BANARAS HINDU UNIVERSITY. FACULTY OF EDUCATION (K)

Ordinances for the Degree of Bachelor of Education (Special) in H.I., M.R. & V.I. of BANARAS HINDU UNIVERSITY

NAME OF THE COURSE: Bachelor of Education (Special)-H.I. or M.R. or V. I. abbreviated as B.Ed. (Special)-H.I.or M. R. or V. I.

1. NATURE AND PURPOSE OF THE COURSE:

The degree course is meant for preparing teachers for teaching special needs children, such as, children with Hearing Impairment/Mental Retardation/Visual Impairment who are studying in Special Schools or in the General Schools under integrating setting.

The B.Ed.(Special Education) programme aims to develop professionals for general as well as special education within a broad perception of education in the current millennium. The B.Ed.(Special Education) course will educate and train human resources to enable them to acquire knowledge and develop competencies and skills to impart education and training effectively to all children including children with special needs.

The B.Ed.(Special) Degree shall be awarded to candidates on successful completion of one academic year course in any one of the three areas of study, viz., Hearing Impairment/Mental Retardation/Visual Impairment in the Faculty of Education of the Banaras Hindu University.

2. <u>COURSE OBJECTIVES:</u>

The course purports to realize the following objectives:

- (i) To enable the prospective teachers to acquire knowledge and understanding about different areas of disabilities (Mental Retardation, Visual Impairment, Hearing Impairment).
- (ii) To enable the prospective teachers to design curriculum and plan educational program suited to the various needs of the special children.
- (iii) To enable prospective teachers to acquire working knowledge and basic skills of assessment of the disability for planning an educational program.
- (iv) To develop in the prospective teachers positive attitude towards educational needs of the disabled and commitment to the cause.
- (v) To enable the prospective teachers to acquire the ability to counsel the disabled students under their case.
- (vi) To acquaint the prospective teachers with equipments and aids for education of the disabled.
- (vii) To develop skills and competence in the Personal Professional and Social Competencies and skills required in teachers.
- (viii) To enable the prospective teachers to acquire educational and communication related potentials of children with disabilities.
- (ix) To develop skills and competencies in the individuals and group parent interaction.
- (x) To develop skills and competencies to cater to the need of children in general, and children with special needs in particular, in cognitive, affective and skill domains in various settings.
- (xi) To acquire knowledge about change in the prevailing and emerging Indian Society in view of recent trends in education and national development.
- (xii) To equip in various techniques of teaching and evaluation in special and inclusive setting.
- (xiii) To perceive the special needs of children and develop confidence in them to realize their potentials and abilities to meet the national development with self respect, dignity and freedom.

3. <u>ELIGIBILITY</u>

A. B.Ed.(Spl.) [Bachelor of Education Special]: (1-Year)

(a) Graduate under at least 10+2+3 pattern [including Shastri] with a minimum of 50% marks in the aggregate in all the subjects in three years. The applicant must have at least one School subject* at the graduation level.

OR

(b) M.A./M.Sc./M.Com./Acharya securing 50% marks in the aggregate. The applicant must have at least one school subject* at the graduation or post-graduation level.

*The School subjects are: Hindi, Sanskrit, English, Science (Physics and/or Chemistry), Biology (Zoology and/or Botany), Mathematics, Economics,

Commerce, History (or AIHC & Arch.), Geography, Political Science (for Civics), Home Science.

NOTE: This is a Teacher Education Programme for preparing teachers for teaching special needs children such as Children with Hearing Impairment, Mental Retardation and Visual Impairment, etc. However, at present Faculty will run three specialties, viz., Hearing Impairment, Mental Retardation and Visual Impairment, Mental Retardation and Visual Impairment.

B. Admission shall be made through entrance test merit list.

4. DURATION OF THE COURSE

This is a full time course of one academic year.

5. PLACEMENT

After the completion of the B.Ed.(Special) course either in H.I. or M.R. or V.I. the degree holder can serve as teachers in special schools as well as in inclusive setting as generalists.

6. MEDIUM OF INSTRUCTION

Medium of instruction shall be Hindi or English

7. <u>NUMBER OF SEATS</u>

There will three specializations, namely, B.Ed.(Special-Hearing Impairment), B.Ed.(Special-Mental Retardation), B.Ed.(Special-Visual Impairment). **No. of seats:**

Faculty of Education-(Male and/or Female):--Hearing Impairment: 22

Mental Retardation : 22

Visual Impairment : 22

8. ATTENDANCE

Attendance requirement will be *as per University rules*.

9. <u>LEAVE</u>

A trainee, who has been awarded stipend (Presently available for Visual Impairment stream only), will be permitted a maximum of 15 days leave during the session. If he/she leaves the course in the middle of the session he/she will have to refund the stipend or Pecuniary assistance availed by him/her till date.

10. <u>GENERAL FRAMEWORK OF THE COURSE AND SCHEME OF THE EXAMINATION</u>

The B.Ed. (Special) education course consists of Theory Papers and practice of teaching including practicum/sessional as per the following scheme.

THEORY

(I)	Core Papers	-	4
(ii)	Specialization Papers	-	3
(iii)	Methodology Papers	-	2
	PRACTICAL		
(i)	Practice of Teaching		

(ii) Practicum

A. <u>THEORY</u>

1. There shall be following <u>Four Core Papers</u> for all the candidates offering B.Ed.(Special), viz. :

Paper I	- Nature and Needs of Various disabilities	65 Marks
	– An Introduction.	
Paper II	- Education in Emerging Indian Societies	65 Marks
Paper III	- Educational Psychology and Persons	65 Marks
	with disabilities.	
Panor IV	Educational Planning and Management	65 Marks

Paper IV- Educational Planning and Management65 MarksCurriculum designing and Research

Paper V, VI & VII: In addition to the above Four Papers each student will have to specialize in one of the following areas. Each area divided in three papers $-70 \times 3 = 210$ Marks.

- (i) Hearing Impaired
- *(ii) Mental Retardation*
- (iii) Visually Impaired

Paper VIII & IX: Two methodology papers either from Group A or B :

	<u> Paper – VIII</u>	<u> Paper - IX</u>	
Group A	: 1. Language	2. Social Science	65 x 2 = 130 Marks
Group B	: 1. Science	2. Mathematics	
-			Total : 600 Marks

The Practical Work will be as follows:

B. <u>PRACTICE TEACHING</u>

1. Observation of classroom and special schools	-	20 Marks
2. Lesson Planning and Teaching in two subjects:		
a) Teaching practice in subjects : 75		
b) Teaching aids : 25	-	100 Marks
3. Two Final Lessons	-	200 Marks
4. Microteaching and simulated teaching	-	20 Marks
5. Individualized Educational Programme/Case Study	-	20 Marks

C. **PRACTICUM/SESSIONAL WORK**

<u>Hearing Impairment Group (Details given at the en</u>	d of Pc	aper VII)
1. Language skills (Internal Assessment & Viva)	-	40 Marks
2. Audiology (do)	-	40 Marks
3. Speech & Speech Teaching (do)	-	40 Marks
4. Psychology Practical	-	40 Marks
5. Organizing co-curricular activities* e.g. Games	-	40 Marks
Sports, Cultural activities		
6. Excursion	-	40 Marks

<u>Mental Retardation Group</u> (Details given at the end of Paper VII)

	Skill training in M.R. & additional disabilities Practical Training in CCA (Yoga, Music, Dance Games, Art & craft, recreation and leisure)	-	40 Marks 40 Marks
	Preparation of learning aids	-	40 Marks
	Organization of resource room Organizing co-curricular activities*, e.g., Sports,	-	40 Marks 40 Marks
6.	different cultural activities Excursion	-	40 Marks

<u>Visual Impairment Group</u>(Details given at the end of Paper VII)

1. Braille Proficiency (Hindi and English)	-	40 Marks
2. Orientation and Mobility Training	-	40 Marks
3. Aids & Appliances, Preparation T. L. M.	-	40 Marks
4. Activities of daily living skills, reading	-	40 Marks
readiness material		
5. Organizing co-curricular activities*, e.g., Games	-	40 Marks
Sports, Cultural activities		
6. Excursion	-	40 Marks

*Note: Morning assembly, gardening & Shramdan will be the integral part of co-curricular activities.

