



College of Physicians and Surgeons of Mumbai

Syllabus for CPS-PG-Course

FCPS (ORL) : FELLOWSHIP IN OTO-RHINO-LARYNGOLOGY

College of Physicians and Surgeons of Mumbai

CPS House, Dr. E. Borges Marg, Parel, Mumbai – 400012.

FCPS (ORL) : FELLOWSHIP IN OTO-RHINO-LARYNGOLOGY

SYLLABUS

Anatomy: Embryogenesis of ear, nose and throat including palate larynx, Oesophagus, trachea, lungs, tongue, salivary gland, Head, Neck & Skull base etc. Parapharyngeal spaces in the neck including connective tissue barriers of larynx.

Anatomy of all cranial nerves with their functions:

Applied anatomy: of the skull bones, accessory sinus, external, middle and inner ears, nose, PNS, nasopharynx, meninges, brain, pharynx, larynx, trachea and bronchi, lungs, pleurae, esophagus, and the mediastinum.

Physiology: Mechanism of perception of smell and taste, mechanism of breathing and voice production, deglutition and salivation. Functions of the nose and Para sinuses, Mechanism of cough and sneezing.

Physiology: of larynx, tracheobronchial tree & esophagus. Histology of mucous membranes, internal ear and other associated organs and structures, nose Par Nasal Sinuses, Nasopharynx, Tracheo Bronchial tree, Lymphoepithelial system. Mechanism of immune system/immunology and genetics.

Physics of sound, theories of hearing, mechanism of perception of sound, speech Production, Physiology of equilibrium . Physiology of brain in connection with hearing, speech smell and phonation. Audiologic tests like audiometry, impedance, evoked potentials, Oto Accustic Emissions, Speech audiometry

Clinical

- Clinical methodology as applied to Oto rhino laryngology and Head & Neck disease in adult & children and the accessory sinuses, diagnosis and surgical treatment of diseases of nose, throat and ear in adult and children. Prevention and treatment, infectious diseases of Otolaryngology and Head Neck region. Circulatory and nervous disturbances of the nose, throat and ear and their effects on other organs of the body. Deformities, injuries sinus infections, polyps and the tumours of the nose, and paranasal sinuses. Examination of the ear, deafness and allied diseases, complications of diseases of the ear. Injuries, tumours, circulatory & neurological disturbances of the ear. Diagnosis and treatment of tinnitus and vertigo. Diagnosis and rehabilitation of the Hearing handicapped including, dispensing of hearing aid other vibrotactile aids.

- Examination of diseases of children in connection with throat and larynx. Neurological and vascular disturbances. Congenital and neonatal stridor.
- Pathology of various diseases of the larynx and throat, tracheobronchial tree and their causative organisms.
- General principles of faciomaxillary traumatology and also neck injury, plastic surgery as applicable to Otolaryngology.

Surgical

- Surgical pathology of Otolaryngology and Head Neck region.
- Basic knowledge of the anesthesia as related to ENT.
- Indications and various techniques of direct laryngoscopy, nasal endoscopy, bronchoscopy and oesophagoscopy. (incl microlaryngoscopic procedures).
- Rhinoplasties, endoscopic sinus surgery, and anterior cranial fossa surgery.
- Phonosurgery
- General surgery, Head-Neck oncology, Medicine related to the ENT diseases Surgery of congenital deformities of nose, ear & trachea/ oesophagus etc.

Diagnostics

- Reading or radiograms, scans, audiograms, nystagmograms and tympanograms in connection with ENT diseases/disorders.
- Special apparatus for the diagnosis and treatment of the diseases of ear, nose and throat including audiometer, Brainstem Evoked Response Audiometry, Electro Nystagmo Graphy, Speech analyzer etc.
- Radiology, Imaging & computed tomography, magnetic resonance imaging (MRI), interventional radiology and angiography related to ENT.
- Newer technique for Radiotherapy including, use of gamma knife for treatment of intracranial tumours and other malignancy.
- Chemotherapy of Head & Neck cancer.
- Recent developments in diag., pathogenesis, treatments in ENT diseases.
- Knowledge of LASERS and fiber optics.

