

Syllabus for the Post of Clinical Audiometrician in Medical Education
Department - Cat No: 035/2024 (Total : 100 marks)

Part I – Audiology (25 Marks)

Sound and Hearing, Anatomy and Physiology of hearing, Hearing loss, Evaluation of hearing, Early identification and prevention

- Sound, its transmission, physical and psychological attributes, human hearing, development of auditory behavior and functions of hearing in humans
- Anatomy & Physiology of External ear, Middle ear including Eustachian tube, Inner ear, Vestibular system, Auditory nervous system
- Nature and type of hearing loss, Causes of hearing loss, Signs & symptoms of hearing loss, Effects of hearing loss, Prevention of hearing loss, Early identification and its importance, Associated problems with hearing loss
- Methods of testing hearing, Importance of case history, tuning fork, audiometry, parts of an audiometer, audiogram, Procedure for obtaining an audiogram, different types of audiograms, Factors affecting hearing evaluation, Informal testing, methods of screening and different conditions for hearing testing, use of different stimuli in rural set/ups.
- Early Identification and prevention of hearing loss, Importance and strategies for Hearing screening in school set up, Hospital set up, camps, Audiological equipment, Calibration, and their maintenance

Part II - Speech & Language Pathology (25 Marks)

Communication, Speech and Language, Anatomy and physiology of speech mechanism, Disorders of speech language and communication disorders Assessment of speech and language and communication disorders

- Definition and interrelation between Communication, language & speech, speech chain, Types of language, phonology, morphology, semantics, syntax & pragmatics, reading and writing, voice, articulation, fluency, prosody, Acquisition/ Development of Language ,speech and communication, and factors affecting the acquisition,
- Anatomy and physiology of speech mechanism, Nervous system, synapse, action potential, CNS and PNS, Speech and language related area of brain,
- larynx and nasopharynx, anatomy and physiology of respiration and its importance in speech. Resonatory and articulatory structures and physiology of phonation, place and manner of articulation, rhythm, rate and intonation in speech,
- Organic, structural, neurological and functional causes, general characteristics and symptoms of the following Disorders of speech and language including disorders of voice, articulation, fluency, childhood language disorders including intellectual disability, Autism, Cerebral Palsy
- Need and importance of diagnosis, differential diagnosis, tools used for screening and diagnostic assessment

Part III - Management of Communication Disorders (25 Marks)

Hearing aids and ear molds, auditory learning, speech reading, Education of children with hearing impairment, rehabilitation

- Hearing aids and assistive listening devices, its parts, various types and models, hearing aid fitting, care and maintenance, trouble shooting, counselling on using hearing aids
- Auditory training and its importance and factors effecting auditory training,
- Speech reading, cued speech, factors effecting both, methods and activities for training both
- Management of speech and language disorders including disorders of articulation, voice and fluency, Hearing impairment, intellectual disability and Cerebral palsy
 - General speech therapy approaches – rationale, setting goals/planning (short term, long term) steps –MIDVAS etc including
- Education for children with disabilities, problems faced, Mainstreaming and segregation, Inclusive, integrated and special schools,

Part IV - General Information (25 Marks)

Acts and regulations, Care and maintenance of instruments, Scheme and assistance, Counselling, Record Keeping

- Acts, regulations and guidelines regarding Disability in the country and in the state,
 - PWD Act 1995, RPWD Act 2016, RCI Act, National Trust Act, UNCRPD and others
 - Kerala state rules for individuals with disability, State rules for registration of institutions and Others
- Procurement, Care and maintenance of clinical instruments
 - Clinical audiometer, Speech trainer, Hearing aid repair kit, Group hearing aids, Sound recorder, assessment and Therapy material, Material for auditory training, Models of the ear, larynx, brain etc.
- Schemes, assistance and certifications available for individuals with disability in the state and in the country
 - ADIP Scheme, Vidhyakiran, RBSK and Others
 - Disability certificate
 - UDID card
- Individual and family counselling relating Speech, Language and Communication disorders
- Maintenance of records
 - Daily diaries, Progress reports, pre-therapy report and lesson plans
 - Report writing and referral, Home training, community services
 - Involvement of the society as a partner

- Curricular development, Preparation and/ use of teaching aids and language work book.
- Community awareness programs and exhibitions, Team approach

NOTE: - It may be noted that apart from the topics detailed above, questions from other topics prescribed for the educational qualification of the post may also appear in the question paper. There is no undertaking that all the topics above may be covered in the question paper.