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

POST GRADUATE M.S. DEGREE COURSE IN E.N.T – BRANCH IV TRAINING PROGRAMME

FIRST YEAR:

E.N.T.	….. 6 Months
General Surgery	….. 1 Month
Anaesthesia	….. 1 Month
Plastic Surgery	….. 1 Month
Cardio Thoracic Surgery	….. 1 Month
Neuro Surgery	….. 1 Month
Oral * Facio Maxillary Surgery	….. 1 Month
Total	12 Months

SECOND YEAR:

Audiology and Neurotology	….. 2 Months
Paediatric Otolaryngology	….. 2 Months
Anaesthesia	….. 1 Month
Radiology and Radiotherapy	….. 1 Month
ENT including upper aerodigestice tract endoscopy	….. 6 Months
Total	12 Months

THIRD YEAR:

ENT	….. 12 Months

POST GRADUATE M.S. DEGREE COURSE IN E.N.T. - BRANCH IV
SCHEME OF EXAMINATION

CLINICAL EXAMINATION **Total Marks : 200**

		No. of Cases	Marks
1.	Long Case	One	80
2.	Short Case	Three (3x40 marks)	120
		Total	200

VIVA VOCE EXAMINATIONS **Total Marks: 100**

1.	OSCE	50
2.	Log Book (Evaluation & Questioning)	20
3.	Orals on Recent Advances	30
	Total	100

1. OSCE (Objective Structural Clinical Examination)

Based on Objective Structured Exam Stations:

S.No.	Stations	Marks
1.	Pathology	05
2.	Microbiology	05
3.	Specimen – Dry – 5	05
4.	Speciment – Wet – 5	05
5.	Operative Surgery	05
6.	Instruments – 5	05
7.	X-ray – 5 / Laptop video	05
8.	CT/MRI – 5	05
9.	Audiogram	05
10.	Recent advances in ENT (BERA/OAE/VEMP/CHAMP/ IMPEDENCE)	05
		50

Note: Serial No. 1 to 10 should be common to all the candidates appearing on that day.

2. Log Book (Evaluation and Questioning) Marks : 20
3. Oral on Recent Advances Marks : 30

THESIS **Marks : 100**

PASS

Minimum for Pass:	Clinical Examination	VIVA	Thesis
Maximum	200	100	100
Minimum	100	50	50

Candidate must pass each component separately. Even if a candidate fails in one component, the candidate is deemed to fail in the whole examination.

POST GRADUATE M.S. DEGREE COURSE IN E.N.T. - BRANCH IV

RECOMMENDED LIST OF TEXT BOOKS AND JOURNALS

1. Scott Brown's Otolaryngology – Five Volumes
2. Otolaryngology Volumes I to IV Edited by Paperella, Shumrick, Gluckman and Meyerhoff.
3. Ballernger – Diseases of the Nose, Throat, Ear, Head and Neck
4. Mawson's Diseases of the Ear.
5. Glasscock and Shambaugh – Surgery of the Ear.
6. Learning Ear Surgery by Temporal Bone Dissection by Dr. K.K. Ramalingam and Dr. B. Sreeramoorthy
7. Year Book of Otolaryngolgy, Head and Neck Surgery Edited by Michael M. Paperella and Byron J. Bailey.
8. Tumours of the Head and Neck – Clinical and Pathological Considerations by John. G. Batsakis.
9. Rob and Smith – Operartive Surgery – Three volumes
10. Recent Advances in Otolaryngology.
11. Jacksons Textbook of Broncho – Oesophagology
12. Radiology of Head and Neck by Valvassori

REFERENCES:

Lore's Atlas or Head and Neck Surgery
Microsurgery of the skull base by Ugo Fisch and Doughlas Matto.
Text Book of Operative Surgery by Lee.

