

**DR. SHAKUNTALA MISRA NATIONAL
REHABILITATION UNIVERSITY,
LUCKNOW**



Curriculum Framework

D.Ed. Special Education (Visual Impairment)
D.Ed. S.E. (VI)

Course Content, 2019
(Effective from Session 2019-20)

Department of Visual Impairment
Faculty of Special Education

D.ED. SPECIAL EDUCATION (VISUAL IMPAIRMENT)

1.0 Preamble

Manpower development is one of the major objectives of Rehabilitation Council of India. Diploma in Special Education is a major step towards preparing teachers across the country to teach children with special needs from pre-school to elementary level. It aims at preparing quality teachers who could meet the challenges of all round development of the children. The course is geared towards developing knowledge, skills and desirable attitudes in teachers to facilitate the differently abled children to blossom to their fullest by providing a barrier free environment and achieving the goal of universal elementary education.

2.0 General Objective

The Diploma Course in Special Education aims to develop professionals for special education within a broad framework of education in the present context. The course will enable pre-service teachers to acquire knowledge, develop competencies and practice skills to impart education to children with disabilities.

The general objective of the course is to prepare special teachers at primary to elementary levels to serve in the following settings:

- i) Special schools
- ii) Inclusive schools
- iii) Home based programme

2.1 Knowledge Related Objectives

To build adequate knowledge in the following areas:

- 1) Various aspects of disability, its impact and management
- 2) Key aspects of elementary education like goals, function, technology and emerging trends
- 3) Educational needs of the children with disability and their management
- 4) Details of planning and executing curricular and co-curricular activities
- 5) Pedagogy of school subjects
- 6) Various areas of child development and the relevant mental processes

2.2 Skill Related Objectives

To develop skills and competencies in the following areas:

- 1) Personal, professional and social competencies and skills required in teachers
- 2) Subject teaching as per requirement
- 3) Development and adaptation of teaching and learning techniques and devices
- 4) Evaluation of the students, teacher in the school
- 5) Planning and executing lessons (individualized and group)
- 6) Classroom management techniques
- 7) Individual and group parent interaction

2.3 Attitude Related Objectives

To develop desirable attitudes towards following issues:

- 1) Role and need of education in the modern world
- 2) Teaching profession and role of teachers in changing society
- 3) Guiding children and solving their academic/behavior problems

3.0 General Framework of the Course

The diploma course consists of 4 core papers and additional papers pertaining to specific disability areas. Though the number of papers pertaining to disability specialization may vary, the core papers are common across the specialization areas. Each paper will have a total of 90 hours for curriculum transaction.

4.0 Duration of the Course

The duration of the course will be 220 days consisting of 1320 hours each year thus having a total of 2640 hours for theory and practicum.

5.0 Eligibility

Students who have passed Plus 2 examination / Junior College or equivalent with minimum 50% marks are eligible for the course.

6.0 Medium of Instruction

The medium of instruction will be English / Hindi language

7.0 Methodology

The methodology of the course includes lectures, demonstration, project work, discussions, exposure visits to different schools/rehabilitation projects, participation in community meetings, medical camps and community development programmes, practice-teaching and internship in the disability intervention programmes at grassroots level.

8.0 Course Pattern

The course will be offered through semester system.

9.0 Intake capacity: The intake for each year of the course will be 30 maximum. Fifty percent seats are reserved for persons with disabilities (except Persons with hearing impairment) and out of which 50% seats are reserved for persons with visual impairment.

10.0 Minimum Attendance

Eighty per cent minimum attendance is required both in theory and practical to be eligible to appear in the semester end examination.

11.0 Certification as Registered Personnel

It is mandatory for every rehabilitation professional/personnel to obtain a “Registered Personnel/Professional Certificate” from the Rehabilitation Council of India to work in the field of special education in India. As continuous professional growth is necessary for the renewal of the certificate, the rehabilitation professional/personnel should undergo in-service programme periodically to update their professional knowledge.

12.0 Papers Wise Hours and Marks Distribution

12.1 Theory Papers

Paper Code	Name of the paper	Hours	Internal marks (40%)	External marks (60%)	Total
Semester –I					
DCP-101	Introduction to Disabilities (Common Paper)	90	30	70	100
DSV-102	Implications of Visual Impairment	90	30	70	100
DSV-103	Teaching of Expanded Core Curriculum	90	30	70	100
DMV-104	Pedagogy of Environment Science (EVS) and Social Science Education	90	30	70	100
	Total	360	120	280	400
Semester –II					
DCP-201	Educational Psychology	90	30	70	100
DSV-202	Education of Children with Low Vision	90	30	70	100
DMV-203	Pedagogy of Science Education	90	30	70	100
	Total	270	90	210	300
Semester –III					
DCP301	Education in Emerging Indian Society and School Administration	90	30	70	100
DSV-302	Education of Visually Impaired Children with Additional Disabilities	90	30	70	100
DMV-303	Pedagogy of Hindi/State Language and English Education	90	30	70	100
	Total	270	90	210	300
Semester –IV					
DCP-401	Inclusive Education for Children with Disabilities	90	30	70	100
DSV-402	Early Childhood Care and Education (Visual Impairment)	90	30	70	100
DMV-403	Pedagogy of Mathematics Education	90	30	70	100
	Total	270	90	210	300
	Grand Total	1170	390	910	1300

12.2 Practical Papers

#	Name of the paper	Hours	Internal marks (60%)	External marks (40%)	Total
Semester-I					
DPV 105	English Braille Grade-I & II	105	90	60	150
DPV 106	Orientation and Mobility	60	30	20	50
DPV 107	Use of Special Appliances	100	60	40	100
DPV 108	Practice Teaching	45	60	40	100
DPV 109	Preparation of Teaching Learning Material	60	30	20	50
	Total	370	270	180	450
Semester-II					
DPV 204	Hindi Braille	105	60	40	100
DPV 205	Orientation and Mobility	90	60	40	100
DPV 206	Preparation of low cost TLM	75	60	40	100
DPV 207	Practice Teaching	60	60	40	100
DPV 208	Information and communication technology	30	30	20	50
	Total	360	270	180	450
Semester-III					
DPV 304	Braille	60	60	40	100
DPV 305	Use of Special Appliances	50	60	40	100
DPV 306	Orientation and Mobility	75	30	20	50
DPV 307	Preparation of Tactile/Audio Maps	25	30	20	50
DPV 308	Practice Teaching	60	60	40	100
DPV 309	Project Work	60	30	20	50
	Total	330	270	180	450
Semester-IV					
DPV 404	Practice Teaching	60	36	24	60
DPV 405	Teaching of Expanded Core Curriculum (ECC) Skills	50	36	24	60
DPV 406	Braille	75	60	40	100
DPV 407	Use of Special Appliances	70	48	32	80
DPV 408	Teaching and organizing co-curricular activities for visually impaired children	100	60	40	100
DPV 409	Community Work	35	30	20	50
	Total	390	270	180	450
	Grand Total	1480	1080	720	1800