Other Topics:

- Other methods of managing Hearing loss.
- Implantable hearing aids. Cochlear implants.
- Etiology and Managements of sleep apnoea/snoring.
- Hypophysectomies and optic nerve decompressions.

- Immunotherapy and modalities of the gene therapy.
- Preventive otolaryngology
- General pathologic aspects as wound healing, Pathology and Pathogenesis of ENT diseases, Pharmacology, molecular biology, genetics, cytology, hematology, and immunology as applicable to otolaryngology.
- Basic computers, computer averaging of the biological signals and its applications in Otolaryngology & Otolaryngologic equipments.
- Audiologic and speech disorders and their managements strategies.
- Principles of Jurisprudence & ethical issues as applicable to ENT surgeons.

FCPS (ORL) Fellowship in Oto-Rhino-Laryngology

EXAMINATION PATTERN**Theory Examination:**

PAPER I	PAPER II	PAPER III	PAPER IV
ENT	ENT	ENT	ENT
Section I	Section I	Section I	Section I
Q.1. 10 Marks	Q.1. 10 Marks	Q.1. 10 Marks	Q.1. 10 Marks
Q.2. 10 Marks	Q.2. 10 Marks	Q.2. 10 Marks	Q.2. 10 Marks
Q.3. 10 Marks	Q.3. 10 Marks	Q.3. 10 Marks	Q.3. 10 Marks
Q.4. 10 Marks	Q.4. 10 Marks	Q.4. 10 Marks	Q.4. 10 Marks
Q.5. 10 Marks	Q.5. 10 Marks	Q.5. 10 Marks	Q.5. 10 Marks
Total 50 Marks	Total 50 Marks	Total 50 Marks	Total 50 Marks
Section II	Section II	Section II	Section II
Q.1. 10 Marks	Q.1. 10 Marks	Q.1. 10 Marks	Q.1. 10 Marks
Q.2. 10 Marks	Q.2. 10 Marks	Q.2. 10 Marks	Q.2. 10 Marks
Q.3. 10 Marks	Q.3. 10 Marks	Q.3. 10 Marks	Q.3. 10 Marks
Q.4. 10 Marks	Q.4. 10 Marks	Q.4. 10 Marks	Q.4. 10 Marks
Q.5. 10 Marks	Q.5. 10 Marks	Q.5. 10 Marks	Q.5. 10 Marks
Total 50 Marks	Total 50 Marks	Total 50 Marks	Total 50 Marks
Section I + II =100 Marks	Section I + II =100 Marks	Section I + II =100 Marks	Section I + II =100 Marks
Total Theory = 400 Marks, Passing = 200 (i.e. 50%) Marks aggregate in Theory			

Practical Examination		Marks
Paper - V	Long Cases	40
Paper - VI	Short Cases	60
Paper - VII	Table 1	50
Paper - VIII	Table 2	50
Marks	(Aggregate marks for passing is 50% out of total.)	200

THESIS

Every student registered as a post graduate shall carry out work on an assigned research project under the guidance of a recognized post graduate teacher, the result of which shall be written up and submitted in the form of a thesis. Work for writing the Thesis is aimed at contributing to the development of a spirit of enquiry, besides exposing the student to the techniques of research, critical analysis, acquaintance with the latest advances in medical science and the manner of identifying and consulting available literature. Thesis shall be submitted at least six months before the theory and clinical / practical examination. The thesis shall be a bound volume of a minimum of 50 pages and not exceeding 75 pages of typed matter (Double line spacing and on one side only) excluding certification, acknowledgements, annexure and bibliography.

Thesis should consist of

- (a) Introduction
- (b) Review of literature
- (c) Aims and objectives (d)Material and methods
- (e) Result
- (f) Discussion
- (g) Summary and conclusion (h)Tables
- (h) Annexure
- (i) Bibliography