JOURNALS

1. Indian Journal of Otolaryngology
2. British Journal of Otolaryngology
3. Laryngoscope
4. North American Clinics of Otolaryngology
5. Annals of Otology, Rhinology and Laryngology
6. Acta Otolaryngologica
7. Archivs of Otolaryngology, Head and Neck Surgery
8. Journal of Paediatric Otolaryngology

Degree of Master of Surgery (M.S.)
Branch IV – E.N.T.
Applied Basic Sciences
SYLLABUS

Anatomy, Physiology, Biochemistry, Pathology and Bacteriology related to E.N.T. Speciality:

Anatomy:

1. Pre-natal and Post-natal development of the ear:
   Internal ear
   Fistula ante fencestrum
   Air spaces and lining membrane
   The Ossicles
   Stapes
   External Ear
   Pneumatisation of the Mastoid Process

2. Anatomy of temporal bone:

   Squamous portion
   Mastoid portion
   Petrous portion
   Tympanic portion

3. Anatomy of the ear:

   External ear
   Middle ear
   Internal ear

4. Anatomy pf pranial nerves:

   with particular reference to facial and auditory nerves

5. Osteology of the cranial bones:

   Vernous sinuses
   The brain

Anatomy of nose and paranasal sinuses:

- Prenatal and post – natal
- The external nose
- The nasal cavity
- The paranasal sinuses
- Nasal Mucous membrane
- Blood supply and nerve supply

Anatomy of he Pharynx and Nose:

- Development
- The tonsils
- The Tymphoid
- Functions

Anatomy of the larynx:

- Prenatal and postnatal development of the larynx
- Difference between child and adult larynx
- Muscles and cartilages of larynx
- Anatomy of traches, bronchi and Oesophagus
- The long and Broncho-pulmonary segments
- The Mediastinum
- The visceral arches, their derivatices developmental defects
- Development of face

Bacteriology Syllabus

1. Elementary Bacteriology pertaining to:
    1. Cornye Bacterium Diptheria
    2. Staphylo, Strepto, Paeumo
    3. Neisseria group
    4. Proteus group
    5. Vincents and Fusiform Bacillus
2. Fungus: Aspergillus group Rhinosporidiosis etc.
3. Viruses: Adeno virus, Cosake virus
4. Immunology

Biochemistry syllabus:

1. Biochemistry of body fluids and C.S.F
2. Electrolyte balance and maintenance of PH of Blood
3. Biochemical changes in upper airway obstruction and after tracheostomy.
4. Biochemistry of labyrinthine fluids and its variations in diseases.

Pharmacology syllabus:

1. Pharmacology of sympathomimetic and their uses in Otolaryngology
2. Local anaesthetics and analgesics : Merits and Demerits
3. Chemotherapy of malignant conditions
4. Cortico Steroids and its usage in Otolaryngology
5. Antibiotics – recent trends

Pathology Syllabus:

General Pathology – Inflammations, Necrosis, Gangrene Repair of wounds.
Shock – Pathology
Granuloms including midline granulomas
Thrombosis and Embolism
Tumors – Aetiology, Classification, Pathology & Histopathologoy

Special Pathology:

Surgical pathology of Mouth, Jaw, Neck Salivary glands and Oesophagus.

Ear:

Pathology of the external ear.
Histopathology of the drum membrance
Inflammations of the middle ear
Inflammation of Mastoid
Inflammaion of the Petrross
Histopathology of the inner ear
Chronic inflammatory changes in the temporal bone
Neoplasms of the ear

Nose:

Pathology of the Nose.
Chronic specific infections of the Nose and acessory sinuses
(Pre Nasal).
Cysts and tumours of the nose and accessary sinuses.

Pharynx and Larynx:

Oral and Pharyngeal pathology as manifestations of
constitutional diseases.
Pathology of the Nasopharynx larynx.
Lungs swellings of tunifactions of the neck.
Clinical Pathology in its relationship to otolaryngology.

Physiology Syllabus:

Regulation of water balance and composition of body fluids by the kidney.
Coagulation of blood.

Physiology of special senses:

Taste.
Smell.
Heating.
Physiology of respiration including its mechanism and regulation.
Physiology of deglution.
Maintenance of balance of body.
Physiology of nose and paranasal sinuses.
Carriage of Oxygen by the blood.
Carbondioxide transport in the body.

Audiology syllabus:

Physiology of hearing and balance:

Hearing including physics of sound.
Sound production.
Physics of sound.
The vibration.
The decibel.
The material sourse.
Wave motion in a material medium.
Propagation.
Complex sound various and phase difference.
Sound conduction.
Vertibular function.
Semicircular canals.
The otolith organs.