

**Paper B.S.Ed. 1.1****24501: Nature and needs of various disabilities – An Introduction****Objectives:**

The student teacher is expected to acquire basic knowledge on identification and characteristics of various disabilities such as

1. Blindness and low vision
2. Hearing impairment
3. Mental retardation and mental illness
4. Locomotor disorders and cerebral palsy
5. Other disorders
6. Multiple disabilities

**Course content****Unit 1: Blindness and low vision (12 hours)**

- 1.1 Nature, types, incidence/prevalence
- 1.2 Characteristics
- 1.3 Causative factors
- 1.4 Preventive and curative measures
- 1.5 Special educational needs
- 1.6 Impact of disability on development

**Unit 2: Hearing impairment (13 hours)**

- 2.1 Nature, types, incidence/prevalence
- 2.2 Characteristics
- 2.3 Causative factors
- 2.4 Preventive and curative measures
- 2.5 Special educational needs
- 2.6 Impact of disability on development

**Unit 3: Mental retardation (13 hours)**

- 3.1 Nature, types, incidence/prevalence
- 3.2 Classification and mental retardation vs. mental illness
- 3.3 Characteristics – mild, moderate, severe, profound
- 3.4 Teaching strategies
- 3.5 Stimulation programs
- 3.6 Impact of disability on development

**Unit 4: Locomotor disorders and cerebral palsy (12 hours)**

- 4.1 Nature, types, incidence/prevalence
- 4.2 Characteristics
- 4.3 Causative factors
- 4.4 Preventive and curative measures
- 4.5 Special educational needs
- 4.6 Impact of disability on development

**Unit 5: Other disorders (14 hours)**

- 5.1 Definition, identification, characteristics and causes and special needs of
  - 5.1.1 Autism
  - 5.1.2 Dyslexia, dysgraphia and dyscalculia
  - 5.1.3 Expressive and receptive language disorders
  - 5.1.4 Behaviour and emotional disorders such as ADHD, ADD
- 5.2 Special education needs of the multiply handicapped



**Paper B.S.Ed.1.2**

**24502: Education in Emerging Indian Society**

**Objectives:**

After studying this paper, the student teachers are expected to have the knowledge of the following:

1. Spell out the aims and functions of education in general and special education in particular.
2. Describe the various systems of education with reference to general and special education.
3. Discuss the various roles of educational agencies in India.
4. Analyze the role of educational system in the context of Modern Ethos like democracy, socialism and secularism.

**Course content:**

**Unit 1: Emerging trends in special education (12 hours)**

- 1.1 Concept of impairment, disability and handicap and their implications.
- 1.2 Normalization – principles and concept and types – process of integration and inclusion
- 1.3 Nature of disabilities and its impact on the person with disability.
- 1.4 Dino's model of special education continuum and criteria for special education placement.
- 1.5 Future perspectives in special and integrated education.

**Unit 2: Special education in the changing social scenario (12 hours)**

- 2.1 Formal (Class room), informal (therapy sessions) and non-formal (home activities) education.
- 2.2 Community based education.
- 2.3 Open learning: National open school, State open school, distance education
- 2.4 Value-oriented education (responsibility of the society towards disability).
- 2.5 Changing social scenario of the disability.

**Unit 3: Introduction to special education (10 hours)**

- 3.1 Meaning, nature and scope of special education
- 3.2 Aims, objectives and principles of special education.
- 3.3 Direction and priorities of general and special education.
- 3.4 Recent trends in modern Indian education with reference to special education.
- 3.5 Education for all movement, national policy on education (1992) with reference to special education.

**Unit 4: Disability management (16 hours)**

- 4.1 Role of Governmental (NCERT, SCERT, RCI, NCTE, UGC, National Institutes for Handicapped), non-governmental agencies including UN agencies (UNICEF, UNESCO etc) in special education.
- 4.2 Role of Home in the education of the disabled
- 4.3 Role of School in the education of the disabled
- 4.4 Role of Society and mass media in the education of the disabled

**Unit 5: Welfare measures for the disabled (14 hours)**

- 5.1 Concessions/facilities for the disabled.
  - 5.1.1 Recommendation of various committees and commissions.
  - 5.1.2 Contribution of national and international thinkers in special education.
  - 5.1.3 Awareness of Govt. policies with respect to health & education, Acts & Schemes such as RCI Act 1992, PWD Act 1995, POA 1987, IEDC Scheme 1992, DPEP scheme, Salamanca statement (1994), Kothari Commission (1992), World summit declaration (1995), National Trust for autism, mental retardation & multiple disabilities (1999), ICDS, ECCE.
  - 5.1.4 Rights of disabled



