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

Distribution of Marks:

Part – 1 (At the end of First Year)

<table>
<thead>
<tr>
<th>Title</th>
<th>Duration in Hours</th>
<th>Maximum Marks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Applied Basic Sciences (relating to E.N.T.)</td>
<td>3</td>
<td>100</td>
</tr>
</tbody>
</table>

MODEL QUESTION PAPER M.S. POST GRADUATE DEGREE
CLINICAL EXAMINATION

PART – I

PAPER – 1: APPLIED BASIC SCIENCES

Time: 3 Hours

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

Part – I (At the end of Third year)

<table>
<thead>
<tr>
<th>Subject</th>
<th>Marks Calculated</th>
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<tbody>
<tr>
<td>Anatomy</td>
<td>5 X 4 = 20</td>
</tr>
<tr>
<td>Physiology</td>
<td>5 X 4 = 20</td>
</tr>
<tr>
<td>Biochemistry</td>
<td>5 x 3 = 15</td>
</tr>
<tr>
<td>Pharmacology</td>
<td>5 x 3 = 15</td>
</tr>
<tr>
<td>Pathology</td>
<td>5 x 3 = 15</td>
</tr>
<tr>
<td>Microbiology</td>
<td>5 x 3 = 15</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>100 Marks</strong></td>
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</table>
### Part – II (At the end of Third year)

<table>
<thead>
<tr>
<th>Theory</th>
<th>Title</th>
<th>Duration in Hours</th>
<th>Maximum Marks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paper - I</td>
<td>E.N.T. including audiology &amp; Neurotology</td>
<td>3</td>
<td>100</td>
</tr>
<tr>
<td>Paper – II</td>
<td>E.N.T. including Head and And Neck oncology</td>
<td>3</td>
<td>100</td>
</tr>
<tr>
<td>Paper – III</td>
<td>Recent advances in E.N.T. Medicine &amp; Surgery as Applied to E.N.T.</td>
<td>3</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td></td>
<td>300</td>
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</table>

### CLINICAL EXAMINATION:

<table>
<thead>
<tr>
<th>No. of Cases</th>
<th>Duration</th>
<th>Marks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Long Case</td>
<td>One Hour</td>
<td>90</td>
</tr>
<tr>
<td>Short Cases</td>
<td>45 Minutes</td>
<td>90</td>
</tr>
<tr>
<td>Communication Skill</td>
<td></td>
<td>20</td>
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<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>200 Marks</strong></td>
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</table>

### 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)

<table>
<thead>
<tr>
<th>Theory</th>
<th>Title</th>
<th>Duration in Hours</th>
<th>Maximum Marks</th>
<th>Minimum Marks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Part - I</td>
<td>Applied Basic Sciences</td>
<td>3</td>
<td>100</td>
<td>50</td>
</tr>
<tr>
<td>Patr – II</td>
<td>1. Theory - Paper I, II &amp; III And Neck oncology including Recent advance</td>
<td>-</td>
<td>300</td>
<td>150</td>
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<tr>
<td></td>
<td>2. Clinical</td>
<td>-</td>
<td>200</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td>3. Viva</td>
<td>-</td>
<td>100</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>4. Aggregate of (2 + 3)</td>
<td>-</td>
<td>300</td>
<td>150</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td>600</td>
<td></td>
</tr>
</tbody>
</table>

SYLLABUS

Anatomy

1. Prenatal & postnatal development of the year,
   Internal year
   Airlspacis 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
5. Anatomy of the cranial nerves
   With particular references to facial and auditory nerves
6. Osteology of the cranial bone
   Vemous 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, there derivatives developmental defects
   Development of face

BACTERIOLOGY SYLLABUS
1. Elementary bacteriology pertaining to :
   a) Corynbacterium Diphtheria
   b) Staphylo, Strepto, Pneumo
   c) Neisseria group
   d) Proteus Group
   e) Vincents and fusiform bacilli
2. Fungus : Aspergillus group Rhinosporidiosis etc.
3. Ciruses : Adeno virus, Cosake 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

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. Corticosterioids 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 sincluding mid – line granulomas
4. Thrombosis and Embolism
5. Tumours –etiology, classification, pathology, and histopathlogy

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. Sreeramoorthy
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 – Opeative surgery – three volumes
10. Recent advances in Otolaryngology
12. Radiology of Head and Nek by Valvassori

REFERENCES:

Lore’s Atlas or Head and Neck Surgery
Microsurgery of the skull base by Ugo Fisch and Douglas Matto

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 Paediatrics Otolaryngology