D.

(i) Every student shall teach at least 40 lessons in the two subjects chosen under 10(A): Group A or B in a class in subjects comprising the primary/high school/higher secondary course. The student will maintain a record of his/her lesson in a record book.

He/She shall observe lessons given by teachers in his/her Faculty/College as well as by teachers in the practicing schools and shall maintain a record of the same.

The supervisor in-charge shall recommend marks under 10(B) (2) out of 100 on the basis of (i) supervision during the entire practice of teaching as well as on the basis of two criticism lessons observed, one in each subject, (ii)preparation and use of teaching aids. The report and the marks shall be submitted by the teachers of the Department to the Dean who will place the same before the panel.

- (ii) Marks out of 200 will be awarded by at least two external examiners and one internal examiner after practice of teaching examination.
- (iii) The candidate shall maintain records of the practical activities in **10B.1,2,4,5** and **10C.1to 6** and marks will be awarded by the Panel/Panels of Examiners(as it will be appointed by the Board of Examination) which will consist of teachers from the Faculty. The marks for practice teaching will be put up to this panel, which will award the final marks after consulting the supervising teachers and/or teacher in-charges.

(iv)A candidate shall apply for appearing in the examination to the Dean/Principal in such a form as may be prescribed. His/Her application and Fee shall be dispatched through the prescribed channel so as to reach the Controller of Examinations at least six weeks before the commencement of the examination.

11. PASSING PERCENTAGE

The marks for passing the course will be 25% or above in individual paper and 36% in aggregate separately in Theory and Practice. Division in Theory and Practice of Teaching will be given separately.

12. CLASSIFICATION OF RESULTS

- 1. The examination at the end of the course will be by papers in the case of theory, and by practical examination in the case of practicals.
- 2. The candidate will be placed in division on the basis of marks as follows in **theory** and **Practical**, separately.

60% and above	-	I Division
50% and above but below 60%	-	II Division
36% and above but below 50%	-	III Division

All those getting marks below 25% in each paper and below 36% in the aggregate will be declared as failed.

The Practical examinations in teaching and other activities will be held after completion of the practice of teaching in all the aspects.

13. <u>RE-APPEARANCE AT THE EXAMINATION</u>

A candidate who at his/her last appearance at the B.Ed. (Special) examination failed, or failed to complete the practicals shall be allowed to appear in the Practical Examination in the following year after undertaking all the activities listed under these papers(practicum/sessional marks, if submitted by panel of examiners, will be carried forward). A candidate who failed or failed to appear at the B.Ed. (Special) theory examination, shall be allowed to appear in B.Ed. (Special) theory examination as an ex-student in the following year only.

Those students whose attendance were 25% and above and failed to take examination in that year be given re-admission only once without going through the process of Entrance Test. However, this should not affect the intake of fresh students in respective courses on the basis of seats available for that particular year.

If a candidate fails to appear in one paper for cogent reasons or fails in one paper, he will be allowed to appear in the ensuing supplementary examination only once.

14. DEFINITIONS

- 1. A *"Regular student"* is one who was pursued a regular course of study and obtained prescribed attendance mentioned herewith and is eligible to appear in the examination for the aforesaid course.
- 2. *"Ex-Student"* means one who has read in the Faculty for at least one academic year preceding the date of the annual examination and has filled up the examination form, but failed or failed to appear in that examination, though otherwise eligible.

B.Ed.(special) Degree Course

Paper I

Nature and Needs of Various Disabilities - An Introduction

Objectives:

After completing this paper the student teachers are expected to realize the following

- 1. The Student teacher is expected to acquire a basic knowledge and basic concept of disability.
- 2. To develop understanding of different categories and characteristics of disabilities.
- 3. Know the relating factors of prevention, detection and early intervention for blindness, hearing impairment, mental retardation, leprosy cured, neurological disorder, learning disorder, autism, etc.
- 4. Describe the associated disabilities.

Course content:

Unit 1: Blindness and Low Vision

- 1.1 Definition and Identification
- 1.2 Incidence and Prevalence
- 1.3 Characteristics
- 1.4 Causes and Prevention
- 1.5 Intervention and Educational Programmes

Unit 2: Hearing Impairment

- 2.1 Definition and Identification
- 2.2 Incidence and Prevalence
- 2.3 Causes and Prevention
- 2.4 Types of Hearing Loss and Characteristics
- 2.5 Intervention, Communication and Educational Programmes

10 Hours

Unit 3: Mental Retardation

- 3.1 Definition and Identification of Mental Retardation and Mental Illness
- 3.2 Incidence and Prevalence, Causes and Prevention
- 3.3 Characteristics Mild, Moderate, Severe, Profound
- 3.4 Types and Classification of Mental Retardation
- 3.5 Intervention and Educational Programmes

Unit 4: Leprosy Cured, Neurological and Locomotor Disabilities 10 Hours

- 4.1 Definition and Classification
- 4.2 Incidence and Prevalence
- 4.3 Causes and Prevention
- 4.4 Types, Classification and Characteristics
- 4.5 Intervention and Educational programmes

Unit 5: Learning Disabilities, Autism and other Associated Disorders 10 Hours

- 5.1 Definition and Identification of Learning Disabilities.Autism and other associated disorders.
- 5.2 Incidence and Prevalence
- 5.3 Causes and Prevention
- 5.4 Types and Characteristics
- 5.5 Intervention and Educational Programmes

Unit 6: Multiple Disabilities

- 6.1 Identification of Deaf-Blind, Deaf-M.R., Cerebral Palsy and associated disorder, epilepsy, behavioural disorders, Attention Deficit Hyperactivity Disorders (ADHD).
- 6.2 Characteristics
- 6.3 Causes and Prevention
- 6.4 Intervention and Educational Programmes

Paper II **Education in Emerging Indian Society**

Objectives

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

- 1. Explain the history, nature, process and philosophy of education.
- 2. Spell out the aims and functions of education in general and special education in particular.
- 3. Know the contemporary trends in special education.
- 4. Discuss the various roles of educational agencies in India.
- 5. Analyze the role of educational system in the context of Modern Ethos like democracy, socialism and secularism.

Course Content 10 Hours Unit 1: History, Nature, Process and Philosophy of Education

- 1.1 Definition and Meaning of Education
- 1.2 Overview of Philosophies of Education
- 1.3 Aims of Education and Special Education
- 1.4 Functions of Education
- 1.5 Role of Teacher and Special Teacher.

Unit 2: Education and Various Commissions

- Principle of education and special education. 2.1
- 2.2 Aims, objectives and functions of special education.
- 2.3 Recent trends in Indian Education and special education.
- 2.4 National Policy on Education including Special Education.

Unit 3: Education in the Social Context

- 3.1 Formal, Informal and Non-formal Education.
- 3.2 Functional literacy, continuous and Life Long Education.
- 3.3 Community Based Education.
- 3.4 Open Learning, Distance Education with reference to General and Special Education.
- 3.5 Value-Oriented Education.

10 Hours

Unit 4: Educational Agencies for the National Development

- 4.1 Role of home, school, society and mass media.
- 4.2 Role of Governmental and non-governmental agencies in general and special education. Such as NCERT, SCERT, RCI, NCTE and National Institutes for Handicapped, UN Organizations and International Non-Governmental Organizations (INGOs) such as UNICEF, UNESCO, WHO.
- 4.3 Concessions and facilities for the disabled.
- 4.4 Govt. Policies, Acts and Schemes such as NPE 1986, POA 1992, RCI Act 1992, IEDC Scheme 1992, PD Act 1995, National Trust Act 1999.