### Paper B.S.Ed.1.3

#### 24503: Educational psychology and persons with disabilities

##### Objectives:

After studying this paper, the student teachers are expected to have the knowledge of the following:

1. The principles of psychology with their application to the field of disabilities and impairments
2. Understand principles of human growth and development with special reference to the field of disabilities and impairments
3. To apply principles of learning for effective management/training of persons with disabilities in classroom/school settings
4. To acquire the basics of guidance and counseling in their application of skills during every-day practice of teaching persons with disabilities and impairments
5. To comprehend the fundamentals in diagnosis and behavioral assessments for identification and remediation of persons with disabilities

##### Course Content:

##### Unit 1: Introduction to Psychology of Disabilities & Impairments (10 hours)

- 1.1 Psychology: Nature, Scope and Methods with special reference to disabilities & impairments
- 1.2 Cognitive Processes: Sensation-Attention-Concentration-Perception-Imagination-Thinking-Concept Formation-Motivation and their implication for understanding mental functions of persons with disabilities & impairments.

##### Unit 2: Developmental Psychology (12 hours)

- 2.1 Concept of Growth & Development: Principles & Laws of Development
- 2.2 Areas of Child Development: Sensory, motor, language, cognition, emotion, play, social & moral development – Implications for Early Childhood Education of Disabled – Understanding developmental delays and deviance in children with disabilities
- 2.3 Stages & Factors in Development: Heredity & Environment; Genetic/Familial conditions (chromosomal & genetic anomalies) with disabilities – Environmental factors (environmental deprivation - inadequate stimulation – role of enriched environments in infant stimulation programs) in disabilities

##### Unit 3: Psychology of Assessments (12 hours)

- 3.1 Assessment: Meaning - Definition - Types of Assessment – Assumptions underlying assessments of children with disabilities - Approaches (Normative, Criterion referenced, Behavioral & Idiometric approach) – Methods in Assessments (Observation, Clinical Interviews, Case History, Testing, etc.)
- 3.2 Diagnostic Assessment: Use of Intelligence Tests, Adaptive Behavior Scales, Achievement Tests, Aptitude Measures, Personality Assessment, etc.
- 3.3 Behavioral Assessment: Skill Behavior and Problem Behavior Assessments – Behavioral Scales in India (Eg., Behavior Assessment Scales for Indian Children, BASIC-MR, Activity Checklist for Preschool Children with Developmental Disabilities, ACPC-DD, Madras Developmental Programming System, MDPS, etc)

##### Unit 4: Psychology of Learning (17 hours)

- 4.1 Concept of Learning: Factors affecting learning in classroom situations – Types of Learning - Transfer of learning & Transfer problem in children with developmental disabilities
- 4.2 Behavior Modification: Application of Learning to Behavior remediation in Classroom/School Settings of learners with disabilities - Steps in Implementation of Behavior remediation programs
  - 4.2.1 Skill Behavior Training (use of techniques like modeling, chaining, shaping, prompting, fading, token economy, reinforcement, behaviour contracting, etc)
  - 4.2.2 Problem Behavior Remediation (techniques like time out, restraint, response cost, token economy, etc.) - Programs in classroom/school and home settings
- 4.3 Specific Problems and Issues related to use of behavioral techniques in persons with disabilities – Ethical Issues



**Unit 5: Guidance & Counseling**

**(13 hours)**

- 5.1 Guidance & Counseling: Nature, Meaning, Scope & Stages in Counseling – Individual & Group Guidance – Orientation - Dissemination
- 5.2 Basic skills & qualities of good counselors - Counseling needs of families and persons with disabilities – Assessment of counseling needs: Formal & Informal techniques
- 5.3 Vocational Guidance & Counseling - Educational Counseling – Career Guidance - Vocational counseling of influential others - Counseling adolescents/adults with handicaps – Premarital/ Marital/Sex counseling
- 5.4 Stigma: Burden & coping mechanisms of persons and families of disabled – Family counseling – correcting misconceptions/negative attitudes – self and other perception – Enabling/empowering parents, sibling & grandparents of persons with disabilities – Parent or family involvement in rehabilitation process.
- 5.5 Stress & burden on parents – reactions/psychic crisis & adaptation process of caregivers to disclosure of handicap