Objectives:

After completion of this paper, the learner is expected to:

1. Understand the differences disability and functioning
2. Understand the educational needs of various categories of persons with disabilities.
3. Know the common causes and preventive aspects of different kinds of disabilities
4. Know the importance of early identification and intervention
5. Understand the importance of different agencies in human resource development

Unit 1: Understanding Disability (15 Hours)

- 1.1 Historical development in understanding disability
- 1.2 Emerging trends: Concept and Definition of Impairment, Disability, Handicap(ICIDH) and Functioning(ICF)
- 1.3 Definition and Categories of Disability as per National laws
- 1.4 Prevalence and demographic profile
- 1.5 Causes and prevention of disability

Unit 2: Definition, types and educational needs of children with disabilities (15 Hrs)

- 2.1. Hearing Impairment: Definition and types
- 2.2. Visual Impairment: Definition and types
- 2.3. Mental Retardation: Definition and types
- 2.4. Neuro–muscular: Definition and types
- 2.5. Autism Spectrum Disorder: Definition and types

Unit 3: Definition, types and educational needs of children with disabilities (15 Hrs)

- 3.1. Mental Illness: Definition and types
- 3.2. Specific Learning Disabilities / Difficulties: Definition and types
- 3.3. Deafblindness: Definition and types
- 3.4. Locomotor Disabilities: Definition and types
- 3.5. Multiple Disabilities: Definition and types

Unit 4: Early Identification and intervention (15 Hours)

- 4.1 Concept and need of early identification
- 4.2 Screening and referral
- 4.3 Involvement of parents and the community
- 4.4 Role of special teacher/ educator in Early Intervention and related matters
- 4.5 Models of Early Intervention- Home based and centre based

Unit 5: Human Resource in Disability Sector (15 Hours)

- 5.1 Concept and need of Human Resource in disability sector
- 5.2 Role of National Institutes
- 5.3 Role of International bodies
- 5.4 Role of NGOs and the Community
- 5.5 Status of Human Resource in India

Experiential Learning (15 Hours)

1. Prepare a checklist for identification of at least one disability.
2. The students are expected to visit at least two institutes for disabilities and observe children with disabilities learning, and submit a report of their observation.

Reference material:

- Madhavan, T. Kayla, M. Naidu, S. Peshawaria, R and Narayan, J (1989).Mental Retardation A Manual for Psychologists.
- Wallace, P.M. and Goldstein, J.M. (1944) An Introduction to Psychology (3rd Edition) Madison: Brown and Benchmark Publishing.
- Lindgren H (1988) Educational Psychology in the Classroom, Harper and Row.

- Panda, KC (1997) Education and Exceptional Children. Vikas Publishing House: New Delhi.
- Smith, D.D, and Luckasan, R. (1992). Introduction to Special Education. Allyn and Bacon, Boston.
- Alan H. and Ravic R. (1998). Best and promising Practices in Developmental Disabilities, Texas, PRO-ED, Inc.
- Hegarty S. (2002). Education and Children with Special Needs in India: Sage Publications, India Pvt. Ltd.
- Myron G. Eisenberg, Robert L. Glueckauf, Herbert H. Zaretsky (1999) Medical Aspects of Disability: A Handbook for the Rehabilitation.
- Arthur E. Dell Orto, Paul W. Power (2007) The Psychological and Social Impact of Illness and Disability.
- Vicki L. Schwean, Donald H. Saklofske (1999) Handbook of Psychosocial Characteristics of Exceptional Children.
- Seamus Hegarty, Mithu Alur (2002) Education and Children with Special Needs: From Segregation to Inclusion.
- S.S. Chauhan (2002) Education of Exceptional Children.

Objectives:

On completion of this Paper, the pupil-teachers will be able to:

- 1 Bring out clearly an understanding with reference to the functions of various parts of the eye and eye-diseases.
- 2 Describe perspectives of the education of children with visual impairment in India and abroad in the context of historical and contemporary developments.
- 3 Demonstrate an understanding of the educational implications of visual impairment and related technologies.
- 4 Describe clearly psycho-social implications including attitudinal factors, concerning visual impairment.

Unit 1: Eye and eye care**(30 hours)**

- 1.1. Anatomy and Physiology of human eye and Process of seeing
- 1.2. Common eye diseases in India: Cataract, Glaucoma, Trachoma, ROP, Muscle imbalance
- 1.3. Retinal detachment, Optic atrophy, Conjunctivitis, Xerophthalmia
- 1.4. Refractive errors of eye; prevention of blindness and eye care
Classroom implications of various eye conditions

Unit 2: Historical perspectives**(15 hours)**

- 2.1 Origin of educational facilities for visually impaired children in: France, UK, USA and India.
- 2.2 Pre-Braille tactile scripts and origin and development of the Braille script
- 2.3 Evolution of Bharati Braille
- 2.4 Special contributions to the education of the visually impaired of some Eminent Personalities in India– An Overview: **1. Neelkanth Rai Chhatrapati, 2. R.M. Alpaiwalla, 3. LalBihari Shah, 4. Clutha Mckenzie, 5. LalAdvani & 6. M. K. Chaudhary**
- 2.5 Special contributions to the education of the visually impaired of some Eminent Personalities abroad – An Overview: **1. Louis Braille, 2. Nicholas Saunderson, 3. Thomas Rhodes Armitage & 4. Helen Keller**

Unit 3: Educational Perspectives**(15 hours)**

- 3.1 Aims and objectives of education of visually impaired children
- 3.2 Principles of teaching visually impaired children
- 3.3 Early Childhood Education
- 3.4 Educational technologies – conventional devices: Braille-writing, computing, mobility
- 3.5 Electronic devices – Talking calculator, diary and watches, screen reading software, reading machine, Braille note-taking devices, Braille embossers, mobility devices

Unit 4: Psychological Perspectives**(15 hours)**

- 4.1 Losses and restrictions of blindness
- 4.2 Effects of early and adventitious blindness on personality development
- 4.3 Adjustment and coping mechanisms
- 4.4 Success stories and role models
- 4.5 Adolescence and its implications for children with visual impairment

Unit 5: Attitudes**(15 hours)**

- 5.1 Concept and process of formation of attitudes
- 5.2 Myths and stereotypes about the visually impaired
- 5.3 Parental & Teacher's attitudes
- 5.4 Community attitudes and Attitudes of visually impaired persons towards themselves
- 5.5 Attitude modification

Reference material:

- Kitchlu, T.N. (1991) A Century of Blind Welfare in India. Delhi: Penman Publishers.
- Kundu, C.L (ed.) (2003), Disability Status India, Rehabilitation Council of India: New Delhi.
- Lowenfeld, B. (1973). The visually handicapped child in school. John Day Company: New York.
- National Institute for the Visually Handicapped (1990). Handbook for Teachers of the Blind: Dehradun.
- Scholl, G. T. (1986). Foundations of the education for blind and visually handicapped children and youth: Theory and Practice. AFB Press: New York.
- Warren D.H (1983). Blindness and Early Childhood Development. AFB Press: New York.