Unit 5: Education and the Modern Ethos

- 5.1 Democracy, socialism and secularism.
- 5.2 Constitutional provisions in human rights.
- 5.3 Equalization of educational opportunities.
- 5.4 Education and human resource development.
- 5.5 Environmental Education

Unit 6: Emerging trends in Special Education

- 6.1 Concept of impairment, disability and handicap and their implications.
- 6.2 Normalization principles, concept & types process of integration and inclusion.
- 6.3 Nature of disabilities and its impact on the person with disability.
- 6.4 Community awareness of special education, and Future of integrated education and inclusive education.

10 Hours

10 Hours

Paper III Educational Psychology and Persons with Disabilities

Objectives

After completing the course the student teachers are expected to realize the following objectives.

- 1. Discuss the concepts and principles of growth and development.
- 2. Describe the various theories of learning and their implications to the disabled.
- 3. Explain the concepts of intelligence and aptitude in general and with specific reference to the disabled.
- 4. Spell out the meaning and concept of personality and mental health and their implications to the disabled.
- 5. Define the meaning and techniques of guidance and counselling in general and with special reference to the disabled.

Course Content

Unit 1: Introduction to Psychology

1.1 Definition, Nature and Concept of Educational Psychology.

- 1.2 Educational psychology: scope and relevance to general education.
- 1.3 Its' Role in special education.
- 1.4 Motivation, Attention and perception with its application in education.
- 1.5 Implications of the above with regard to specific disabilities.

Unit 2: Growth and Development

- 2.1 Concept, Principles of Growth and Development, Maturation and Learning.
- 2.2 Hereditary factors including genetic and chromosomal. Environmental factors including effects of malnutrition, iron-deficiency, iodine-deficiency, trauma, stress, hypoxia, infectious-diseases and socio-cultural deprivation.
- 2.3 Stages of Development with reference to children with disabilities.

Unit 3: Learning

- 3.1 Definition and meaning of learning.
- 3.2 Learning Domains and factors affecting learning.
- 3.3 Theories of learning (classical and operant conditioning, trial and error and gestalt) with reference to special need children and their application in special education an overview.
- 3.4 Remembering, forgetting and transfer of learning.

12

10 Hours

10 Hours

Unit 4: Intelligence and Aptitude

10 Hours

- 4.1 Definition and meaning of intelligence and aptitude.
- 4.2 Test of intelligence and aptitude.
- 4.3 Individual differences and their implications in education.
- 4.4 Implications of the above with regard to various disabilities.

Unit 5: Personality

10 Hours

- 5.1 Definition, Meaning and dimensions of personality.
- 5.2 Theories of personality (Type and Trait) an overview and assessment
- 5.3 Frustration and conflict, adjustment mechanisms and behaviour deviations,
- 5.4 Mental health
- 5.5 Impact of various disabilities on personality an overview

Unit 6: Guidance and Counseling

- 6.1 Nature, meaning and scope of guidance and counseling.
- 6.2 Role of home and school in guidance and counseling.
- 6.3 Techniques of guidance and counseling with reference to various disabilities.
- 6.4 Vocational Guidance assessment, training, avenues and perspectives.
- 6.5 Individual problems and stress management through counseling and Yoga.

Paper IV Educational Planning and Management, Curriculum Designing and Research

Objectives

After completing the course the student teachers will be able to :

- 1. Discuss the meaning, need and scope of educational management.
- 2. Define the concept and meaning of curriculum and instructional strategies.
- 3. Explain the concept, meaning, scope and types of educational technology.
- 4. Describe the need and scope of educational research.
- 5. Discuss the meaning, scope and types of educational evaluation.

Course Content

Unit 1: Educational Management

10 Hours

- 1.1 Definition, Meaning, Need, Scope of Educational Management.
- Concept and Principles of Institutional Planning and Management, Admission, School Plant Classification, Provisions.
- 1.3 Inspection and supervision.
- 1.4 Institutional Organization, Administration and Evaluation.
- 1.5 Types of Leadership and Organizational Climate.

Unit 2: Curriculum

10 Hours

10 Hours

- 2.1 Definition, Meaning and Principles of Curriculum,
- 2.2 Principles of curriculum construction.
- 2.3 Curriculum planning, implementation and evaluation.
- 2.4 Role of the teacher in curriculum construction, implementation and evaluation.
- 2.5 Curriculum planning and evaluation for various disabilities and meaning, importance and types of co-curricular activities.

Unit 3: Instructional Strategies

- 3.1 Theories of instruction Burner, Gagne and Skinner.
- 3.2 Approaches to instruction cognitive, behavioural, and eclectic.
- 3.3 Design instruction macro design.
- 3.4 Organizing individual, peer, small group, large group instructions.
- 3.5 Teaching materials aids and appliances, other equipment development.

Unit 4: Educational Technology

- 4.1 Definition, meaning and scope of educational technology and Information Communication Technology and its impact on education.
- 4.2 Role and types of audio-visual aids in teaching and application of multi media in teaching and learning
- 4.3 Individualized instruction Programmed instruction, computer assisted instruction and interactive learning.
- 4.4 Environmental modifications and use of assistive technology for persons with Disabilities and barrier free environment.

Unit 5: Educational Research

- 5.1 Definition, Need and scope of educational research
- 5.2 Principles of Research in Education.
- 5.3 Problems faced in educational research, Sources of Research Problems,
- 5.4 Types of research designs in educational research.
- 5.5 Overview of research studies in special education in India.

Unit 6: Educational Evaluation

- 6.1 Definition, Meaning, scope and types of evaluation.
- 6.2 Various types of tests.
- 6.3 Characteristics of a good test
- 6.4 Descriptive statistics, measures of central tendencies (Mean, Median, Mode);Standard Deviation, Quartile Deviations.
- 6.5 Construction of different graphs & diagrams and rank order correlation.

10 Hours

Specializations: <u>HEARING IMPAIRMENT</u>

Paper V

Facilitating Language, Communication Development in Children with Hearing Impairement

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 understand various types of assessments of Language.

Course content

Unit 1: Communication and Language - Definition and Scope

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

Unit 2: Methods and Techniques

12 Hrs.

12 Hrs.

2.1 Modes of Communication

(a) Oralism

-Oral, Aural, Oral-Aural, Auditory verbal Therapy (AVT)

(b) Manualism

-Manual – sign language (ASL, BSL, ISL), Indian signing system, cued

speech, finger spelling.

(c) -Total communication.

(d) –Bilingualism

2.2 Methods of teaching language to the Hearing Impaired

a) Natural method - Montessori, Frobel

b) Structural method - Concept, Importance,

Developing vocabulary and grammar.

c) Combined Method - Maternal Reflective method

- 2.3 Special techniques of teaching language to the Hearing Impaired through a) News/Conversation
 b) Story telling
 c) Directed activity
 d) Visit
 e) Free play
 f) Picture comprehension
 - g) Dramatization h) Poems/Rhymes i) Unseen Passages
- 2.4 Teaching of texts and poetry for all levels and high school
- 2.5 Teaching grammar through conversational method and teaching formal grammar at all levels.

Unit 3: Role of Functionaries

12 Hrs.

- 3.1 Impact of early identification and Intervention of hearing impairment for language development and the role of parents and other family members in it
- 3.2 Importance of parent guidance, counseling and Home-training
- 3.3 Sociological implications Attitude of siblings, peers, parents, teachers and community
- 3.4 Teachers role in Inclusion and community awareness programmes

Unit 4: Reading and Writing

12 Hrs.

4.1 Development of Motor coordination,

- visual perception and Auditory Perception.

- 4.2 Reading readiness and sight vocabulary
- 4.3 Development of Reading,
 - a) Goals and Importance of Reading,
 - b) Classification of Reading -

b.1) According to goal - (Functional, Recreational, Remedial and Developmental.)

b.2) According to Method - (Loud Reading, Silent Reading).

c) Methods of Teaching, Reading - Traditional and Recent Methods.