**Paper B.S.Ed. 1.4**

**24504: Educational management, curriculum designing and research**

**Objectives**

After studying this paper, the student teachers are expected to have the knowledge of the following:

1. To know management aspects related to educational administration of institutions like in special schools and integrated school settings
2. To be able to carry out curriculum planning, development, implementation and evaluation for children with disabilities in special school and integrated school settings
3. To carry out instructional strategies, design, methods and techniques applicable for children with disabilities in special school and integrated school settings
4. To undertake classroom/school based research involving appropriate research design and methods applicable to the field of special educational planning or processes in persons with disabilities and impairments
5. To apply basic statistics to the field of action-oriented educational research on persons with disabilities and impairments in special school and integrated school settings

**Course Content:**

**Unit 1: Educational Management**

**(14 hours)**

- 1.1 Meaning, Nature and Scope of Educational Management.
- 1.2 Organization of Special Schools/Classes in Normal School Settings/Resource Rooms for children with disabilities and impairments. Classroom Management: Physical Settings, Seating Arrangements & Time Scheduling
- 1.3 Concept and Principles of Institutional Planning & Administration - Admission – Staff/Student Management – School Administration – Maintenance of registers and record keeping
- 1.4 Leadership – Styles; Organizational Processes/Climate – Organizational Pathology: Signs & Symptoms; Staff Turn Over – Job Dissatisfaction & Staff Burn Out as special phenomena when working with disabled

**Unit 2: Curriculum**

**(12 hours)**

- 2.1 Concept, Principles & Purpose of Curriculum.
- 2.2 Types of Curriculum: Functional Programming – Developmental Therapies - Ecology based Curriculum; Child-centered-Activity Centered-Holistic curriculum for children with disabilities
- 2.3 Principles & practice of adapting curriculum for children with disabilities.
- 2.4 Steps in curriculum planning, implementation & evaluation in individualized and/or group teaching for children with disabilities
- 2.5 Individualized Education Planning/Programming (IEPs); Steps, Procedures, Merits & Demerits
- 2.6 Extra curricular Activities: Play & Leisure Training; Role of Special Olympics/ Paralympics; Very Special Arts for Disabled

**Unit 3: Instructional Strategies**

**(12 hours)**

- 3.1 Theories of Instruction: Implications to the field of special education (To cover major contributions of Seguin-Bruner-Vygotsky-Gagne-Skinner-Montessori-Frostig, etc.)
- 3.2 Approaches to Instruction for Pupils with Disabilities: Cognitive-Behavioral-Eclectic
- 3.3 Grouping Strategies: Individual-Peer Group-Small Group-Large Group-Play Group Designs
- 3.2 Teaching Aids & Teaching Materials: Differences; Value of Teaching aids/materials; Types: Low Cost & High Cost Teaching Aids/Materials; Preparation of teaching aids/materials/ equipment for pupils with disabilities;
- 3.3 Educational aids: Mobility aids & Low vision aids for visually handicapped – Prosthetic & Orthotic devices - splints and calipers – Education in Least Restricted Environments



**Unit 4: Educational Research**

**(12 hours)**

- 4.1 Research: Types of Research-pure & applied; Principles & Problems for research in special education
- 4.2 Types of Research Designs: Pre-experimental-Experimental-Quasi experimental designs; Cross-sectional & Longitudinal Designs; Survey Designs-Questionnaires-Interview Schedules-Opinion Studies-Case studies; Illustrative studies for each design related to field of disabilities to be worked out from Indian settings – Characteristics of Good Research Designs: Randomization & Control

**Unit 5: Statistics in Education**

**(14 hours)**

- 5.1 Introduction to Statistics – Meaning, Scope and application in the field of education of disabled.
- 5.2 Measures of Central Tendency: Mean, Mode & Median; Quartiles, Deciles & Percentiles; Sample problems related to disability statistics to be worked out for each measure of central tendency
- 5.3 Dispersion: Range, Mean Deviation, Average Deviation & Standard Deviation, Sample problems related to disability statistics to be worked out for each measure of central tendency.
- 5.4 Normal Probability Curve: Characteristics- Skewness & Kurtosis.
- 5.5 Graphical Depictions of Data - Data Collection (Observation – Interview – Questionnaire –Structured Tool); Data processing and tabulation



