

Speech Pathology and Audiology

POST GRADUATE DEGREE STANDARD

AUDIOLOGY

1 AUDIOLOGY:

Definition, Branches in Audiology.

2 Ear and Hearing:

Structure and function physiology and Theories of hearing Speech perception. Afferent and Efferent Auditory pathways. Electrical potential of Ear, Binaural hearing. Selective hearing etc., acoustic parameters of sound d.B.concept.

3 Vestibular system: Structure and function.

4 Hearing loss, Definitions, Terminology, Types, Effects, prevention, Age related manifestations etc.,

5 Information sources for Medical diagnosis, Case History, ENT examination, Audiological assessment, Laboratory investigations and other related tests.

6 Non Audiometric tests of hearing and their affectiveness, usefulness etc.,

7 Audiometric Tests, parameters and d.B. concept. Audiometric standards, procedures, A.C. B.C. masking etc., purpose and methods of threshold measurement. Factors effecting thresholds. Types of Audiometry. Testing Children. Bekesy Audiometry. Pure tone and speech Audiometry.

8 Supra threshold special Tests.

Special tests to find site of lesion and specific characteristic manifestations. Ex. Cochlear, Retrocochlear, CAD, recruitment, Tone decay, functional hearing loss etc.,

9 Audiometric procedures in special Groups:

Ex: Mentally retarded, Emotionally disturbed, Brain damaged, Geriatric group, neurologically and physically disabled individuals etc.,

10 Electro Physiological Auditory measurements:

(a) Impedance Audiometry. Concept of Impedance. Mechanical and Electro Acoustic Impedance Bridge. Tympanometry, IPSI lateral and contra lateral acoustic reflex threshold measurements, Acoustic reflex decay etc.,

(b) Other tests like Electro Cochleography. Evoked response Audiometry. Brain stem Evoked response Audiometry. OTO- Acoustic emission, PGSR Audiometry etc.,

11 DIAGNOSIS OF DEAFNESS:

Normal Vs hard of hearing. Type and severity of Deafness. Typical Audiometric patterns. Functional hearing loss, Percentage of hearing Impairment. Social adequacy. Assessment of related medical problems like tinnitus. vertigo Headache, vomiting and other communication problems like speech etc., syndromes associated with deafness.

12 Noise induced Hearing loss and Acoustic Trauma:
Effects of noise, sources and measurements of noise. Noise reduction methods. Damage risk criteria. TTS AND PTS.susceptability. Conservation of hearing. Preplacement and monitoring audiogram.

13 Calibration of the Audiometer:
Need for calibration. Subjective and objective methods. Calibration of different parametres, signals like Frequency. Intensity and time of puretones; speech, noise etc., AC and B.C calibaration. Instruments used in calibration.

14 The need, principle and designing of sound treated room.

15 Medico surgical care of Deafness:
Conventional methods and also latest remedial techniques like cochler implant. Audiological basis for selecting surgical cases. Single channel Vs Multi channel. Speech tracking etc.,

16 Rehabilitative management of Deafness:
Adults and Children. Selection of hearing aid. Auditotory training, lipreading, speech language therapy. Home training etc., Institutional based, Home based and community based programmes. Evolution, technical details and types of hearing aids. Custom earmoulds: Methods of making and the need. Special provisions in earmould making.

17 Educational considerations:
Different methods like oral, Aural, Manual Acoupedic, total communication etc., second language exemption. Segregation, resource room, and inclusive education.

18 Management of special Groups:
Middle ear effusion in infants. Unilateral Deafness, sudden deafness etc., use of strategies to cope up with these problems.

19 Assistive listening devices:

20 Counselling and guidance:
Individuals and Family members, management of the problem, use of appliances, Educational options, Scholarships, Employment reservation, social aspects, other Government and NGO support etc.,

21 Articles explained in "PEOPLE WITH DISABILITIES ACT 1995" Uniform definition given to Handicapped conditions by Government of India etc.,

22 Recent developments in Audiology . Research Activities

PAPER -II SPEECH PATHOLOGY

1 Communication, Language and Speech, Definition, Structure, Functions, acquisition, Theories etc., Anatomical, Physiological and Psycho-social correlates, production of speech, Acoustical aspects, Feed back system.

2 Normal development of speech and Language. Stages. Factors influencing development etc.,

3 Delayed Speech and Language. Definitions, Incidence, causes, prevention, Assessment, Diagnosis, Different types of formal and informal test, used in assessment including phonological analysis, Management, counselling and Diagnosis, Specific Language Impairment. Special reference to our country interms of Multicultural and multilingual variations.

4 Other Language Disorders, Aphasia - Pathology, manifestations, Associated problems, Assessment, types, classifications, Localisations, recovery, Therapy, methods etc., Dominance and Speech. Learning and Reading disability-causes manifestation, Diagnosis, Associated problems, Remedial methods etc., Speech and Language problems in parkinsonism, Athetosis, Right hemispheric damage mentally retarded, emotionally disturbed, sensori deprivation etc., Its pathology, causes, Characteristic features incidence types, associated

5 Misarticulation - Articulatory structure and function. Classification of sounds, Articulation and points of articulation. Types of Misarticulation and their assessment. Therapy. Dysarthria, Cranial nerve innervation. cleft lip and cleft palate-causes, types, speech Language and associated problems, diagnosis, Therapy etc.,

6 Voice Disorders - Structure and function of Normal voice production and it's theories. Parameters of voice. Types and causes of voice disorders. Specific categories like Laryngectomy, Spastic Dysphonia, Hypernasality etc.,

7 Cleft lip and Cleft palate:- Embryology of face, Incidence and classification, types, speech, Language, hearing and associated problems in cleft palate, assessment of speech and related parameters, Diagnosis and therapy. Team approach and mutual interactions.

8 Eluency Disorders. Stuttering, Cluttering, and Normal non-fluency. Definition, Manifestation, incidents, causes, theories, secondary symptoms, assessment including its severity, therapy techniques, counselling etc.,

9 Speech and language problems diagnostic and therapy materials. Selection of therapy techniques. Planning speech and hearing centres etc.

10 Computer application in speech pathology.

11 Public education regarding speech, language and hearing science Camps, exhibitions, media coverage etc.,

12 Speech language and hearingservices in School set up, community based rehabilitation.

13 Speech and hearing science in relation to our traditional practice.

14 Research Programmes in speech language pathology.