- 4.4 Development of writing
 - a. Prewriting skill development
 - b. Goals and Importance of writing
 - c. Development of writing (look and write, listen and write, see and write, writing with proper speed and comprehensive and spontaneous writing)

Unit 5: Assessment of Language

- 5.1 Meaning and types of assessments(Formal & Informal, Test and their selection)
- 5.2 Standardized language test meaning scope and Indian Test.
- 5.3 Classroom assessment techniques.
- 5.3.1 Knowledge based, language based.
- 5.3.2 Open ended/close ended
- 5.3.3 Direct/Indirect

PAPER VI

AUDIOLOGY AND AURAL REHABILITATION

Objectives

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

- 1. Describing the Anatomy and Physiology of the ear. Assessing the hearing capability of an individual.
- 2. Operating an Audiometer and assessing the hearing loss in adults, infants and children.
- 3. Hearing Impairment and its classification.
- 4. Understanding the function of hearing aids. Amplification devices and their optimum utilization.
- 5. Understanding the use, handle & maintenance of different types of hearing aids to compensate for the hearing impairment and development of language.
- 6. Counseling the parents regarding the role of hearing aids in rehabilitation of the hearing impaired child.
- 7. Audiogram interpretation for the purpose of educational planning and management.
- 8. Observing and documenting auditory behaviour/responses.
- 9. Knowledge and importance of auditory training for spoken languages.

Course content

Unit 1: Hearing Mechanism

- 1.1 Basic Anatomy and Physiology of hearing mechanism, outer, middle and inner ear.
- 1.2 Definitions terminologies used for hearing Impairment (deaf, pre-lingual, postlingual)
- Concept of impairment, disability & handicap with reference to Hearing Impairment.
- 1.4 Hearing loss prenatal, perinatal, postnatal causes, types of hearing loss, prevention of hearing loss.
- 1.5 Early identification of hearing loss its importance, tests (subjective and objective) and other methods available.

Unit 2: Audiometry

12 Hrs.

12 Hrs.

12 Hrs.

12 Hrs.

- 2.1 Sound, propagation of sound and parameters of sound zero dB reference for pressure and power
- 2.2 Puretone Audiometry and Speech audiometry, use of masking _parts and use of audiometers
- 2.3 Free field audiometry, aided and unaided audiograms
- 2.4 Interpretation of audiogram, concept of speech banana, basic and educational implications
- 2.5 Case reports and their interpretation

Unit 3: Amplification Devices and Strategies

- 3.1 Parts of a hearing aid, their functions
- 3.2 Types of hearing aids, Body worn, (B.T.E., in the year Spectacle/glass and Parameters for determining good quality of Hearing aids.
- 3.3 Importance of ear moulds, Types of ear moulds.
- 3.4 Recent Development in Amplification Devices as Cochlear Implant.
- 3.5 Training parents regarding use and care and maintenance of hearing aids and moulds

Unit 4: Classroom Management

- 4.1 Setting up of a acoustics classroom for hearing impaired children.
- 4.2 Adjustment of children with various degrees of loss in one group.
- 4.3 Classroom amplification devices, hard-wire system, induction Loop system,FM system, infrared system, speech trainer.
- 4.4 Care and Maintenance of all group hearing aid systems
- 4.5 Comparison between group hearing aid systems and individual hearing aids

Unit 5: Auditory Training

- 5.1 Definition, meaning and scope, 7 sound test.
- 5.2 Stages of Auditory Training-Detection, discrimination, identification, comprehension.
- 5.3 Use of gross sounds, environmental sounds.
- 5.4 Discrimination between speech sounds, loudness, stress and temporal factors like rhythm and pauses.
- 5.5 Importance of Auditory training.

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PAPER VII INTRODUCTION TO SPEECH AND SPEECH TEACHING TO THE HEARING IMPAIRED

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 speech.
- 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. Identifying parameters of speech in children with hearing impairment.
- 5. Identifying and classifying speech problem in children with hearing impairment.
- 6. To acquaint the student teacher with methods of correcting the disorders in the Speech of the Hearing Impaired, individually and in the classroom.
- 7. Planning and execution of various approaches and techniques to teach speech in the classroom.
- 8. Optimum utilization of aids and appliances for speech to hearing impairment.

Course content: Unit 1 Speech Mechanism

- 1.1 Definition and functions of Speech
- 1.2 Anatomy and Physiology of the Respiratory, Phonatory and Resonatory and Articulatory systems.
- 1.3 Speech as an overlaid function.
- 1.4 Mechanism of breathing, breathing for speech.
- 1.5 Prerequisites for the production of speech.

Unit 2: Normal Speech - Production and Reception

- 2.1 Characteristics of Speech, Speech Intelligibility.
- 2.2 Parameters of speech.
- 2.3 Non-segmental and Supra-segmental aspects of speech (Voice, duration, pitch, loudness, quality, rhythm, rate, intonation, stress, accent, phrasing, pause)
- 2.4 Multi-sensory speech reception, hearing and vision, hearing and touch, vision and touch.

12 Hrs.

12. Hrs.

Unit 3: Phonetics

12 Hrs.

- 3.1 Description of Speech sounds
- 3.2 Definition of Phonetics
- 3.3 Classification of Speech sounds (Vowels, Consonants and Diphthongs)
- 3.4 Introduction to I.P.A. with reference to phonemes of Regional languages
- 3.5 Relevance of Phonetics in the correction of Speech of Hearing Impaired children

Unit 4: Speech Perception, Production and Evaluation12 Hrs.

- 4.1 Perception of Speech with and without Hearing Aid. 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 or supra-segmental)
- 4.3 Assessment of voice vocalization, duration, loudness, pitch and voice quality
- 4.4 Assessment of speech sounds vowels, consonants, diphthongs,
- 4.5 Planning for correction of the disorders detected. (Lesson Plan)

Unit 5: Remedial Measures

5.1 Models of speech teaching (developmental and correctional)

- 5.2 Stages of speech teaching developed by Dr. Ling.
- 5.3 Consonant and vowel correction Place, manner and voicing.
- 5.4 Use of uni-sensory approach and multi-sensory approach and electronic visual, tactile aids for correction of speech
- 5.5 Individual speech teaching and classroom speech teaching activities.

Practicum (*Hearing Impairment*)

I. Education

- 1. Case study, educational assessment and programme planning (IEP) for one child with hearing impairment to be done by each teacher trainee.
- 2. Observation of ten schools for all the disabilities and report writing, The School settings may be further divided as follows:
 - (a) Integrated School for the Deaf 2
 - (b) Integrated School for the Blind 1
 - (c) Integrated School for the Mentally Handicapped 1
 - (d) Special School for the Deaf 2
 - (e) Special School for the Blind 2
 - (f) Special School for the Mentally Handicapped 2
- 3. Observation and Report Writing of five institutes / organizations. The organization setting may be further divided as follows:
 - (a) National Institute 1
 - (b) Government Organizations 2
 - (c) Non-Government Organizations 2
- Observation and Report Writing of five class room teaching periods in each Special and Integrated School
- 5. Organization on different modes of communication
 - (a) One handed finger spelling (English and Regional Language)
 - (b) Two handed finger spelling
 - (c) Common gestures/signs
 - (d) Practice of total communication (Indian Signing System).

The trainee teachers may be exposed to four sessions of two hours duration for the above purpose.

