio - Visual aids used</i>					
7.	<i>Ability to discuss the paper</i>					

8.	<i>Clarity of presentation</i>					
9.	<i>Any other observation</i>					
	<i>Total Score</i>					

ANNEXURE - 5

CHECK LIST 5

EVALUATION OF TEACHING SKILL

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:

SI.No	Points to be considered	Poor 0	Below Average 1	Average 2	Good 3	Very Good 4
1.	<i>Interest shown in 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>					
	Total Score					

ANNEXURE - 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>					
	Total score					

ANNEXURE - 8

CHECK LIST 8

OVERALL ASSESSMENT SHEET

Name of the College:

Date:

Check list no	Particulars	0	1	2	3	4
1	Clinical work					
2	Clinical presentation					
3	Seminars					
4	Journal review					
5	Teaching skill					
6	Dissertation work					
	TOTAL					

0- Poor 1- Below average 2- Average 3- Good 4- Very good

Signature of HOD

Signature of Principal



LOG BOOK

TABLE 3

DIAGNOSTIC AND OPERATIVE PROCEDURES PERFORMED

Name

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

Key:

O - **OBSERVED**

A - **ASSISTED A MORE SENIOR SURGEON**

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 informations 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 :