**Paper B.S.Ed.1.5**

**24505: Methodology in Speech therapy**

**Objectives**

After studying this paper, the student teachers are expected to realize the following objectives:

1. To acquaint the student teacher with the anatomy and physiology of the articulatory system.
2. To acquaint the student teacher with the normal development of speech.
3. To acquaint the student teacher with the development of speech in a hearing impaired child.
4. To acquaint the student teacher with the disorders in the speech of hearing impaired children.
5. To acquaint the student teacher with methods of correcting the disorders in the speech and hearing impaired, individually and in the classroom.

**Course content:**

**Unit 1: Speech mechanism (12 hours)**

- 1.1 Definition and functions of speech.
- 1.2 Anatomy and physiology of the respiratory, phonatory and articulatory.
- 1.3 Speech as an overlaid functions.
- 1.4 Production of normal speech.

**Unit 2: Normal speech – production and reception (14 hours)**

- 2.1 Characteristics of speech, speech intelligibility, parameters of speech.
- 2.2 Multi-sensory speech reception, hearing and vision, hearing and touch, vision & touch, hearing.
- 2.3 Non-segmental & suprasegmental aspects of speech (voice, duration, pitch, loudness, quality, rhythm, rate, intonation, stress, accent, phrasing, pause).
- 2.4 Levels of speech acquisition

**Unit 3: Phonetics (12 hours)**

- 3.1 Description and classification of speech sounds
- 3.2 Introduction to I.P.A. with reference to phonemes of Indian languages.
- 3.3 Relevance of phonetics in the correction of speech o hearing impaired children.

**Unit 4: Speech evaluation (12 hours)**

- 4.1 Development of speech in a child with the hearing impairment.
- 4.2 Description and classification of speech disorders present in the speech of a hearing impaired child (problems relating to voice, articulation, breathing suprasegmentals).
- 4.3 Assessment of voice
- 4.4 Assessment of articulation
- 4.5 Assessment of other related parameters: prosody, fluency, co-articulation, etc.

**Unit 5: Speech therapeutic methods (14 hours)**

- 5.1 Models of speech teaching (developmental and correctional)
- 5.2 Conventional, linguistic and computerized methods for speech correction
- 5.3 Consonant and vowel correction: place, manner and voicing and deviant patterns.
- 5.4 Use of multi-sensory approach and electronic visual aids for correction of speech.
- 5.5 Speech readiness, individual speech teaching and classroom speech teaching activities



**Paper B.S.Ed.1.6**

**24506: Methodology in Language Therapy**

**Objectives:**

After studying this paper, the student teachers are expected to realize the following objectives:

1. To understand the importance of communication and function of language as a means of communication.
2. To realize the need of early identification and intervention of hearing impairment for language development.
3. To study language development in a hearing person and the effect of hearing impairment on it.
4. To understand the need to develop reading and writing skills to support receptive and expressive language.
5. To know the methods of teaching school subjects.

**Course content:**

**Unit 1: Communication and language – definition and scope (12 hours)**

- 1.1 Definition and scope of communication.
- 1.2 Definition, nature and functions of verbal language
- 1.3 Biological and psychological foundations of language
- 1.4 Concept of critical period for language acquisition
- 1.5 Development of receptive & expressive language in hearing persons & in hearing impaired persons

**Unit 2: Modes of communication (12 hours)**

- 2.1 Historical overview
- 2.2 Modes of communication
  - 2.2.1 Oral-aural
  - 2.2.2 Manual
  - 2.2.3 Total communication.
  - 2.2.4 Teaching non-verbal language – Alternative & augmentative communication

**Unit 3: Natural methods of teaching language to the hearing impaired (14 hours)**

- 3.1 Natural method
  - 3.1.1 Maternal reflective method
  - 3.1.2 Groth's method
  - 3.1.3 Use of (a) News/conversation (b) Story telling (c) Directed activity (d) Visit (e) Free play (f) Picture comprehension

**Unit 4: Structured methods of teaching language to the hearing impaired (10 hours)**

- 4.1 Fitzgerald Key
- 4.2 Box technique
- 4.3 Other structured procedures
- 4.4 Application of structured approaches in Indian languages