- 6. Teaching practice in special and integrated schools. The detailed plan could be as follows
 - (a) Micro teaching 5 periods per trainee teacher
 - (b) Classroom teaching 20 language lessons and preparation of language lesson plans
 - (c) Classroom teaching 20 methodology lessons and lesson plan books (the methodology should correspond to the subjects taken at the under graduate level)

II. Audiology — Practical

- 1. (a) Parts and Functions of Audiometer
 - (b) Audiometry testing interpretation 5
 - (c) Use and maintenance of Hearing Aids
 - (d) Use and maintenance of
 - (i) Group hearing aid
 - (ii) Loop induction system
 - (e) Ear Moulds: Preparation of Ear moulds
- 2. Auditory training 5 lessons

III. Psychology Practicals

Administration and interpretation of relevant psychological tests and intelligence tests.

IV. Speech Practical

Speech evaluation and correction and materials for assessment (speech, language and articulation books) lesson plan and progress reports for speech correction -5 lessons.

Space, Devices and Material Required

Space Required

1.	Principal's Office	12'x 15'
2.	One well equipped sound-treated room	12' x 15'
3.	One classroom for demonstrations etc. (fitted with	
	Group Hearing Aids System & other equipments)	15' x 20'

4. One room for Ear Mould Lab and repair of Hearing Aids

Aids and Appliances Required

- 1. Portable Audiometer
- 2. Diagnostic Audiometer
- 3. Speech Trainer
- 4. Tape Recorder and Cassettes
- 5. Clinical Psychology test material
 - a. Bhatia's Battery Performance Test
 - b. Binet-Kamath's Test of Intelligence
 - c. Seguin Form Board
 - d. Draw-A-Man Test
 - e. Denver's Developmental Screening Test
 - f. Chatterjee's Non-Language Preference Record
 - g. Benton's Visual Retention Test
 - h. Minnesota Multi-phasic Personality Inventory
- 6. Mirrors 4
- 7. Toys and Play Material
- 8. Ear Model and Larynx Model

SPECIALIZATIONS: (Mental Retardation)

PAPER V

IDENTIFICATION AND ASSESSMENT OF PERSONS WITH MENTAL RETARDATION

Objectives

60 Hrs.

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

- 1. Define mental retardation and its characteristics and classifications
- 2. To acquaint them with factors that cause mental retardation and their identification.
- 3. To train them with the necessary skills and competence to organize and manage classroom activities for mentally retarded children.
- 4. To train them in the techniques of rehabilitation of mentally retarded children.
- 5. Comprehend the nature, and needs of persons with mental retardation, historical perspectives, causes prevention, screening and identification.
- 6. Describe various assessment procedures, assessment tools and evaluation techniques.
- 7. Analyze the psycho-social implications of mental retardation.
- 8. Relate psycho-social implications appropriate to the issues pertaining to family and community.

COURSE CONTENT

Unit 1: Mental Retardation – Nature, needs and identifications 10 Hrs.

- 1.1 Historical perspective of the concept of mental retardation.
- 1.2 Definition of mental retardation AAMR, WHO (ICD), incidence and prevalence.
- 1.3 Classification of mental retardation medical, educational psychological and characteristics.
- 1.4 Screening and identification of mental retardation in pre-natal, infancy, childhood, adolescence and adulthood.
- 1.5 Causes and Prevention; Pre-conceptional, pre-natal, perinatal and postnatal.

Unit 2 : Additional impairments

- 2.1 Introduction to associated conditions and education implications
- 2.2 Sensory impairment – vision, hearing.
- 2.3 Motor impairments – cerebral palsy, congenital deformities, muscular dysfunction.
- 2.4 Epilepsy
- 2.5 Emotional disorders and Autism.

Unit 3: Assessment and Evaluation

- 3.1 Definition of assessment and evaluation, concept scope.
- 3.2 Continuous and periodic assessment, formative and summative evaluation.
- 3.3 Types of assessment – psychological, educational behavioral and clinical assessment for varied ages and severity levels.
- Norm Reference Test (NRT) and Criterion Reference Test (CRT) and 3.4 curriculum based assessment.
- 3.5 Interpretation of assessment results and programme.

Unit 4: Assessment of Adaptive Behaviour

- 4.1 Tools for assessment of Adaptive Behaviour
- 4.2 Assessment tools with reference to Indian context
- 4.3 Assessment of adaptive and mal adaptive behaviour
- 4.4 Documentation and recording.
- 4.5 Evaluation

Unit 5: Mental Retardation – Social Perspective

- Differences between Mental Retardation and Mental Illness 5.1
- Mental retardation and its Psycho-social aspects sexual problems / 5.2 exploitation, delinquency, Child Labour, child abuse, rights and advocacy.
- 5.3 Misconceptions and social practices
- 5.4 Constitutional provisions and their implications.
- 5.5 Legislation relating to services for mentally retarded children, schemes and benefits provided by Government.

10 Hrs.

10 Hrs.

10 Hrs.

Unit 6: Working with parents, Family and Community

- 6.1 Impact on parents and parental attitudes.
- 6.2 Guidance and counseling for parents and family members of mentally retarded children
- 6.3 Family intervention
- 6.4 Empowering families mobilizing resources and supports
- 6.5 Community awareness and cooperation.

PAPER VI

MENTAL RETARDATION - ITS MULTIDISCIPLINARY ASPECTS

Objectives

60 Hrs.

10 Hrs.

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

- 1. Comprehend the physiological and psychological aspects of mental retardation
- 2. To acquaint them with factors that cause mental retardation and their identification.
- 3. To train them in the psycho-educational assessment of the mentally retarded children.
- 4. Enumerate the motor developmental aspects of mental retardation
- 5. Narrate the nature of the communicative aspects associated with mental retardation
- 6. To train them in the techniques of rehabilitation of mentally retarded children.
- 7. Demonstrate competency in working with multi-disciplinary team
- 8. Narrate the procedures to provide referral, networking as well as services to mentally retarded students

Course Content :

Unit 1: Physiological Aspects

- 1.1 Neurological aspects Autonomous Nervous System, Central Nervous System, Peripheral Nervous System.
- 1.2 Associated Impairments Cerebral Palsy, Epilepsy, ADD, ADDH, Autism.
- 1.3 Genetic aspects
- 1.4 Endocrinal influences
- 1.5 Other associated problems related to mental retardation

Unit 2: Development and Behavioural Aspects in Relation to Mental Retardation 10 Hrs.

- 2.1 Developmental stages physical, social, cognitive, language, emotional and moral.
- 2.2 Developmental delays and their implication in the life cycle
- 2.3 Adaptive deficits self-help areas, emotional social cognitive and language areas
- 2.4 Maladaptive (problem) behaviours functional analysis
- 2.5 Ethical issues in strategies for management, management of maladaptive behaviour in home and classroom settings

Unit 3: Communicative Aspects

- 3.1 Development of Speech and Language
- 3.2 receptive and expressive language for children with mental retardation
- 3.3 Hearing and speech disorders classroom management
- 3.4 Home training role of parents
- 3.5 Activities to enhance communicative skills of children with mental retardation

Unit 4: Motor Aspects

- 4.1 Gross motor and fine motor development and impairment
- 4.2 Neuromotor, eye-hand, sensory motor, perceptual motor difficulties
- 4.3 Locomotor/mobility related problems
- 4.4 Physiotherapy, occupational therapy their implications and adaptations in classroom management
- 4.5 Activities to enhance motor functions in children with mental retardation

10 Hrs.

Unit 5: Working with multi-Disciplinary Team10 Hrs.