Objectives:

On the completion of this paper, the pupil-teachers will be able to:

1. Describe clearly the concept and importance of expanded core curriculum and appreciate the rationale for the use of the term.
2. Acquire and use information about the methods of teaching Braille to visually impaired children.
3. Understand and utilize the procedures, principles and methods of sensory training.
4. Acquire necessary skills and competencies for imparting training in orientation and mobility and daily living skills to the visually impaired children.
5. Demonstrate an ability to use various assistive devices for the visually impaired.
6. Gain knowledge about concept-formation for the visually impaired children.

Unit 1: Expanded Core Curriculum & Concept Formation (20 hours)

- 1.1 Need and importance and Concept of expanded core curriculum
- 1.2 Rationale for using the term “Expanded Core Curriculum” instead of “Plus Curriculum”
- 1.3 Meaning, definition and stages of concept formation
- 1.4 Implications of loss of vision in concept formation
- 1.5 Development of concepts amongst visually impaired children

Unit 2: Teaching of Braille (20 hours)

- 2.1 Pre-requisite skills for Braille reading
- 2.2 Braille reading readiness
- 2.3 Methods of teaching Braille reading (letter, word, sentence method) Use of flash cards
- 2.4 Introduction of Braille writing and Braille writing devices
- 2.5 Techniques of rapid reading and note taking skills

Unit 3: Sensory Training (15 hours)

- 3.1 Meaning and Importance
- 3.2 Tactile and Auditory discrimination
- 3.3 Olfactory, Gustatory and Kinesthetic discrimination
- 3.4 Visual discrimination (use of residual vision)
- 3.5 Inter-sensory coordination/sensory integration

Unit 4 : Teaching of Orientation and Mobility (15 hours)

- 4.1. Definition and importance
- 4.2. Techniques of teaching orientation
- 4.3. Techniques of teaching indoor and outdoor mobility – sighted guide, pre-cane, cane techniques
- 4.4. Significance and use of clues and landmarks
- 4.5 Tactile and auditory maps and Echo-location

Unit 5: Teaching of Daily Living Activities, Social Skills and Assistive Devices (20 hours)

- 5.1. Meaning, importance and Age-appropriate classification of daily living skills
- 5.2. Techniques of teaching daily living skills
- 5.3. Personal hygiene, grooming and social etiquette and Performing household tasks (cooking, cleaning, washing etc.)
- 5.4. Taylor Frame and Abacus, Geometry Devices
- 5.5. Low cost/No cost Teaching -Learning material, tactile maps, diagrams and three-dimensional models

Reference material:

Kundu, C.L (ed.) (2003), Disability Status India, Rehabilitation Council of India: New Delhi

Mani, M.N.G (1992). Techniques of Teaching Blind Children. New Delhi : Sterling

Publishers.

Pandey, R.S. and Advani, Lal (1995) Perspectives in Disability and Rehabilitation. Vikas Publishing House: New Delhi

Punani, B., and Rawal, N. (1993). Handbook : Visual Impairment. New Delhi :Ashish Publishing House.

RadhaBai. Et al. (Ed.) (1995). All Colors are there. Trichy : Holy Cross Service Society.

Pedagogy of Environment Science (EVS) and Social Science Education

Total Marks: 75

Total hours: 90

Objectives:

On completion of this Paper, the pupil-teacher will be able to:

1. Appreciate the concept and nature of Environment Science.
2. Dain and apply knowledge of different environmental issues and how to transact them in the classroom.
3. Gain comprehension of the nature and scope of Social Science.
4. Describe clearly methods and skills of teaching Social Science.
5. Gain familiarity with skills for preparing teaching-learning material for children with visual impairment, concerning Social Science.
6. Carry out systematic evaluation.
7. Acquire and apply knowledge of different Social Science issues

Unit 1: Concept of Environment Science (EVS) & Nature of Social Science(20 hours)

- 1.1 Scope of Environment Science (EVS) as a curricular area at primary level
- 1.2 Understanding Environment Science (EVS) as an integrated area of Science, Social Science, and Environmental Education
- 1.3 Special significance of EVS education for children with visual impairment.
- 1.4 Nature, Scope and Objectives of teaching Social Science; Integration between different social sciences; Role of Social Science in developing children understands of their social context and reality
- 1.5 Environment Science (EVS) as a Science and Social Science: water, air, soil, source of energy, eco system, response and adaptation in plants and animals. Human population and the environment, agriculture and industry, degradation of environment, environmental concerns, disasters and management

Unit 2: History & Geography

(10 hours)

- 2.1 Rise of various dynasties through early and Middle Ages
- 2.2 Establishment and expansion of the British Empire
- 2.3 India's freedom struggle – 1857 to 1947
- 2.4 Understanding globe
- 2.5 Earth and solar system

Unit 3: Methods of teaching Social Science

(20 hours)

- 3.1 Source and Discovery methods
- 3.2 Project and Problem solving methods
- 3.3 Play way method and Field study
- 3.4 Observation and Pendulum method; Correlation and Discussion method
- 3.5 Classroom transaction: ways of conducting enquiry, activities, discussion, small group work, field visit, project

Unit 4: Skills of teaching Social Science & Socio -Political life / Civics (20 hours)

- 4.1 Skills of teaching Social Science: Dramatization, Narration, Explanation,
- 4.2 Skills of teaching Social Science: Story telling & Role play
- 4.3 Salient features of the Indian Constitution
- 4.4 Concept of democracy and secularism
- 4.5 Relationship between union, state and local self-government

Unit 5: Use of Devices in Social Science & Evaluation

(20 hours)

- 5.1 Guidelines for preparing models for teaching Social Science to children with visual impairment & embossed maps preparation
- 5.2 Techniques of developing and adapting of relevant teaching-learning materials for teaching Social Science

- 5.3 Construction of test items for evaluating learning of Social Science by pupils
- 5.4 Diagnosing pupil difficulties in learning Social Science
- 5.5 Designing remedial teaching

Reference material:

- Kochhar, S.K., Teaching of Social Studies (1984). Sterling Publishers Private Limited - New Delhi.
- Y K Singh - Teaching of Social Studies (2004). APH Publishing Corporation, New Delhi
- Scholl, G. T. (Ed.) Foundations of the education for blind and visually handicapped children and youth: Theory and Practice; (1986). AFB Press: New York.

