PACIFIC MEDICAL UNIVERSITY, UDAIPUR

Ph.D. Entrance Syllabus: Oto-Rhino-Laryngology (ENT)

Ph.D. Entrance Syllabus – Oto-Rhino-Laryngology (ENT)

1. Basic Sciences Related to ENT

- **Anatomy of Ear, Nose & Throat**
    - External, middle & inner ear
    - Nose & paranasal sinuses
    - Pharynx & larynx
    - Neck spaces & salivary glands
- **Physiology**
    - Hearing & balance
    - Voice & speech
    - Swallowing
- **Embryology**
    - Development of ear, nose, larynx
    - Congenital anomalies
- **Histology**
    - Mucosa of ear, nose & larynx
- **Applied anatomy relevant to ENT surgery**

2. Otology

- Anatomy & physiology of hearing and balance
- **Evaluation of hearing loss**
    - Tuning fork tests
    - Pure tone audiometry
    - Impedance audiometry
    - OAE & BERA
- **Otitis media (acute & chronic)**
- **Eustachian tube dysfunction**
- **Otosclerosis**

- **Meniere's disease**
- **Vertigo & balance disorders**
- **Facial nerve disorders**
- **Tumors of ear**
- **Implantable hearing devices**
    - Hearing aids
    - Cochlear implants

3. Rhinology

- Anatomy & physiology of nose and PNS
- **Epistaxis**
- **Rhinitis (allergic & non-allergic)**
- **Sinusitis**
- **Nasal polyposis**
- **DNS**
- **CSF rhinorrhea**
- **Fungal sinusitis**
- **Tumors of nose & PNS**
- **Endoscopic sinus surgery (FESS)**

4. Laryngology

- Anatomy & physiology of larynx
- **Voice disorders**
- **Laryngitis**
- **Vocal cord nodules & polyps**
- **Laryngeal trauma**
- **Stridor**
- **Benign & malignant laryngeal tumors**
- **Laryngeal papillomatosis**
- **Tracheostomy**
- **Microlaryngeal surgery**

5. Pediatric ENT

- Congenital ear anomalies
- Otitis media in children
- Adenoids & tonsillitis
- Pediatric airway problems
- Speech & hearing disorders
- Foreign bodies (ear, nose, airway)

6. Head & Neck

- Anatomy of neck spaces
- **Neck swellings**
- **Thyroid disorders**
- **Salivary gland diseases**
- **Oral cavity lesions**
- **Head & neck infections**
- **Head & neck malignancies**
- **Lymph node evaluation**
- **Staging of head & neck cancers**

7. ENT Investigations & Imaging

- Endoscopy (nasal, laryngeal)
- Radiology
    - X-ray
    - CT
    - MRI
- FNAC
- Biopsy techniques
- Audiological investigations

8. ENT Surgical Procedures

- Tympanoplasty
- Mastoidectomy
- Septoplasty
- Tonsillectomy & adenoidectomy

- FESS
- Tracheostomy
- Neck dissection
- Cochlear implantation (basic concepts)

9. ENT Emergencies

- Epistaxis
- Airway obstruction
- Foreign bodies
- Sudden sensorineural hearing loss
- Facial nerve palsy
- Vertigo emergencies

10. Research Methodology & Biostatistics

- Research design
- Types of studies
- Protocol writing
- Ethics in research
- Informed consent
- ICMR guidelines
- Basics of biostatistics
- Evidence-based ENT
- Scientific writing & publication ethics

11. National Health Programs & Public Health ENT

- National Programme for Prevention and Control of Deafness (NPPCD)
- School ear screening programmes
- Occupational hearing loss
- Noise pollution & health
- Community ENT