**Unit 5: Teaching of texts and poetry for all levels and high school (16 hours)**

- 5.1 Implications of language teaching in science, mathematics, history, geography to hearing impaired
- 5.2 Reading & writing: Development of visual perception, Reading readiness, Reading comprehension skills, identifying the goal of reading – types of reading (Functional, Developmental, Recreational, Remedial – implication for the hearing impaired), Writing readiness & development of writing skills in the hearing impaired
- 5.3 Importance of parent guidance and counseling and home-training
- 5.4 Sociological implications – attitude of siblings, peers, parents, teachers & community





**B.S.Ed. 1.7 Clinical Practicum – 1  
SA 080: Speech & Hearing**

Course content:

**I. Speech: (80 hours)**

Observation of:

1. Speech and language assessment of normal children
2. Speech and language assessment of hearing impaired children
3. Speech and language therapy for hearing impaired children
4. Children with disability studying in special schools
5. Children with disability studying in regular schools
6. Report writing

**II. Hearing: (80 hours)**

Observation of:

1. Hearing assessment of normal children
2. Hearing assessment of hearing impaired children of different ages
3. Auditory verbal training in speech and hearing set-up
4. Auditory verbal training in a special school set-up
5. Auditory verbal training in an integrated set-up
6. Report writing



**Paper B.S.Ed.2.1**

**24521: Audiology for Educators**

**Objectives:**

After studying this paper, the student teachers are expected to realize the following objectives:

1. Describing the anatomy and physiology of the ear.
2. Assessing the hearing capability of an individual.
3. Implication of audiological findings in management of the hearing impaired
4. Setting up classroom for the hearing impaired

**Course content:**

**Unit 1: Hearing mechanism**

**(10 hours)**

- 1.1 Basic anatomy and physiology of hearing mechanism, outer, middle and inner ear.
- 1.2 Definitions terminologies used for hearing impairment (Hard of hearing, deaf, prelingual, postlingual, sensory-neural, conductive).
- 1.3 Concept of impairment, disability, handicap.
- 1.4 Classification of hearing impairment

**Unit 2: Basic Audiological evaluation**

**(10 hours)**

- 2.1 Sound, propagation of sound and parameters of sound
- 2.2 Overview to audiological evaluation
  - 2.2.1 Screening Vs. diagnostic tests
  - 2.2.2 Behavioral tests and objective tests
- 2.3 Types and degrees of hearing loss

**Unit 3: Speech perception tests**

**(12 hours)**

- 3.1 Definition and types of speech tests
- 3.2 Need for speech audiometry
- 3.3 Speech audiometry for different age groups
- 3.4 Speech audiometry application in rehabilitation of the hearing impaired

**Unit 4: Audiological test interpretation/referrals**

**(16 hours)**

- 4.1 Case reports and their interpretation
- 4.2 Referrals to be made based on results of audiological evaluation
- 4.3 Implication of type, degree, slope of audiogram & speech identification ability in the educational placement

**Unit 5: Classroom management**

**(16 hours)**

- 5.1 Setting up of a classroom for hearing impaired children:
  - 5.1.1 Classroom acoustics – S/N ratio, reverberation
  - 5.1.2 Lighting
  - 5.1.3 Class strength
  - 5.1.4 Ratio of hearing impaired children to normal hearing children
- 5.2 Modifications to be used to improve
  - 5.2.1 Classroom acoustics
  - 5.2.2 Visual cues in the class (Speech reading)
- 5.3 Adjustment of children with various degrees of loss in one group.

**Paper B.S.Ed. 2.2****24522: Aids and appliances in teaching hearing impaired****Objectives:**

After studying this paper, the student teachers are expected to realize the following objectives:

1. Understanding the function of hearing aids.
2. Understanding the use of hearing aids to compensate for the hearing impairment and development of language.
3. Devices / material for improving speech and language
4. Counseling the parents regarding the role of hearing aids in rehabilitation of the hearing impaired child.