PRACTICUM (Semester – I)

DPV 105

English Braille

Total Marks: 100

Hours: 135

Unit 1: Beginnings

- 1.1. Seven-line Braille system
- 1.2. English alphabets
- 1.3. Different ways of embossing dot-combinations
- 1.4. Various signs used in English Braille—punctuation marks, Capitalization, italics, numeric, Numerals
- 1.5. Practice on the use of Braille writing devices –Pocket Frames, Inter-Line Frames, InterPoint Frames, Braillers
- 1.6. Reading and writing English Braille – Grade I

Unit 2: English Braille Grade II

- 2.1. English contractions and abbreviation
- 2.2. Writing poems
- 2.3. Reading and writing English Grade II Braille

Unit 3: Transcribing of a 20-page English Book in to English Grade II Braille.

DPV 106

II- Orientation and Mobility

Total Marks: 50

Hours: 60

Unit 1: Training Under Blind-fold Condition

- 1.1. Auditory — Sound Identification, Localization & Discrimination
- 1.2. Masking Sound , Echo-Location and Sound Shadow
- 1.3. Tactile Exploration of Surfaces
- 1.4. Use of Kinaesthetic

Unit 2: Identification of clues and landmarks in in-door and out-door environment and their use

Unit 3: Training in Independent Living Skills (ILS) under Blindfold: Eating, Dressing, Hygiene, Personal grooming & Household chores

DPV 107

III- Use of Special Appliances

Total marks 100

Hours 100

Unit 1: Abacus

Exercises involving: Setting numbers, Addition and Subtraction & Multiplication and division

Unit 2: Taylor Frame

- 2.1 Exercises involving
- 2.2 Writing of numbers and digits
- 2.3 Writing of various mathematical signs like plus, minus, multiplication, division etc.
- 2.4 Writing and doing various mathematical exercises – a. Addition, b. Subtraction, c. Multiplication, d. Division, e. LCM and HCF

Unit 3: Tactile geometry kit and its use for drawing tactile diagrams and figures. Unit 4: use of embossed globe, tactile maps and charts.

DPV 108

IV - Practice Teaching

Total Marks 100

Hours 45

Each pupil-teacher is expected to plan and deliver 20 lessons in the concerned school subject.

DPV 109

V-Preparation of Teaching Learning Material

Total Marks: 50

Hours 60

Each teacher-trainee will be required to prepare at least 2 low cost / no cost teaching-learning material in the concerned subject (Pedagogy studied in concerned semester) and present the same for evaluation along with one 3-D model.

Objectives:

After completion of this paper, the students are expected to:

- 1 Clearly delineate the nature of child development including delayed development.
- 2 Gain insights into various aspects of growth and development including personality development.
- 3 Acquire and apply knowledge about cognition and intelligence.
- 4 Demonstrate clear comprehension of different perspectives of learning.
- 5 Acquire knowledge of different behavior problems among children and their management.

Unit 1: Psychology and Theories of Learning (15 Hours)

- 1.1 Educational Psychology – Nature, Importance and Scope.
- 1.2 Individual differences and methods of dealing with the differences
- 1.3 Importance of principles of psychology for the educators of children with disabilities.
- 1.4 Theories of Learning: Behaviorist (Classical & Operant), Social Learning (Bandura), Cognitive Learning (Information Processing).
- 1.5 Role of teacher and learner in different teaching-learning situations- Learning Styles and Learning in Constructivist Perspective

Unit 2: Nature of Child Development (15 hours)

- 2.1 Child Development: meaning and nature
- 2.2 Principles of growth and development
- 2.3 Significance of child development for special educators in understanding the learner with disability
- 2.4 Concept of developmental delay and / differences
- 2.5 Factors influencing development: heredity and environmental

Unit 3: Major Aspects of Development (20 hours)

- 3.1 Physical and Motor Development: meaning, growth and maturation, gross and fine motor development skills in infancy and pre-school children
- 3.2 Social Development: meaning, significance, stages, psycho-social development
- 3.3 Emotional Development: meaning, development of emotions at different stages
- 3.4 Personality Development: meaning, definition and factors affecting
- 3.5 Language Development: meaning and significance, bilingual and multilingual language situations, implications for teachers

Unit 4: Cognition and Intelligence (15 hours)

- 4.1 Cognitive Development: Concept, Piaget's stages of cognitive development
- 4.2 Understanding socio-cultural difficulties and factors influencing cognition
- 4.3 Role of cognition in learning
- 4.4 Intelligence: meaning, definition and measurement of IQ.
- 4.5 Howard Gardner's theory of Multiple Intelligence

Unit 5: Behaviour Problems and Management (10 hours)

- 5.1 Common behaviour problems in children
- 5.2 Assessment of problem behaviour
- 5.3 Functional analysis
- 5.4 Behaviour management techniques
- 5.5 Planning, Implementation and Evaluation of Behavioural Management Programme

Experiential Learning (15 Hours)

The student learner is expected to observe problem behaviour of two children with disability and write a report.

Reference material:

- Kaul, V. (1993). Early Childhood Education Programme, New Delhi, NCERT.
- Madhavan, T. Kalyan, M. Naidu, S. Peshawaria, R. and Narayan, J. (1989).Mental Retardation-A Manual for Psychologists.
- Muralidharan R. (1990). Early Stimulation Activities for Young Children, New Delhi NCERT.
- Panda, K.C. (2001). Elements of Child Development (Sixth Revised Edition), Ludhiana: Kalyani Publishers.
- Sharma, P. (1995). Basics on Development and Growth of a Child. New Delhi: Reliance Publishing House.
- Sharma, R. and Sharma, R. (2002).Child Psychology. Atlantic: New Delhi.
- Mohan Mathew (1972). Child Psychology in Indian Perspective.
- Jan Borms (1984). Human Growth and Development.
- Madhavan, T. Kayla, M. Naidu, S. Peshawaria, R. and Narayan, J. (1989).Mental Retardation-A Manual for Psychologists.
- Wallace, P.M. and Goldstein, J.M. (1944).An introduction to Psychology (3rd Edition). Madison: Brown and Benchmark Publishing.
- Lindgren, H. (1988). Educational Psychology in the Classroom.Harper and Raw.
- Panda, K.C. (1997).Education and Exceptional Children.Vikas Publishing House, New Delhi.
- Arthur E. Dell Orto, Paul, W. Power (2007).The psychological and Social Impact of Illness and Disability.
- Vicki L. Schwean, Donald H. Saklofske (1999) Handbook of Psychosocial Characteristics of Exceptional Children.

