

**SYLLABUS FOR
M.S. DEGREE COURSE IN E.N.T.**

**POST GRADUATE M.S. DEGREE COURSE IN E.N.T.
TRAINING PROGRAMME**

First year

E.N.T.	5	months
General Surgery	1	month
General Medicine Ward	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

(Training in departments not active in our hospital, may be arranged in other centres)

Second Year

Audiology add Neurology	2	months
Paediatric Otolaryngology	2	months
Anaesthesia	1	month
Radiology and Radiotherapy	1	month
ENT including upper aerodigestive tract endoscopy	6	months
Total	12	months

(Training in radiation & surgical oncology may be arranged in other centre)

Third year

E.N.T.	12	months
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**POST GRADUATE M.S. DEGREE COURSE IN E.N.T.
SCHEME OF EXAMINATION**

Distribution of Marks :

Part – 1 (At the end of First Year)

Title	Duration in Hours	Maximum Marks
Applied Basic Sciences (relating to E.N.T.)	3	100

**MODEL QUESTION PAPER M.S. POST GRADUATE DEGREE
CLINICAL EXAMINATION
PART –I
PAPER – 1 :APPLIED BASIC SCIENCES**

Time : 3 Hours

Maximum : 100 Marks

(Four out of Five Short Notes to be Answered in each subject)

Part – I (At the end of Third year)

Anatomy	5 X 4 =	20
Physiology	5 X 4 =	20
Biochemistry	5 x 3 =	15
Pharmacology	5 x 3 =	15
Pathology	5 x 3 =	15
Microbiology	5 x 3 =	15
Total	=	100 Marks

Part – II (At the end of Third year)

Theory	Title	Duration in Hours	Maximum Marks
Paper - I	E.N.T. including audiology & Neurotology	3	100
Paper – II	E.N.T. including Head and And Neck oncology	3	100
Paper – III	Recent advances in E.N.T. Medicine & Surgery as Applied to E.N.T.	3	100
		Total	300

CLINICAL EXAMINATION :

	No. of Cases	Duration	Marks
Long Case	1 x 90)	One Hour	90
Short Cases	3 X 30	45 Minutes	90
Communication Skill			20
		Total	200 Marks

ORALS - 100

Instrument	-	10
X- ray / Radiology	-	20
Specimen	-	10
Slide	-	10
Operative Surgery	-	20
Viva and Log Book	-	30
Total	-	100

Viva Voce : Includes – Slides, Specimens, X-ray, Log Book & Orals

MARKS QUALIFYING FOR A PASS

Part – II (At the end of Third year)

Theory	Title	Duration in Hours	Maximum Marks	Minimum Marks
Part - I	Applied Basic Sciences	3	100	50
Part – II	1. Theory - Paper I, II & III And Neck oncology including Recent advance	-	300	150
	2. Clinical	-	200	100
	3. Viva	-	100	-
	4. Aggregate of (2 + 3)	-	300	150
	Total		600	

SYLLABUS

Anatomy

1. Prenatal & postnatal development of the year,
Internal year
Airspace and lining membrane
2. The ossicles
Stapes
External ear
Pneumatisation of the mastoid process
3. Anatomy of temporal bone
Squamous portion
Petrous portion
Tympanic portion
4. Anatomy of the ear
External ear
Middle ear

- Internal ear
5. Anatomy of the cranial nerves
With particular references to facial and auditory nerves
 6. Osteology of the cranial bone
Venous Sinuses
The brain

ANATOMY OF NOSE AND PARA NASAL SINUSES

- Prenatal and post natal
- The external nose
- The nasal cavity
- The para nasal sinuses
- Nasal mucous membrane
- Blood supply and nerve supply

ANATOMY OF THE PHARYNX AND NOSE

- Development
- The tonsils
- The lymphoid tissue

ANATOMY OF THE LARYNX

- Prenatal and post natal development of the larynx
- Difference between child and adult larynx
- Muscles and cartilages of larynx
- Anatomy of trachea, bronchi, oesophagus
- Broncho pulmonary segments
- The mediastinum
- The visceral arches, their derivatives developmental defects
- Development of face

BACTERIOLOGY SYLLABUS

1. Elementary bacteriology pertaining to :
 - a) Corynebacterium Diphtheria
 - b) Staphylo, Strepto, Pneumo
 - c) Neisseria group
 - d) Proteus Group
 - e) Vincents and fusiform bacilli
2. Fungus : Aspergillus group Rhinosporidiosis etc.
3. Viruses : Adeno virus, Coxsacke virus
4. Immunology

BIOCHEMISTRY SYLLABUS

1. Biochemistry of body fluids and CSF
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 variation in diseases.

PHARMACOLOGY SYLLABUS

1. Pharmacology of sympathomimetic and their uses in oto laryngology
2. Local anesthetics and analgesics : Merits and Demerits
3. Chemotherapy of Malignant conditions
4. Corticosteroids and its usage in Oto laryngology
5. Antibiotic – recent trends

PATHOLOGY SYLLABUS :

1. General Pathology – Inflammations, Necrosis, Gangrene repair of wounds
2. Shock – Pathology
3. Granuloma including mid – line granulomas
4. Thrombosis and Embolism
5. Tumours –etiology, classification, pathology, and histopathology

SPECIALPATHOLOGY

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

EAR :

Pathology of the external ear
Histopathology of the drum membrane
Inflammation of the middle ear
Inflammation of the mastoid
Inflammation of the petrous
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 Accessory sinuses (prenasal)
Cysts and Tumours of the nose and Accessory sinuses

PHARYNX AND LARYNX:

Oral and Pharyngeal pathology as manifestations of constitutional diseases
Pathology of the nasopharynx, larynx
Lungs swellings of tunification of the neck
Clinical pathology in its relationship to oto – laryngology

PHYSIOLOGY SYLLABUS:

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

PHYSIOLOGY OF SPECIAL SENSES:

Taste
Smell
Hearing
Physiology of respiration including its mechanism and regulation
Physiology of deglutition
Maintainance of balance of the body
Physiology of nose and paranasal sinuses
Carriage of oxygen by blood
Carbon – dioxide transport in the body

AUDIOLOGY SYLLABUS :

Physiology of hearing and balance
Hearing including physics of sounds
Sound production
Physics of sound
The vibration
The decibel
The material source
Wave motion in material medium

Propagation
Complex sound in various and phase difference
Sound conduction
Vestibular function
Semicircular canals
The otolith organs

PATH II SYLLABUS

Disease of ear
Disease of nose
Diseases of throat
Diseases of head and neck

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. Ballenger – 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. Sreeramorthy
7. Year book of otolaryngology, Head and Neck surgery edited by Micheal 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 – Operative surgery – three volumes
10. Recent advances in Otolaryngology
11. Jackson's text book of Broncho – Oesophagology
12. Radiology of Head and Neck by Valvassori

REFERENCES :

Lore's Atlas of Head and Neck Surgery
Microsurgery of the skull base by Ugo Fisch and Douglas 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. Archives of Otolaryngology, Head and Neck surgery
8. Journal of Paediatrics Otolaryngology