# Datta Meghe Institute of Medical Science's (Deemed University)

# Jawaharlal Nehru Medical College

Sawangi (Meghe), Wardha

# DEPARTMENT OF ENT

### **UPDATION OF Ph.D. CURRICULUM IN 05 THEMES**

## I Basic Science (Anatomy and Physiology): Ear, Nose & Throat

- 1. Anatomy and ultrastructure of the human ear
- 2. Physiology of hearing
- 3. The Physiology of equilibrium and its application to the dizzy patient.
- 4. Anatomy of the nose and paranasal sinuses.
- 5. Physiology of the nose and paranasal sinuses
- 6. Pathophysiology of the nose and paranasal sinuses
- 7. Anatomy of the mouth and related faciomaxillary structures
- 8. Anatomy of the pharynx and oesophagus
- 9. Deglutition
- 10. Anatomy and physiology of the salivary glands
- 11. Anatomy of the larynx and Tracheobronchial tree
- 12. Physiology of respiration
- 13. The generation and reception of speech
- 14. Surgical anatomy of the skull base
- 15. Clinical Neuroanatomy
- 16. Imaging and radiology
- 17. Basic immunology
- 18. Microbiology and otorhinolaryngologic manifestations of viral ,bacterial ,fungal and parasitic infections
- 19. Sterilization techniques and hospital acquired infections
- 20. Cell biology
- 21. The Principles of radiotherapy in head and neck cancer
- 22. The principles of chemotherapy
- 23. Wound healing
- 24. Intensive and high dependency care including basics of nutrition
- 25. General and Local Anaesthesia in ENT
- 26. Medical negligence in otoloaryngology
- 27. Research methodology
- 28. Principles of GCP and surgical ethics, clinical trials and consumer protection
- 29. Principles of OT designing and patient safety
- 30. Day care surgery and surgical audit
- 31. Doctor patient relationship
- 32. Shock and its management

#### **II OTOLOGY**

- 1. Examination of the Ear
- 2. Radiology of the Ear
- 3. Pathophysiology of inflammatory conditions of the external, middle & Inner ear
- 4. Pathology of the cochlea
- 5. Diseases of the External, Middle & Inner Ear
- 6. Acute suppurative otitis media etiopathogenesis clinical features management
- 7. Chronic otitis media etiopathogenesis clinical features management
- 8. Secretory Otitis Media
- 9. Complications of otitis media
- 10. Otalgia
- 11. Otosclerosis
- 12. Ear trauma
- 13. Reconstruction of Ear
- 14. Plastic Surgery of the Ear
- 15. Diseases of the temporal bone
- 16. Conducting hearing loss
- 17. Sensosineural hearing loss
- 18. Sudden and fluctuant sensorineural hearing loss
- 19. Vertigo
- 20. Meniere's disease
- 21. Ototoxicity
- 22. Vestibular schwannoma and CP angle lesion
- 23. Glomus and other tumors of the ear
- 24. Epithehal and other tumors of the External auditory meatus and middle ear
- 25. Disorders of the facial nerve
- 26. Hearing Rehabilitation
- 27. Acoustics
- 28. Computer in audiology
- 29. Epidemiology
- 30. Clinical tests of hearing and balance
- 31. Legal and ethical matters
- 32. The prevention of hearing Loss and balance disorders
- 33. Noise and the ear
- 34. Diagnostic audiometry
- 35. Hearing aids, BAHA & Tactile aids
- 36. Tinnitus
- 37. Central auditory dysfunction
- 38. Diagnostic aspects of the vestibular system
- 39. Vestibular Rehabilitation
- 40. Genetic factors and causes of deafness
- 41. Surgery of congenital abnormalities of the external and middle ears

#### **III- RHINOLOGY**

- 1. Examination of the nose
- 2. Evaluation of the nasal airway and nasal challenge
- 3. Radiology of the nose and paranasal sinuses
- 4. Conditions of the external nose
- 5. Acute and Chronic rhinosinusitis
- 6. Abnormalities of smell
- 7. Mechanisms and treatment of allergic rhinitis
- 8. Food allergy and intolerance
- 9. Nasal Polyps etiopathogenesis clinical features management
- 10. The nasal septum
- 11. Epistaxis
- 12. Fractures of the facial skeleton
- 13. Rhinoplasty
- 14. Snoring and sleep apnea
- 15. Non healing granuloma of Nose and PNS
- 16. Malignancies of Nose and PNS
- 17. Facial pain and headache
- 18. Dental surgery for otorhinolaryngology
- 19. Nasal obstruction and rhinorrhoea in infants and children
- 20. Tonsils and adenoids
- 21. Dental development, orthodontics cleft lip and palate

#### IV- LARYNGOLOGY AND HEAD AND NECK SURGERY

- 1. Examination and endoscopy of the upper aerodigestive tract
- 2. Radiological examination
- 3. Diseases of Oral Cavity
- 4. Acute and chronic infections of the pharynx and tonsils,
- 5. Deep Neck Space Infections
- 6. Acute and chronic laryngitis
- 7. Disorders of the voice
- 8. Management of the obstructed airway and tracheostomy
- 9. Trauma and stenosis of the larynx
- 10. Neurological affections of the pharynx and larynx
- 11. Pharyngeal pouches
- 12. Tumors of the Larynx
- 13. Nasopharynx (the postnasal space)
- 14. Angiofibroma
- 15. Tumors of the oropharynx and lymphomas of the head and neck
- 16. Tumors of the hypopharynx
- 17. Benign diseases of the neck
- 18. Metastatic neck diseases
- 19. The thyroid gland
- 20. Non neoplastic salivary gland disease
- 21. Benign salivary gland tumors
- 22. Malignant salivary gland tumors
- 23. Cysts, granulomas and tumor of the face, nose and sinuses
- 24. The oesophagus in otolaryngology
- 25. Plastic and reconstructive surgery of the head and neck
- 26. Terminal care of patients with head and neck cancer
- 27. Stertor and stridor
- 28. Congenital disorders of the larynx, trachea and bronchi
- 29. Foreign bodies in the larynx and trachea
- 30. Neonatal pulmonary disorders
- 31. Diseases of the oesophagus

## **V** RECENT ADVANCES

- 1 The principles of laser surgery
- 2 Biomaterials
- 3 Principles and use of nuclear medicine
- 4 Cochlear Implants
- 5 Transphenoidal hypophysectomy and Skull Base surgery
- 6 The Orbit
- 7 Tumors of the infratemporal fossa and parapharyngeal space
- 8 Facial plastic surgery
- 9 Phonosurgery
- 10 Sialoendoscopy
- 11 Molecular Biology
- 12 Biomaterial
- 13 Immunology
- 14 Middle Ear Implants
- 15 Sleep Disorders