Total Marks: 75**Hours: 90****Objectives:**

On completion of this paper, the pupil-teachers will be able to:

- 1.1 Understand and apply the definitions and terminologies of low vision and undertake need-based assessment.
- 1.2 Carry out vision training programmes systematically.
- 1.3 Get fully upraised of the educational needs of low vision children.
- 1.4 Understand and describe the various implications of low vision.
- 1.5 Get knowledge of low vision devices and suggest suitable environmental modifications.

Unit 1: Understanding Low vision**(15 hours)**

- 1.1. Definitions as per the extant Indian Law and WHO
- 1.2. Use of different terminologies – low vision, visual impairment, partially sighted and legal blindness
- 1.3. Visual Deficits: types and causes
- 1.4. Importance of early identification
- 1.5. Functional assessment and other Commonly used adapted tests for assessment

Unit 2: Vision Training Programme**(20 hours)**

- 2.1 Nature and importance of the programme
- 2.2 Underlying considerations for the programme
- 2.3 Visual stimulation: concept and procedure
- 2.4 Procedure for increasing visual efficiency
- 2.5 Factors affecting visual efficiency training programme

Unit 3: Educational Intervention**(15 hours)**

- 3.1 Special educational needs of low vision children
- 3.2 Early intervention
- 3.3 Exemplar curricular adaptations
- 3.4 Evaluation procedure
- 3.5 Management of children with progressive vision loss

Unit 4: Educational and Psychological Implications**(20 hours)**

- 4.1. Identity issues of low vision children
- 4.2. Selection of an appropriate medium of reading and writing for low vision children
- 4.3. Programme for developing reading and writing skills
- 4.4. Orientation and mobility for low vision children
- 4.5. Classroom management – seating arrangement, adjustable furniture, illumination, non-reflecting surfaces and color contrast.

Unit 5: Low vision Devices and Environmental Modifications**(20 hours)**

- 5.1 Optical aids
- 5.2 Non-optical aids
- 5.3 Electronic devices ICTs
- 5.4 Environmental modifications at home, school, public places, means of transport and communication, common utility items, etc.
- 5.5 Impact of using optical and non-optical devices on persons with low vision

Books Recommended

- Barraga, N.C., Visual handicaps and learning. Belmont, CA :Wadasworth Publishing Co., Inc., Inc., 1976.
- Fernandez,G., Koenig, C., Mani M.N.G., and Tesni, S. (1999). See with the Blind.

- Bangalore : Books for Change and CBM International.
- Jangira, N.K. Mukhopadhyay, M., Mani M.N.G., and Roychoudary. Source book for Teaching of Visually disabled children. New Delhi : NCERT, 1988.
- Julka, A. (2000). Low Vision Children : A Guide for Primary School Teachers. NCERT, New Delhi – 1999. Both in English (1999) and Hindi (2001).
- Kelly, L.J. and Vergason, G.A. (1978).Dictionary of Special Education and Rehabilitation. Denver: Love Publishing Company.
- Mani, M.N.G., (2001). Reading Preference Test (REPT) for Children with Low Vision. Coimbatore : International Human Resource Development Centre for the Disabled.
- Randall T Jose (1983). Understanding the Low Vision. New York : American Foundation for the Blind.
- Warren, D.H. (1977). Blindness and early childhood development. New York: American Foundation for the Blind.
- World Health Organization (1993).Management of Low Vision in Children. Geneva.

Objectives:

On completion of this Paper, the pupil-teachers will be able to:

- 1 Understand and describe the objectives of teaching Science
- 2 Use methods of teaching science and Conduct practical work
- 3 Make use of various aids and instructional material and Carry out evaluation properly
- 4 Acquire basic knowledge of various science concepts, principles and material
- 5 Understand and apply information about elementary physics, chemistry and biology.

Unit 1: Understanding Science and Natural Phenomenon (18 hours)

- 1.1. Nature, scope and Objectives of teaching Science at primary stage
- 1.2. Scientific enquiry in different domains of knowledge
- 1.3. Values of Science – social, cultural, ethical, vocational, utilitarian
- 1.4. Rain, thunder, lightening, earthquake, Change of climate, formation of day and night; Stars and planets
- 1.5. Conservation – biodiversity, wild life, pollution and its preventions, flora & fauna, soil

Unit 2: Methods of Teaching Science at Elementary Stage (12 hours)

- 2.1 Discovery and Project method
- 2.2 Problem solving method
- 2.3 Inductive-deductive and constructive method
- 2.4 Field trip: visit to science museum and exhibition
- 2.5 Understanding Science through media

Unit 3: Conducting Practical Work (12 hours)

- 3.1. Setting up a Science lab
- 3.2. Determining the nature of practical work and apparatus requirements for the class
- 3.3. Instructions for carrying out practical work for children with visual impairment
- 3.4. Actual performance of the practical work and interpreting results and drawing conclusions
- 3.5. Collaboration in practical work in inclusive setup

Unit 4: Use of Aids in science and evaluation (13 hours)

- 4.1 Techniques of adapting available teaching aids for children with visual impairment
- 4.2 Techniques of preparing new teaching aids and embossed diagrams and charts
- 4.3 Preparation of adapted instructional material in teaching Science
- 4.4 Techniques of using multi-sensory approach and Construction of test items for evaluating learning of Science by pupils
- 4.5 Diagnosing pupil difficulties in learning Science and Designing remedial teaching

Unit 5: Food, Materials and World of Living and moving Things (35 hours)

- 5.1 Sources of food, components of food, food processing, crop production and micro organisms
- 5.2 Material: Clothes (Cotton, jute, silk, wool), metal –non-metal and their properties (roughness, transparency, solubility)
- 5.3 Living, non-living things, habitats plants (form, function and multiplication/reproduction)
- 5.4 Animals – forms, function and reproduction; Motion and measurement (distance, velocity, speed)
- 5.5 Concept of force, friction, pressure, gravity; Electric current and circuits; Magnets ; Sound and light

Books Recommended:

Das R. C. (1985). Science Teaching in Schools. New Delhi: Sterling Publishers Private Limited.