- 5.1 Personnel involved in multi-disciplinary team
- 5.2 Nature of coordination with multi-disciplinary team
- 5.3 Referral agencies, linkages, networking and follow-up
- 5.4 Assessment of the abilities of mentally retarded children

Unit 6: Community Based Rehabilitation

- 6.1 Definition and scope
- 6.2 Education for independent living
- 6.3 Strengths and limitations of CBR
- 6.4 Role of special educator in CBR
- 6.5 Challenges and implications

PAPER VII CURRICULUM & TEACHING STRATEGIES

Objectives

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

- 1. Develop curricular content of practical nature based on functional skills and simple communication skills.
- 2. Select the appropriate content area for various age levels and severity levels
- 3. Counsel and family members to adjust and adapt mentally retarded children.
- 4. Develop curricular guidance and instructional methods for children with mental retardation.
- 5. Formulate the IEP and apply suitable strategy for the given group of children with mental retardation
- 6. Demonstrate competency to train children with mental retardation in different co-curricular activities
- 7. Describe various educational provisions available for mentally retarded children.
- 8. Organize resource room and teaching children with learning problems in regular classroom in the resource room, coordinating with the regular class teacher

Course Content

Unit 1: Curriculum Development

10 Hrs.

- 1.1 Aims, principles and approaches (clinical teaching, diagnostic, prescriptive teaching, multi-sensory, ecological approaches and Computer Assisted Instructions)
- 1.2 Development of curricular guidelines for children with mental retardation
- 1.3 Individualized educational programme
- 1.4 Group education programme in special and inclusive set ups.
- 1.5 Emerging trends in Curriculum Development

Unit 2: Introduction to Instruction

- 2.1 Theories of instruction Skinner, Gagne, Burner
- 2.2 Approaches to instruction
- 2.3 Models of Teaching
- 2.4 Simulated techniques of microteaching
- 2.5 Skills of micro teaching and their relevance in special education

Unit 3: Curriculum Content – Various Stages

10 Hrs.

- 3.1 Pre-school (early intervention) / Early Childhood Years infant simulation, sensory motor training, self-help, communication, pre-academic and social skills
- 3.2 Primary age level self-help, concepts, functional communication, functional academics, pre-vocational skills, domestic skills and social skills – Severely and Profoundly retarded
- 3.3 Secondary age level and pre-vocational level-concept, functional academic, possibility of academic integration, concept of National Open School, functional communication, pre-vocation skills Severely / Profoundly retarded.
- 3.4 Strategies for teaching task analysis, acquisition, maintenance and generalization, modeling, shaping, chaining, promoting, fading reinforcement
- 3.5 Record maintenance and monitoring progress

Unit 4: Teaching children with learning problems in Resource room setting 10 Hrs.

- 4.1 Characteristic of children with learning problems in regular schools borderline intelligence, specific learning disabilities, scholastic backwardness due to other reasons
- 4.2 Assessment of children with learning difficulties
- 4.3 Organizing of resource room
- 4.4 Adapting teaching strategies
- 4.5 Coordinating with regular school teachers

Unit 5: Co-Curricular Activities

10 Hrs.

- 5.1 Relevance and Importance
- 5.2 Visual Arts (arts and crafts) and stimulation material
- 5.3 Performing Arts (dance, music, drama, mimicry, etc)
- 5.4 Physical education yoga, play, sports and games, Leisure skills and recreational activities
- 5.5 Emerging trends and activities Special Olympics, very special arts, special youth festivals, special national and international days

Unit 6: Educational Provisions

- 6.1 Concept of normalization, integration, mainstreaming and inclusive education their implications in educational provision
- 6.2 Special schools, Residential schools
- 6.3 Special class in ordinary school, consultant and itinerant teacher, resource room, Community Based Rehabilitation
- 6.4 Vocational Training and Rehabilitation
- 6.5 Social benefits and scheme State and Central government NGOs.

Practicum(M.R.)

- 1. Educational assessment and programme planning (IEP) for at least 2 children with mental retardation preferably each child of a different age/severity level.
- 2. (a) 15 Observations in special schools in different classes/inclusive set up.
 - (b) Classroom teaching of children with mental retardation at various levels from preprimary, primary, secondary, prevocational levels. A total of 30 lessons should be taught including 12 curricular and 8 co-curricular lessons, using suitable methods and materials.
- 3. Practical training in co-curricular activities (participatory learning) yoga, visual arts or performing arts (music, dance, drama), sports and games art and craft recreation and leisure activities.
- 4. Preparation of learning aids
- 5. Skill training in Mental Retardation and additional disability areas such as Autism, Cerebral Palsy and Sensory Impairments (HI and VI)
- 6. (a) Organization of Resource Room
 - (b) Resource room teaching of children with learning problems in regular schools. A minimum of 30 lessons (10 maths, 10 English), 10 Regional Language/Hindi) must be taught, following educational assessment and suitable programming – methods and materials.
- 7. (a) Observation in regular classrooms for language teaching
 - (b) Teaching language to regular primary classes (choice of language left to the students – English/Hindi/Telugu). A minimum of 10 lessons with suitable teaching learning materials.
 - (c) Teaching of 10 subject classes opted at graduation level.

SPECIALIZATIONS: (Visual Impairment)

Paper V Introduction to the Visually Impaired Children

Objectives:

After completing the course, the student teachers will able to:

- 1. Carry out basic assessment of visual impairment
- 2. Understand the problems of Visually impaired and work out solutions
- 3. Narrate the evolutionary process of the development of services for visually impaired children.
- 4. Define blindness and other types of visual impairment.
- Develop skills of teaching techniques, technologies applied to the education of Visually Impaired.
- 6. Describe the impact of visual impairment on the personality development of the child.
- 7. Plan child-centered educational services for low vision children.
- 8. Enumerate the nature of services for visually impaired children with additional disabilities.

Course Content

Unit 1 Historical Perspectives of Education of Visually Impaired Children12Hrs.

- 1.1 Historical development in India and Abroad.
- 1.2 Mainstreaming of disabled persons in the society.
- 1.3 Psychological implications of visual impairment.
- 1.4 Sociological implications of visual impairment.

Unit 2: Nature of Visual Impairment

- 2.1 Concept of impairment, disability and handicap.
- 2.2 Definition and Classification of blindness and low vision
- 2.3 Effects of blindness on growth and development physical, social, intellectual and emotional.
- 2.4 Problems of visually impaired adolescent, helping visually impaired adolescent

Unit 3: Implications of Visual Impairment on Personality Development 12Hrs.

- 3.1 Implications of visual impairment on personality development.
- 3.2 Effects of early blindness on personality, verbalism and mannerism
- 3.3 Attitude towards visual disability.
- 3.4 Parental attitudes, attitude of siblings, peer group attitude and stereotypic attitude towards blindness.
- 3.5 Teachers' attitudes, social attitudes, and attitude modification,

Unit 4: Education of Low Vision Children

- 4.1 Assessment of low vision.
- 4.2 Educational problems of low vision children.
- 4.3 Vision stimulation and visual efficiency.
- 4.4 Low vision aids magnifiers, large print materials, and computers.
- 4.5 Education of low vision children with associated intellectual impairment, hearing impairment and neurological impairment.

Unit 5: Visually Impaired Children with Associated Disabilities 12 Hrs.

- 5.1 Concept.
- 5.2 Types of associated disabilities hearing impairment, mental retardation, locomotor and neurological disorders, learning disabilities.
- 5.3 Educational implications.
- 5.4 Support services modify and implications.

Paper VI

Educational Perspective of Visual Impairment

Objectives:

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

- 1. List the common eye defects of children and adults.
- 2. Use the tests appropriate for assessing the capabilities of visually impaired children.
- 3. Describe various educational service options available for visually impaired children.
- 4. Narrate the need and nature of curricular adaptation for visually impaired children.
- 5. Plan educational services leading to rehabilitation of visually impaired adults.

Course Content

Unit 1: Anatomy and Physiology of the Eye

- 1.1 Eye and Eye care.
- 1.2 Visual Acuity, refraction, fusion, depth perception.
- 1.3 Visual deficit tunnel vision, loss of visual field, central scotoma, low vision.
- 1.4 Refractive errors myopia, hyperopia, persbiopia, astigmatism.
- Common eye diseases cataract, glaucoma, traucoma, corneal ulcer, Xerophthalmia, retinitis pigmentosa, macular degeneration, optic atrophy.

Unit 2 Assessment Procedures

- 2.1 Clinical assessment of visual impairment.
 - 2.2 Functional assessment procedures.
 - 2.3 Importance of early identification and intervention.
 - 2.4 Commonly used adapted tests for assessment.
 - 2.5 Selective educational placement.

