RAJASTHAN PUBLIC SERVICE COMMISSION, AJMER SYLLABUS OF SCREENING TEST FOR THE POST OF ASSISTANT PROFESSOR – OTO- RHINO- LARYNGOLOGY (E.N.T.) MEDICAL EDUCATION DEPARTMENT

Physiology – Mechanism of perception of smell and taste, mechanism of breathing and voice production, laerimation, deglutition and salivation. Functional tests of the nose and para nasal sinuses. Mechanism of cough and sneezing.

Physics of sound, theories of hearing, mechanism of perception of sound and speech Production, Physiology of equilibrium & Cerebral function. Physiology of brain in connection with hearing, speech, smell and phonation. Audiologic tests like audiometry, impedance, evoked potentials, OAE, Speech audiometry Physiology of larynx, tracheobronchial tree & oesophagus – Histology of mucous membranes, internal ear and other associated organs and structures, nose, PNS NPx, Larynx, TB tree, Lymphoepithelial system. Mechanism of immune system/immunology and genetics.

Anatomy – Embryogenesis of ear, nose and throat including palate and the larynx, Oesophagus, trachea and lungs, tongue, salivary gland Head & Neck & skull base etc.

Parapharyngeal spaces in the neck including connective tissue barriers of larynx.

Applied anatomy of the skull bones, accessory sinuses, external, middle and inner ears, nose, PNS, nasopharynx, meninges, brain, pharynx, larynx, trachea and bronchii, lungs, pleurae oesophagus and the mediastinums.

Anatomy of all cranial nerves with their functions.

- 1 Clinical methodology as applied to ORL HN 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, nervous and 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 vibrotatile aids.
- 2 Surgical pathology of Otolaryngology and Head Neck region.
- 3 Basic knowledge of the anaesthesia as related to E.N.T.
- 4 Examination of diseases of children (Pediactric ORL) in connection with throat and larynx. Neurological and vascular disturbances. Congenital and neonatal stridor.
- 5 Pathology of various diseases of the larynx and throat, tracheo bronchial tree and their causative organisms.
- 6 Indications and various techniques of direct laryngoscopy, nasal endoscopy, bronchoscopy and oesophagoscopy, including microlaryngoscopic procedures.
- 7 Reading of radiograms, scans, audiograms, nystagmograms and tympanograms in connection with E.N.T. diseases/disorders.
- 8 Special apparatus for the diagnosis and treatment of the diseases of ear, nose and throat including audiometer, BERA, ENG, Speech analyser etc.
- 9 The recent developments in the diagnosis pathogenesis treatments of the E.N.T. diseases.
- 10 The knowledge of the frontiers of the oto-laryngology and lateral skull base surgery.

- 11 Rhinoplasties, endoscopic sinus surgery and anterior cranial fossa surgery.
- 12 Knowledge of LASERS and fibre optics.
- 13 Other methods of managing Hearing loss.
- 14 Implantable hearing aids, cochlear implants.
- 15 Phonosurgery.
- 16 Etiology and Managements of sleep apnoea/snoring.
- 17 Hypophysectomies and optic nerve decompressions.
- 18 Immunotherapy and modalities of the gene therapy.
- 19 Newer techniques for Radiotherapy including, use of gamma knife for treatment of intracranial tumours and other malignancy.
- 20 Chemotherapy of cancer.
- 21 General surgery, Head & Neck oncology and Medicine as applicable to the ENT disorders/diseases. Surgery of congentital deformities of nose, ear (Pinna) & trachea/oesophagus etc.
- 22 Radiology, Imaging computed tomography and magnetic resonance imaging, (MRI) and interventional radiology and angiography as related to E.N.T.
- 23 General pathologic aspects such as wound healing and also Pathology and Pathogenesis of E.N.T. diseases, Pharmacology, molecular biology, genetics, cytology, haematology and immunology as applicable to otolaryngology.
- 24 General principles of faciomaxillary traumatology and also neck injury, Plastic surgery as applicable to Otolaryngology.
- 25 Basic computers, computer averaging of the biological signals and its applications in Otolaryngology & Otolaryngologic equipments.
- 26 Audiologic and speech disorders and their management strategies.
- 27 Principles of Jurisprudence and ethical issues as applicable to E.N.T. surgeons.
- 28 Fascial spaces of Neck.
- 29 Lymph nodes & Lymphatic's of Head & Neck region.
- 30 Anatomy of thyroid gland. Benign and Malignant thyroid neoplasm.
- 31 Principals of Nuclear Medicine, role of Nuclear Medicine in Oto-Rhino-Laryngology.
- 32 Role of robotic surgery in Oto-Rhino-Laryngology.
- 33 Medical education & newer teaching tools: OSCE, OSPE, etc.
- 34 Research Methodology: Sampling, study bias, clinical research design, clinical trials, p-values.
- 35 Lymphomas of head & neck region.

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Pattern of Question Papers:

- 1. Objective Type Paper
- 2. Maximum Marks : 100
- 3. Number of Questions : 100
- 4. Duration of Paper : Two Hours
- 5. All Questions carry equal marks
- 6. There will be Negative Marking