

ENT - (MS)

POST GRADUATE DEGREE STANDARD

PAPER -I CODE:--

I. BASIC SCIENCES

A. ANATOMY

1. Anatomy - Ear

a. Developmental Anatomy of Ear

b. Osteology of Temporal bone.

c. Anatomy of the External ear

d. Anatomy of the Middle ear

e. Anatomy of the inner ear

f. Anatomy of Cranial nerves

2. Anatomy - Nose

a. Developmental anatomy of nose

b. Anatomy of nasal septum including blood supply and nerve supply

c. Anatomy of the lateral wall of nose including blood supply and nerve supply

d. Anatomy of para nasal sinuses

e. Osteology of maxilla and ethmoid bone.

3. Anatomy - Larynx

a. Development of Larynx

b. Difference between child and adult larynx

c. Pre-epiglottic space, paraglottic space

d. Cartilages of Larynx

e. Muscles of Larynx

f. Quadrangular membrane

g. Conus elasticus

h. Vocal cords

4. Anatomy - Pharynx

a. Development anatomy of pharyngeal arches

b. Anatomy and blood supply of tonsil

c. Waldeyers Ring

5. Anatomy - Trachea & Oesophagus

a. Anatomy of Trachea

b. Broncho pulmonary segments

c. Anatomy of Oesophagus.

6. Anatomy of neck nodes, Deep cervical fascia

B. PHYSIOLOGY OF EAR, NOSE, THROAT

1. Functions of the nose

2. Physiology of olfaction

3. Physiology of hearing

4. Middle ear impedance transformer mechanism

5. Vestibular function in maintaining equilibrium

6. Auditory pathway

7. Physiology of swallowing

8. Taste pathway

9. Speech generation

C. BACTERIOLOGY

1. Elementary bacteriology with ref to

a. Staphylococcus

b. Streptococcus

c. Pneumococcus

d. Pseudomonas

e. Moraxella

2. Fungus

a. Aspergillus

- b. Candida
- c. Mucormycosis
- d. Rhinosporidiosis

3. Virus

- a. Adenovirus
- b. E B Virus
- c. Coxsackie
- d. HIV

4. Basics in allergy and immunology

D. PATHOLOGY

1. General Pathology

- a. Inflammation necrosis
- b. Wound healing
- c. Shock pathology
- d. Thrombosis & embolism

2. Granulomatus Lesions

- a. Tuberculosis
- b. Midline lethal Granuloma

3. Tumours - aetiology, classification, histopathology

E. PHARMACOLOGY

1. Local Anaesthetics

2. Cortico steroids in ENT

3. Antibiotics

4. Chemotherapy in malignancy

5. Analgesics - pain relief.

F. BIOCHEMISTRY

1. Biochemistry of body fluids - CSF, Endolymph, perilymph

2. Electrolyte balance and maintenance of PH of blood

3. Biochemical changes in airway obstruction.

II. CLINICAL FEATURES, SIGNS AND SYMPTOMATOLOGY OF COMMON ENT DISEASES

A. Tonsillitis etc.

a. Tonsillitis

b. Sinusitis

c. Chronic suppurative otitis media - both safe and unsafe

d. Neckspace infections

e. Otosclerosis

f. Menieres disease

g. Atrophic Rhinitis

h. Otitis externa

i. Otomycosis

j. Keratosis obturans

k. Rhinosporidiosis

B. Tumours - Benign & Malignant

a. Carcinoma of larynx

b. Carcinoma maxilla

c. Hypopharyngeal malignancy

d. Carcinoma nasopharynx

e. Acoustic Neuroma

f. Nasopharyngeal Angiofibroma

g. Evaluation of secondaries neck with unknown primary

h. Sinonasal Lymphomas

i. Glomus tumours

III RADIOLOGY

1. CT Scan of para nasal sinuses
2. CT Scan of neck
3. Basics of MRI
4. DSA
5. Carotid Angiography
6. CT scan of temporal bone
7. Radiologic planes - plain x rays
8. Ultrasound neck

IV. OPERATIVE SURGERY

1. Tonsillectomy
2. FESS
3. Mastoidectomy
4. Rhinoplasty
5. Maxillectomy
6. Laryngectomy
7. Tracheostomy
8. Flaps in ENT
9. Block dissection
10. Stapedectomy

V. SCOPY

1. Direct Laryngoscopy
2. Oesophagoscopy
3. Bronchoscopy
4. Nasal endoscopy
5. Otoscopy

VI. REHABILITATION

- a. Speech rehabilitation following laryngectomy

b. Rehabilitation following maxillectomy - obturator

c. Management of hearing loss

Hearing aids

Bone anchored hearing aids

Cochlear implants

VII. RADIOTHERAPHY, BRACHYTHERAPHY, CHEMOTHERAPHY, PALLIATIVE CARE

VIII. RECENT ADVANCES

a. Advances in laser in ENT applications

b. Ultrasonic scalpal

c. Gamma Knife

d. Computer assisted surgeries

e. Intra -Arterial Local Chemotherapy

f. Powered instruments

g. Coobular

Reference Books

1. Diseases of the nose, throat for head and Neck - Ballenger

2. Tumours of the head and neck - John G. Batsakis

3. Jacksons textbook of Broncho - oesophagology

4. Lore's Atlas of head and neck surgery

5. Micro surgery of the skull base by ugo fisch and Douglas matto

6. Otolaryngology Head and Neck Surgery - Charles W Cummings.

Journals

1. North American clinics of Otorhinolaryngology

2. Indian Journal of Otolaryngology.

3. Laryngoscope

4. British journal of Otolaryngology

5. Annals of otology, Rhinology and Laryngology

6. Archives of Otolaryngology

7. American Journal of Otolaryngology

List of books for study purpose

1. Scott Brown's otolaryngology - six volumes - VI edn

2. Otolaryngology Vol I to IV by Paparella

3. Diseases of the ear - Mawson - VI edn

4. Surgery of the ear - Shambough - V edn

5. Head and neck surgery - Stell and Maran's - IV edn

6. Functional Endoscopic Sinus Surgery - Stammberger

7. Endoscopic Sinus Surgery - Levine and May

8. Operative Surgery Rob and Smith

9. Clinical Audiovestibulometry - Anirban Biswas