**Course content:****Unit 1: Hearing aids****(14 hours)**

- 1.1. Need for hearing aids
- 1.2. Components, parts of a hearing aid, their functions.
- 1.3. Types of hearing aids, body worn, BTE, ITE, ITC, CIC.
- 1.4. Parameters for determining good quality hearing aids.
- 1.5. Concept of speech spectrum and implication in management.
- 1.6. Importance of ear molds, types of ear molds.
- 1.7. Use, care, maintenance and trouble shooting of hearing aids and molds

**Unit 2: Assistive listening devices (ALDs) to improve speech perception****(16 hours)**

- 2.1 Need for ALDs in classroom
- 2.2 Types of ALDs
  - 2.2.1 Individual vs. group amplification devices
  - 2.2.2 Auditory devices, visual devices, tactile devices
  - 2.2.3 Portable vs. non-portable devices
- 2.3 Advantages and disadvantages of different ALDs
- 2.4 ALDs to be used in classrooms
- 2.5 Guiding parents regarding use, care and maintenance of the ALDs

**Unit 3: Cochlear implants****(10 hours) 3.1**

- Parts and working of cochlear implants
- 3.2 Candidates for cochlear implants
- 3.3 Types of cochlear implants
- 3.4 Advantages and disadvantages of cochlear implants

**Unit 4: Devices to improve speech****(12 hours)**

- 4.1 Devices to improve articulation of specific speech sounds
- 4.2 Portable vs. non-portable devices
- 4.3 Advantage and disadvantage of each of the devices
- 4.4 Devices giving cues through the visual modality, tactile modality
- 4.5 Devices to improve articulation

**Unit 5: Devices to improve voice****(12 hours)**

- 5.1 Types of devices to improve voice quality
- 5.2 Types of devices to improve rhythm
- 5.3 Computer software to improve voice quality and rhythm



**Paper B.S.Ed.2.3**

**24523: Community studies of disability**

**Objectives:**

After studying this paper, the student teachers are expected to realize the following objectives:

1. Prevention and early identification of hearing and speech problems
2. Ways to prevent and identify speech and hearing problems
3. Ways in which hearing impairment can be identified
4. Multi-disciplinary approach in preventing, identifying & managing speech and hearing problems
5. Community based rehabilitation
6. Empowerment of different target groups
7. Use of media in community rehabilitation

**Course content:**

**Unit 1: Primary prevention of speech and hearing problems (12 hours)**

- 1.1 Definitions, epidemiology and classifications of hearing impairment and communication problems
- 1.2 Ear, hearing mechanism, role of hearing in education
- 1.3 Causes and prevention of hearing impairment and communication problems

**Unit 2: Early identification of speech and hearing problems (14 hours)**

- 2.1 Indications for identification, screening tests and checklists for early identification
- 2.2 Diagnostic tests and interpretation of results for hearing and communication problems
- 2.3 Multidisciplinary approach in prevention, identification and management
- 2.4 Role of each team member
- 2.5 Role of teachers in prevention, early identification and management

**Unit 3: Community based rehabilitation (14 hours)**

- 3.1 Role of Panchayat
- 3.2 Community services in India for the disabled
- 3.3 Schemes and projects for the welfare of the challenged
- 3.4 Convergence of community data
- 3.5 Role of teachers in community based rehabilitation programs

**Unit 4: Empowerment (12 hours)**

- 4.1 Community
- 4.2 Parents
- 4.3 Self-help groups
- 4.4 Others

**Unit 5: Media for community (12 hours)**

- 5.1 Different modes (print, radio, audio-visuals, word-of-mouth)
- 5.2 Strategies for community awareness
- 5.3 Effectiveness of each media for different target groups

**Paper B.S.Ed.2.4****24524: Computer applications in the education of hearing impaired****Objectives:**

After studying this paper, the student teachers are expected to realize the following objectives:

1. Know about the basics of computer
2. The use of computers
3. Use of computers in speech processing
4. Use of computers in teaching of speech, language and auditory learning

**Course content:****Unit 1: Fundamentals of Computers (12 hours)**

- 1.1. Block Diagram of a computer and its working
- 1.2. Hardware, memory devices and other peripherals
- 1.3. Operating system, languages, application soft-wares
- 1.4. Programs, Flow charts
- 1.5. Internet and networking of computers

**Unit 2: Fundamentals of digital signal processing and communication systems (10 hours)**

- 2.1 Analog and digital systems
- 2.2 Principles of digital signal processing
- 2.3 Fundamentals of communication systems

**Unit 3: Computer techniques of speech processing and analysis (10 hours)**

- 3.1 Voice response system
- 3.2 Speaker recognition system and speech recognition system
- 3.3 Speech synthesis methods