Joshi, S.R. (2005). Teaching of Science. New Delhi : APH Publishing Corporation.

Rao, V. K. (2004). Science Education. New Delhi: APH Publishing Corporation.

Siddiqui, M. H. (2005). Teaching of Science. New Delhi : APH Publishing Corporation.

PRACTICUM (Semester-II)

DPV 204

Hindi Braille

Total marks: 100

Hours: 105

Unit 1: Reading and Writing

- 1.1 Alphabets
- 1.2 Reading Words
- 1.3 Writing Words – Use of writing Frames and Brailleurs
- 1.4 Reading and Writing Passages

Unit 2: Preparing Braille Calendar

Unit 3: Hindi/State language Braille Formats

- 3.1 Paragraphs
- 3.2 Poems
- 3.3 Poetry in prose format
- 3.4 Poetry in verse format
- 3.5 Making a mark sheet

Unit 4: Transcribing a 20-Page Hindi/ Stale Language Book into Braille (concerned language)

DPV 205

Orientation and Mobility

Total Marks: 100

Hours: 90

Unit 1: Using Safety Techniques

- 1.1 Trailing
- 1.2 Protective Techniques (Upper arm, Lower arm and Both arms Techniques)
- 1.3 Squaring off
- 1.4 Locating and picking dropped objects/articles

Unit 2: Sighted Guide/Human Guide Techniques

- 2.1 Familiarization with the Technique
- 2.2 Getting started
- 2.3 Changing sides
- 2.4 Walking through narrow spaces and door-ways
- 2.5 Ascending and descending stairs
- 2.6 Getting into cars and public transport
- 2.7 Negotiating various seating arrangements

Unit 3: O&M for Low Vision

- 3.1 Encouraging optimum use of residual vision
 - 3.2 Negotiating doors, door- ways, stairs
 - 3.3 Independent outdoor travel with and without human guide
-

DPV 206

Preparation of Low Cost TLM

Total Marks: 100

Hours: 75

Each teacher-trainee will be required to prepare at least two low cost / no cost teaching-learning material in the concerned subjects (Pedagogy studied in concerned semester) and present the same for evaluation along with one 3D model.

DPV 207

Practice Teaching

Total marks: 100

Hours: 60

20 lessons in the concerned subject

Unit 1: Nature of Information and Communication Technology

- 1.1 Meaning and scope of information and communication technology
- 1.2 Technological inputs to reduce handicapping conditions
- 1.3 Technological devices enhancing cognitive abilities
- 1.4 Major ICT devices for the visually impaired
- 1.5 Evolution of ICT for the visually impaired

Unit 2: Orientation to Computers and Computer Applications (Special Software)

- 2.1 Hardware and Software
- 2.2 Screen Reading Software
- 2.3 Magnification devices
- 2.4 Braille Translation
- 2.5 DAISY Book Production

Unit 3: Basic Computer Applications

- 3.1 Keyboard operations
- 3.2 Using application software – MS Office, Windows
- 3.3 Preparing word documents
- 3.4 Preparing power-point files
- 3.5 Creating spread sheets

Unit 4: Internet applications

- 4.1 Google search operations
- 4.2 E-mail
- 4.3 Use of speech synthesizers
- 4.4 Adaptive devices for persons with disabilities
- 4.5 Using internet for learning and teaching purposes

Unit 5: Hands-on Practical experience for unit 3.

Unit 6: Hands-on Practical experience for unit 4.

THEORY PAPER VIII:

DCP 301 Education in Emerging Indian Society and School Administration

Total Marks: 75

Total Hours: 90

Objectives:

After completion of this paper, the students are expected to:

1. Understand the different facets of education in India.
2. Describe various philosophies and their educational implications.
3. Appreciate the role of various agencies of education.
4. Know various significant legal policies initiative concerning education of children with disabilities.
5. Acquire proficiency in school-administration and documentation matters.

Unit 1: Nature and Emerging Priorities of Education (15 Hours)

- 1.1 Meaning, Definition and Scope of Education
- 1.2 Aims and objectives of general education and special education with reference to pre-primary and elementary level (Primary and upper primary)
- 1.3 Value education
- 1.4 Gender-equity (women's education) with particular reference to special education
- 1.5 Prevocational education

Unit 2: Philosophies and Educational Implications (15 Hours)

- 2.1. Idealism
- 2.2. Naturalism
- 2.3. Pragmatism
- 2.4. Humanism
- 2.5. Implications of Educational Philosophies in special education

Unit 3: Agencies of Education (15 Hours)

- 3.1. Formal – special and regular schools
- 3.2. Informal – family, community and mass media
- 3.3. Open and distance education with reference to special education
- 3.4. Roles of governmental and non-governmental agencies in general and special education
- 3.5. Equalization of educational opportunities

Unit 4: Significant Legal/Policy Initiatives Concerning Education of Children with Disabilities (15 Hours)

- 4.1 United Nations Convention on the rights of Persons with Disabilities (UNCRPD) and Incheon Strategy
- 4.2 The Persons with Disabilities (Equal Opportunities, Protection of Rights and Full Participation) Act 1995/ Replacement Legislation
- 4.3 National Trust Act for Persons with Autism, Cerebral Palsy, Mental Retardation and Multiple Disabilities (1999)
- 4.4 National Policy for Persons with Disabilities (2006)
- 4.5. The Right of Children to Free and Compulsory Education Act (RTE) (2009) along with Amendment.

Unit 5: Introduction to School Administration and Documentation (15 Hours)

- 5.1. Definition and principles of school organization and administration
- 5.2. Organization of Special School and Inclusive School
- 5.3. Duties and responsibilities of the head of school
- 5.4. Annual school plan and Preparation of time-table
- 5.5. Maintenance of school-record--progress report, cumulative record, case histories, Continuous and Comprehensive Evaluation (CCE)

Experiential Learning**(15 Hours)**

The student is expected to take up one of the important facets of education such as gender- equity, value education, prevocational education or any of the legal initiatives and develop a review of literature.

Reference material:

Ashok Kumar (1991) Current Trends in Indian Education. New Delhi: Ashish Pub. House.

Garg, V.P. (1990) Development of Perspectives in India education. New Delhi: Metropolitan Pub.