Unit 3: Educational Services

- 3.1 Cascade system of service delivery.
- 3.2 Models of integrated education: resource model, itinerant model, combined model, cluster model, cooperative model, dual teacher model, multi-skilled teacher model.
- 3.3 Role of functionaries head masters/principals, special teachers, class room teachers, parents and peers.
- 3.4 Factors responsible for successful integration and inclusion.

12 Hrs.

12 Hrs.

Unit 4: Curricular Adaptation

12 Hrs.

- 4.1 Importance of curricular adaptations.
- 4.2 General principles of material preparation: duplication, modification, substitution and omission.
- 4.3 Use of adapted instructional material for teaching and learning subjects like maths, science, social science, etc.
- 4.4 Creative arts and adapted physical education activities, yoga, strategies for coping with stress.

Unit 5: Education for Rehabilitation

- 5.1 Pre-requisite skills for the successful rehabilitation of visually impaired persons.
- 5.2 Role of multi-purpose rehabilitation workers and Para-professionals.
- 5.3 Linkages between education and rehabilitation professionals.
- 5.4 Awareness of other development programmes in the community.
- 5.5 Familiarizing with poverty alleviation programmes.

Paper VII

Instructional Methods and Strategies for Teaching Children with Visual Impairment

Objectives

- 1. List various approaches to be adopted in teaching visually impaired children.
- 2. Demonstrate expertise in teaching plus curricular skills to visually impaired children.
- 3. Develop in the students the correct expressive and receptive skills of the language.
- 4. Apply methods of the teaching language in its various aspects and forms.
- 5. Understand the use and importance of Mathematics in daily life.
- 6. Acquaint himself with the different methods of teaching mathematics.
- 7. Acquaint himself with the various techniques and methods of evaluation mathematical performances.
- 8. Acquaint with the specific curriculum of science for the Visually Impaired.
- Develop and understanding and appreciation of the social studies in daily life of Visually Impaired.
- 10. Learn various techniques and methods of evaluation in social studies.

Course Content

Unit 1: Need for Various Approaches in Teaching Visually Impaired Children 12 Hrs.

- 1.1 Process of providing non-visual experience to visual ideas.
- 1.2 Learning stage sensory motor, concrete operation and abstract thinking (logical operations).
- 1.3 Compensatory instruction for concept development and learning.
- 1.4 Adaptation of instructional methods in teaching visually impaired children and the use of teaching learning materials.
- 1.5 Sensory training importance, objectives and procedures.
 - Residual vision
 - Tactile sense
 - Auditory sense
 - Olfactory sense
 - Kinesthetic sense &
 - Intercessory coordination

Unit 2: Teaching Plus Curricular Skills

- 2.1 Introduction and techniques of teaching various daily living skills to visually impaired children.
- 2.2 Techniques of teaching of orientation and mobility, importance of orientation and mobility for persons with visual impairment.
- 2.3 Braille techniques of teaching Braille, reading and writing skills, reading readiness activities.
- 2.4 Knowledge of various aids and appliances.
- 2.5 Techniques of effective use of remaining senses.

Unit 3: Methodology of Teaching Language

- 3.1 Developing listening skills.
- 3.2 Pre-requisite skills for language development.
- 3.3 Development of vocabulary with object / situation characteristics and comprehension skills
- 3.4 Verbalization of visually impaired children
- 3.5 Evaluation of the language development skills.

Unit 4: Methodology of Teaching Mathematics

- 4.1 Factors contributing to learning mathematics.
- 4.2 Abstract ideas for the visually impaired.
- 4.3 Use of mathematical devices abacus, Taylor frame and geo board, Tactile Chart etc.
- 4.4 Mathematical Braille code (Teaching numbers and numerals, TeachingArithmatic, Teaching Algebra, Teaching Geometry, Teaching Trigonometry
- 4.5 Evaluation of mathematical concepts acquired by visually impaired childrenStating behavioral objectives in mathematics
 - Types of Item and steps in item-writing and preparing a unit test.

Unit 5: Methodology of teaching a) Science and b) Social Science 12 Hrs.

- 5.1 Methods of teaching science to visually impaired children with the help of relevant equipment (problems solving, project demonstration, laboratory, methods including dangerous chemicals and explosives in Chemistry) Analytic and Synthetic.
- 5.2 Play way method and field trips in teaching social science,
- 5.3 Presentation and use of different types of maps globe and relevant material,
- 5.4 Evaluation of learning in science and social science.

12 Hrs.

12 Hrs.

Practicum(V.I.)

- 1. Reading Readiness: Preparation and use of reading readiness material
- 2. Braille
 - Reading and writing Bharathi Braille as applicable to regional languages, Standard English (Grades I & II), Mathematics (Nemeth code) and Science Notations.
 - b. Transcription of Braille materials in to print in English as well as in regional language and vice versa
 - c. Use of the Brailler and slate and stylus.
- 2. Assistive Devices
 - a. Use of Taylor frame, abacus and other mathematical devices.
 - b. Use of speech softwares and other talking equipments
 - c. Use of Computer for visual assessment,
 - d. Use of adapted physical education devices.
- 3. Orientation and Mobility
 - a. Pre-cane skills
 - b. Long cane skills.
 - c. Direction finding training.
 - d. Knowledge about electronic devices in mobility.
 - e. Preparation and Use of Mobility Maps (Audio and Tactile)
- 5. Preparation and use of functional vision assessment tests and visual efficiency training for low vision children
- 6. Case study of at least 2 visually impaired children.
- 7. Preparation and use of improvised Teaching Learning Material
- 8. Preparation and use of Achievement Tests
- 9. Visits to Special and Integrated/Inclusive Schools
- Practice of teaching 20 lessons in special schools
 20 lessons for integrated/inclusive school
 In addition to this, 5 lessons in DLS activities and 5 lessons in sensory training.

Aids and Appliances Required:

- 1. Braille slate and stylus
- 2. Braillers (Taj or Perkins)
- 3. Mathematical devices (Abacus, Taylor frame etc.)
- 4. Tactile aids (including the use of relief papers for preparing geometrical figures)
- 5. Reading readiness material.
- 6. An embossed political map of the World with the use of threads.
- 7. A Physical feature map of Asia.
- 8. Mobility map of the City or Village where the trainee studies.
- 9. Inch and Centimeter graph sheets using the brailler.
- 10. A kit to develop the visual efficiency of a low vision child.
- 11. A kit for low vision assessment.
- 12. Materials for adopted physical education.
- 13. Optical and non-optical devices for low vision.
- 14. Teaching learning materials for teaching various subjects.
- 15. Mobility canes.

METHODOLOGY PAPERS GROUP A :

PAPER VIII

Methods of Teaching Languages

Objectives:

M. M. : 65

The student teacher will be able to –

- 1. Develop in the students the correct expressive and receptive skills of language.
- 2. Enable them to acquire knowledge of the objectives of teaching language.
- 3. Develop among themselves a favorable attitude towards the challenging task. of a teacher of language.
- 4. Develop among themselves the skills required for locating, defining and tackling specific problems of teaching language of the disabled child.
- 5. Develop skills required for diagnosing the major defects of the disabled child in language skills and carrying out remedial work.
- 6. Applying methods of the teaching the language in its various aspects and forms.
- 7. Appreciate the significance of creative writing.
- 8. Apply the techniques of evaluation in language instructions.
- 9. Proficiency in organizing the suitable learning experience for effective people involvement.
- 10. Skills in preparing tools for effective language evaluation.