**Unit 4: Use of computers in (16 hours)**

- 4.1 Auditory learning activities
- 4.2 Prescription of hearing aids using computers
- 4.3 Teaching speech and language
- 4.4 Providing articulatory feedback using computers
- 4.5 Acquaintance with software packages used in speech and language teaching

**Unit 5: Teaching methodology papers to the hearing impaired (16 hours)**

- 5.1 Teaching social- sciences using computers
- 5.2 Teaching maths subjects using computers
- 5.3 Teaching art- subjects using computers
- 5.4 Knowledge of using computers in research/statistics



**Paper B.S.Ed.2.5**

**24525: Methodology in Aural Rehabilitation**

**Objectives:**

After studying this paper, the student teachers are expected to realize the following objectives:

1. Know about the various educational placements for hearing impaired children
2. Know the requirements of a hearing impaired child who is to be integrated
3. Uses of a resource room and resource room teacher
4. Use of auditory training, speech reading and communication strategies in helping the hearing impaired communicate

**Course content:**

**Unit 1: Educational placement for the hearing impairment (14 hours)**

- 1.1 Educational placements for the hearing impaired children
- 1.2 Advantages and disadvantages of different educational placements
- 1.3 Types/levels of inclusive education
- 1.4 Factors contributing to the success of inclusive education
- 1.5. Criteria, tests for inclusive education

**Unit 2: Resource room (10 hours)**

- 2.1 Need for resource room
- 2.2 Requirements of a resource room
- 2.1 Duties of a resource room teacher
- 2.2 Children who need to use the services of the resource room teacher

**Unit 3: Uni-sensory vs. multi-sensory approach (12 hours)**

- 3.1 Definition
- 3.2 Advantage and disadvantage
- 3.3 Types of uni-sensory approaches
- 3.4 Types of multi-sensory approaches

**Unit 4: Auditory oral approach (14 hours)**

- 4.1 Terminological variations of auditory oral approaches
- 4.2 Pre-requisites for auditory training
- 4.3 Auditory training methods
- 4.4 Use of acoustics of speech during auditory training
- 4.5 Importance of auditory training in the comprehension of spoken language.

**Unit 5: Speech reading and Communication strategies (14 hours)**

- 5.1 Definition and need
- 5.2 Factors influencing speech reading
- 5.3 Candidates for speech reading
- 5.4 Methods of teaching speech reading
- 5.5 Anticipatory strategies
- 5.6 Repair strategies



**Paper B.S.Ed 2.6**

**SB 060: Teaching Practice with the Hearing Impaired - Practicum**

**Objectives:**

After undergoing this practical training program, the student teachers are expected to realize the following objectives:

1. Use of different approaches used in training the hearing impaired while teaching methodology papers
2. Teach methodology papers in integrated schools
3. Teach methodology papers in special schools
4. Use innovative measures that will maximize learning by the hearing impaired

**Course content:**

**Teaching of methodology papers to the hearing impaired using:**

**(64 hours)**

1. Natural method in teaching the hearing impaired
2. Different structured approaches
3. Additional sensory cues including speech-reading
4. Auditory learning activities
5. Communication strategies
6. Optimizing auditory reception of speech
7. Optimizing visual reception of speech
8. Uses of different devices to enhance reception of speech



**B.S.Ed. 2.7 Clinical Practicum – II**  
**SB 080: Speech & Hearing**

Course content:

**I. Speech: (80 hours)**

1. Preparing lesson plan for teaching specific class lessons
2. Making appropriate referrals for speech and language training
3. Practical training in government and non-government set-ups
4. Determine choice of educational placement of hearing impaired children
5. Visit to DRC and CBR programs, conducting survey in one of the schools /extension regarding the incidence and prevalence of communication disorders & submitting report

**II. Hearing: (80 hours)**

1. Determining necessity for referral for audiological evaluation and/or rehabilitation
2. Care of hearing aids and earmolds
3. Care of ALDs used in classroom situations
4. Trouble shooting hearing aids
5. Trouble shooting ALDs
6. Making necessary modifications in a classroom to optimize auditory & visual reception of speech
7. Use of auditory-verbal approach with the hearing impaired children
8. Use of speech reading with the hearing impaired children





## REFERENCES I SEMESTER

### 24501: NATURE & NEEDS OF VARIOUS DISABILITIES – AN INTRODUCTION

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