Agrawal, S.P. and J.C. (1994) Third Historical Survey of Educational Development of India. New Delhi: Concept Pub. Co.

Sharma, S.N. (1995) Philosophical and Sociological Foundation of Education. New Delhi: Kanishka.

Smt, D.D. and Luckasson (1992) Introduction to Special Education. Boston: Allyn and Bacon.

Nanda, V.K Education Emerging Indian Society

B.N. Dash (2004) Theories of Education and Education in the Emerging Indian Society

DSV 302 PAPER IX: Education of Visually Impaired Children with Additional Disabilities

Total Marks: 75

Total Hours: 90

Objectives: On the completion of this paper, the pupil-teachers will be able to:

- 1.1 Identify visually impaired children with additional disabilities
- 1.2 Provide support by way of early intervention.
- 1.3 Acquire necessary skills and competencies to recognize special needs
- 1.4 Provide educational interventions for visually impaired children who are slow-learning or have such additional disabilities as: learning disability/ADHD/Autism/mental retardation /neuro-muscular / locomotor disabilities /deafblindness.

Unit 1: Visually Impaired Children with Additional Disabilities (18 hours)

- 1.1 Concept and definition of multiply disabled child
- 1.2 Types of additional disabilities
- 1.3 Current status of education of visually impaired child with additional disabilities
- 1.4 Challenges of teaching visually impaired children with additional disabilities
- 1.5 Early intervention and its significance in education of the visually impaired children with additional disabilities

Unit 2: Management of Slow Learning Visually Impaired Children (18 hours)

- 2.1 Concept of slow learner visually impaired
- 2.2 Characteristics of slow learner visually impaired
- 2.3 Factors responsible for slow learning
- 2.4 Implications
- 2.5 Educational interventions

Unit 3: Visually Impaired Children with Cognitive Deficits: (18 hours)

- 3.1 Learning disability – concept, educational implications and teaching strategies
- 3.2 Attention –deficit Hyperactivity disorder (ADHD) – concept and educational implications
- 3.3 Teaching strategies for ADHD with Visually Impaired Children
- 3.4 Intellectual Impairment – concept, educational implications and teaching strategies
- 3.5 Autism -- concept, educational implications and teaching strategies

Unit 4: Visually Impaired Children with Neuromuscular & Locomotor Disabilities (18 hrs)

- 4.1 Visually impaired children and cerebral palsy -- concept and educational implications, teaching strategies
- 4.2 Visually impaired children and locomotor disability (upper and lower extremities) -- concept, educational implications and teaching strategies
- 4.3 Visually impaired children with severe seizure disorders -- concept, educational implications and teaching strategies
- 4.4 Architectural modifications
- 4.5 Educational interventions

Unit 5: Teaching of Deafblind Children (18 hours)

- 5.1 Assessment – hearing, vision and age of onset
- 5.2 Teaching communication skills – verbal and non-verbal
- 5.3 Using vibratory devices for communication
- 5.4 TADOMA Method, Braille and Large Print
- 5.5 Manual alphabet and Total Communication

Books Recommended:

- Blake, K.A., *The Mentally Retarded: An educational psychology*, Englewood Cliffs, NJ: Prentice-Hall, 1976.
- Fernandez,G., Koenig, C., Mani M.N.G., and Tensi, S. (1999). *See with the Blind*. Bangalore: Books for Change and CBM International.
- Rehabilitation Council of India (2000). *Status Report on Disability 2000*.
- Murickan S.J.J, and Kareparampil, G. (1995). *Persons with Disabilities in Society*. Trivandrum: Kerala Federation of the Blind.
- Punani, B., and Rawal, N. (1993). *Handbook: Visual Impairment*. New Delhi: Ashish Publishing House.

PAPER X

DMV 303

Pedagogy of Hindi/State Language and English Education

Total Marks: 75

Total Hours: 90

Part A: Hindi/State Language (Hours: 45)

हिंदी शिक्षण (समय – 45 घंटे)

पाठ्यक्रम के उद्देश्य : प्रस्तुत पाठ्यक्रम द्वारा विद्यार्थियों इस योग्य होंगे कि -

1. प्राथमिक स्तर पर हिंदी शिक्षण के उद्देश्य एवं महत्व को बता सकेंगे;
2. हिंदी शिक्षण के विभिन्न विधियों की चर्चा कर सकेंगे;
3. हिंदी में सुनने, बोलने, पढ़ने एवं लिखने के कौशलों को अधिग्रहण कर सकेंगे;
4. हिंदी की विभिन्न विधियों की शिक्षण विधियों को समझा सकेंगे;
5. हिंदी में मूल्यांकन कर सकेंगे।

इकाई-1: हिंदी भाषा का स्थान एवं महत्व

(7 घंटे)

- 1.1 भाषा की परिभाषा एवं महत्व
- 1.2 हिंदी भाषा के विविध रूप: मातृभाषा, प्रादेशिक अथवा क्षेत्रीय भाषा, राजभाषा, राष्ट्रभाषा एवं सम्पर्क भाषा
- 1.3 हिंदी भाषा का विद्यालयी पाठचर्या में स्थान
- 1.4 हिंदी भाषा का विद्यालयी पाठचर्या में महत्व
- 1.5 हिंदी भाषा शिक्षण के सामान्य सिद्धांत : स्वभाविकता, प्रयत्न, रूचि, क्रियाशीलता, प्रेरणा, अनुकरण, वैयक्तिक विभिन्नता, एवं अभ्यास का सिद्धांत

इकाई-2: प्राथमिक स्तर पर हिंदी शिक्षण के उद्देश्य एवं विधियाँ

(8 घंटे)

- 2.1 हिंदी शिक्षण के सामान्य उद्देश्य
- 2.2 हिंदी शिक्षण के विशिष्ट उद्देश्य: ज्ञानात्मक, कौशलात्मक, रसात्मक एवं समीक्षात्मक
- 2.3 हिंदी शिक्षण की विधियाँ: कहानी कथन विधि, पाठ्यपुस्तक विधि, व्याख्या विधि, हरबार्तीय विधि एवं
- 2.4 भाषा प्रयोगशाला विधि; इनके गुण एवं अवगुण
- 2.5 हिंदी शिक्षण की नवीन विधियाँ: निदानात्मक एवं उपचारात्मक शिक्षण

इकाई-3: हिन्दी की विविध विधाओं के शिक्षण की विधियों का परिचय और उपयोग

(10 घंटे)