Unit I : Need and Aims of Teaching Language in India

- Role of Hindi, Sanskrit and English in present day India
- Their position in the school curriculum
- Objectives of teaching Hindi as National Language
- Objectives of teaching English as a Second Language
- Principles of Language Learning and Teaching

Unit II : Methods of Teaching Hindi or Sanskrit

- Teaching pronunciation in a language
- The phonetic structure of language
- Stress and Intonation
- English sounds, stress and intonation
- Teaching English in actual classroom situations
- Lesson planning and transaction techniques

Unit III : Basic skills of Language Learning

- Listening and Speaking
- Listening drills for sound discrimination, listening games, listening spoken worlds, sentences, passages, reading materials, dialogues, classroom interactions.
- Comprehension
- Teaching of speaking skills
- The significance of speaking
- Measurement of speaking ability, teaching skills required for developing speaking skill, organizing a discussion of conversation, asking question, asking probing questions and diagnosing speech defects.

Reading skills

- Types of Reading : Extensive, Intensive, Reading Aloud,
- Silent Reading
- Reading for Comprehension
- Problems of Reading and Methods of Teaching Reading
 Writing Skills
- Mechanics of writing and elements of good writing
- Nature and Style of Writing
- Writing words, sentences, paragraphs, dictations ideas using capital letters, small letters, punctuation marks, word distance, alignment and legibility
- A brief analysis of the process and purposes of the writing activity
- Importance of oral preparation for writing exercise
- Making difference between formal and informal writing

Unit IV :

- Approaches to teaching the pre-school children
- Approaches to teaching the pre-primary level students
- Motivating language in the young child
- Development of the speech skills
- Associating the orally learnt units with their graphic representations through blackboard, flash cards and other word-game exercise

PAPER IX Methods of Teaching Social Studies

M. M. : 65

Objectives:

The student teacher will be able to:

- 1. Develop an understanding and appreciation of the social studies in daily life of disabled children.
- 2. Acquaint himself with such contents which would deepen and enrich their knowledge in social studies
- 3. know different methods of teaching social studies to disabled children
- 4. learn various techniques and methods of evaluation in social studies
- 5. develop an ability to have a realistic approach to teaching
- 6. develop ability to prepare teaching aids
- 7. develop skills in constructing and interpreting graphs, diagrams, sketches etc.
- 8. develop ability to organize group activities.

Unit I : Social Studies and School Curriculum

- Nature, concept and scope of social studies
- Objective of teaching social studies in elementary and secondary school curriculum
- Techniques of preparation and use of social studies text-book
- Critical analysis of syllabi in social studies

Unit II : Methods and Techniques of Teaching Social Studies

- Environmental approach in teaching of social studies
- Visit and field trips
- Lecture and discussion
- Problem and Project
- Narration and dramatization

Unit III : Teaching Learning Material

- Maps, charts and models
- Cartography (map, drawing, map reading)
- Audio-visual aids for disabled children

Unit IV : Evaluation and Techniques

- Stating behavioural objective in social studies
- Types of item and steps in the preparation of a unit test and diagnostic test
- Remedial measures

METHODOLOGY PAPERS GROUP B:

PAPER VIII:

Methods of Teaching Science

Objectives:

M. M. : 65

The student teacher will be able to –

- 1. Develop understanding and appreciation of the science to glorify daily life.
- 2. Acquaint with the different methods of teaching of science to the special needs children i.e. (H. I. or M. R. or V. I.).
- 3. Specific curriculum of science for the special needs children.
- 4. Enable them to learn the skill of preparing unit and lesson plans.
- 5. Explore the trainees about the scientist and their inventions.
- 6. Enable the trainees to learn the various evaluation techniques of assessing content / knowledge. Practical skills and attitudes etc.
- 7. Realize the essential unity between laboratory work and theoretical background of the subject.
- 8. Construct improvised apparatus.
- 9. Train the teachers in the establishment and maintenance of a modern science laboratory.

Unit 1: Science and school curriculum

20 Hours

- Nature, structure, scope of science.
- Role of science in modern living.
- Objective of teaching science at primary and secondary level, specific objectives in behavioral terms
- Critical analysis of science syllabi for primary and secondary classes.
- Concept of plus and minus curriculum.
- PSSC, CHEM Study, Harward Physics Project, Different Versions of Biological Science Curriculum Study.

Unit 2: Approaches, Methods and Planning

- Teacher-centered and learner-centered approaches inductive & deductive approaches, content and process approaches.
- Methods, demonstration, laboratory, problem solving, project methods, analytic and synthetic.
- Unit planning and lesson planning & their formats.

Unit 3: Teaching Learning Materials

- Audio-visual aids such as charts, models, transparency, film, radio and teleconferencing. Learning Resources – field trips, science exhibitions, science clubs, science parks and science museum.
- Specific teaching aids and their use for special needs children, Tactile charts, models, Improvised operators, computer aided instructions and multimedia presentation of science concepts.

Unit 4: Evaluation

- Measurement and evaluation.
- Concept of formative and summative.
- Stating behavioral objectives in Physical and Biological science,

steps in preparation of unit test, designing of blue print.

- Norm, referenced and Criterion testing.
- Diagnostic test and remedial procedure.

Suggested Readings:

Mishra, K.S. : Science Teaching
Kalra, R.M. : Innovations in science teaching
Sharma, R.C. : Science Teaching
Das, R.C. : Science Teaching in School
Nair, C.P.S. : Teaching Science in our Schools
Mittal, R.S., Mishra, R.R & Maheshwari, S.C. : Laboratory Manual in Science,
Arya Book Department, New Delhi.
Romey : Enquiry Techniques in Teaching Science.
Thusber & Waltre : Exploring Science
Robinson, J.T. : The Nature of Science and Science Teaching.

12 Hours

15 Hours

13 Hours

METHODOLOGY PAPERS GROUP B: PAPER IX: Methods of Teaching Mathematics

Objectives:

The student teacher will be able to:

- 1. Nature, Scope and teaching of Mathematics
- 2. Appreciate mathematical structures
- 3. Recall basic concept and appreciate their unifying strength and wide applicability
- 4. Develop competence in methods of teaching Mathematics effectively
- 5. Devise and suitably use aids for teaching
- 6. Acquaint himself with various techniques and methods of evaluating mathematical performances
- 7. Teaching of Arithmetic and commercial mathematics
- 8. Understand the use and importance of mathematics in daily life

Unit I: Mathematics and School Curriculum

- Nature and structure of Mathematics in School curriculum
- Scope and value of mathematics
- Goals of mathematic instruction at primary and secondary school levels
- Critical analysis of mathematics syllabi for primary and secondary classes

Unit II : Methods and Techniques

- Factors of motivation in mathematics
- Role of drill and practice in mathematics
- Approaches to mathematic instruction
- Task analysis, inductive-deductive, analytic synthetic problem solving and discovery.

Unit III : Teaching Learning Material and Mathematical Instructions

- Importance of teaching aids
- Specific teaching aids and their use for differently abled children
- Teaching numbers and numerals
- Teaching arithmetic (written and oral)
- Teaching Algebra including graph and set theory;
- Teaching commercial mathematics
- Teaching elementary statistics
- Teaching mensuration
- Teaching geometry and trigonometry
- Teaching mathematics for recreation

Unit IV : Evaluation and Remediation in Mathematics

- Stating behavioural objectives in mathematics
- Types of item and steps in item-writing and preparing a unit test,
- Steps in preparation of achievement test
- Diagnostic testing and remediation procedures

Books Recommended:

- 1. Butler and Wren : The Teaching of Secondary Mathematics. McGraw Hill Book Company, New Yorm
- 2. George Polya : Mathematical Discovery Vol. I & II. John Wily and Sons, INC New York
- 3. Kulbir Singh Sidhu : The Teaching of Mathematics, Sterling Publishers (P.) Ltd., Delhi-6,.
- 4. Jerry P. King : The Art of Mathematics. Plenum Publishing Corporation 233, Spring Street, New York-1013.
- 5. Robert B. Daves : Learing Mathematics. The Cognitive Science approach to Mathematics Education, Billing & Sons Limited, Worcester, Great Britain.