- 3.1 गद्य शिक्षण: अर्थबोध, व्याख्या, विश्लेषण और संयुक्त विधि का परिचय
- 3.2 पद्य शिक्षण: शब्दार्थ कथन, खण्डान्वय, व्यास और समीक्षा विधि का परिचय
- 3.3 नाटक शिक्षण
- 3.4 व्याकरण शिक्षण
- 3.5 उच्चारण शिक्षण

इकाई-4: हिंदी भाषा के विभिन्न कौशल एवं श्रव्य दृश्य उपकरण

(10 घंटे)

- 4.1 श्रवण कौशल
- 4.2 पठन कौशल
- 4.3 लेखन कौशल
- 4.4 उच्चारण कौशल
- 4.5 हिंदी शिक्षण में श्रव्य दृश्य उपकरणों का उपयुक्त चयन

इकाई-5: पाठ नियोजन एवं मूल्यांकन

(10 घंटे)

- 5.1 पाठ नियोजन का परिचय, उपयोग एवं महत्व
- 5.2 पाठ नियोजन के विविध उपागम
- 5.3 पाठ योजना का प्रारूप, गुण एवं दोष
- 5.4 पाठयोजना के चरण और उनका क्रियान्वयन।
- 5.5 हिंदी में मूल्यांकन की प्रमुख प्रविधियाँ

सन्दर्भ पुस्तकें -

1. हिन्दी शिक्षण: अभिनव आयाम, डा. श्रुतिकान्त पाण्डेय, एक्सिस पब्लिकेशंस, दरियागंज, नई दिल्ली, 2010.
2. हिन्दी शिक्षण, उमा मंगल, आर्य बुक डिपो करोल बाग, नई दिल्ली, 2005.
3. हिन्दी शिक्षण, डा. रामशकल पाण्डेय, विनोद पुस्तक मन्दिर, आगरा, 2005.
4. हिन्दी साहित्य का इतिहास, आचार्य रामचन्द्र शुक्ल, राजकमल प्रकाशन, नई दिल्ली, 2006
5. हिन्दी शिक्षण, रमन बिहारी लाल, रस्तोगी प्रकाशन, मेरठ, 2002.
6. हिन्दी शिक्षण, सावित्री सिंह, इन्टरनेशनल पब्लिशिंग हाउस, मेरठ, 2004.
7. हिंदी शिक्षण, डा. कर्ण सिंह, गोविन्द प्रकाशन, लखीमपुर खीरी, 2012.
8. माध्यमिक विद्यालयों में हिन्दी शिक्षण, निरजंन कुमार सिंह, राजस्थान हिंदी आकादमी, जयपुर, 2010.

Part B: English (Hours: 45)

Objectives:

On completion of this paper, the pupil-teachers will be able to:

1. Define the objectives of teaching English at the elementary level, consistent with its place in society.
2. Make use of appropriate methods of teaching English.
3. Acquire efficient skills of listening, speaking, reading and writing English.
4. Enrich their knowledge of grammar and lexical items and teach them efficiently in the classroom.
5. Carry out evaluation properly.

Unit 1: Role of English Language in Curriculum and Life & Grammar (10 hours)

- 1.1 Importance of English Language in a multilingual society
- 1.2 Objectives of teaching English as second/third language at elementary level
- 1.3 Word formation/spelling; Parts of speech; Kinds of sentences;
- 1.4 Transformation of sentences – tenses, clauses and connectors, non-finites, voices
- 1.5 Methods of teaching grammar – inductive and deductive methods

Unit 2: Methods of Teaching English (07 hours)

- 2.1. Translation method – Importance, merits and demerits
- 2.2 Auro-Oral Approach-- Importance, merits and demerits
- 2.3 Structural Approach -- Principles of Structural Approach, merits and demerits; Skill based Approach – Listening, speaking, reading, writing
- 2.4 Direct method – Aims, merits and demerits; Eclectic method – Importance, merits and demerits
- 2.5 Communicative Approach – Importance, merits and demerits

Unit 3: Listening and Speaking (07 hours)

- 3.1 Listening with comprehension to follow simple instructions, public announcements, telephonic conversation, radio, television news, sports commentary, classroom discussion
- 3.2 Organs of speech, the classification and description of speech sounds: consonants, vowels
- 3.3 Word stress and sentence stress; Intonation, accents and rhythm in connected speech
- 3.4 Use dictionary for correct pronunciation and stress
- 3.5 Organizing listening and speaking activities – rhymes, songs, stories, poems, role play, dramatization, language games etc.

Unit 4: Reading & Writing (14 hours)

- 4.1 Reading Readiness/creating environment for reading;
- 4.2 Methods of teaching reading-- the phonic method, the sentence method, and story method

- 4.3 Reading efficiency – reading aloud, silent reading, reading with speed.
- 4.4 Reading with comprehension -- textbooks, story books, fiction, poetry, articles and Internet; Using reading as a tool for reference – use of Dictionary, Encyclopaedia and Internet
- 4.5 Prewriting skills and writing readiness; Mechanics of writing and punctuations; Different forms of writing – letters (application, complaint, permission, invitation), messages, notices and posters

Unit 5: Evaluation

(07 hours)

- 5.1 Objectives of evaluation
- 5.2 Tools of evaluation
- 5.3 Types of evaluation – formative, summative, continuous and competency-based
- 5.4 Construction of test items for evaluating language problems of children
- 5.5 Designing remedial teaching

Books Recommended:

- Baruah, T C, The English Teachers Hand Book (2006), Sterling Publishers Private Limited: New Delhi
- Paul Varghese, C., Teaching English as a Second Language (1989), Sterling Publishers Private Limited: New Delhi
- Prem Shankar, Teaching of English (2004), APH Publishing Corporation: New Delhi
- Singh, Y K, Teaching of English (2005), APH Publishing Corporation: New Delhi.

PRACTICUM (Semester-III)

DPV 304

Paper-I—BRAILLE

60 Hours

Total Marks 100

Unit 1: Mathematical Braille

- 1.1 Writing Numerals, Numeric Indicator, Math, Comma, Decimal Point, Punctuation Indicator
- 1.2 Signs of operation (+, -, X,)
- 1.3 Brackets (Round, Curly, Square)
- 1.4 Fractions - (i) Simple fraction (ii) Mixed fraction
- 1.5 Units of Currency Measurements
- 1.6 Roman Numerals
- 1.7 Omission and Cancellation
- 1.8 Shape Signs – Basic Shapes (Angle, Triangle, Circle, Square, Rectangle, Quadrilateral, Rumbas)
- 1.9 Run over Indicator
- 1.10 Dash and Ellipsis
- 1.11 Recurring Indicator
- 1.12 Miscellaneous - (At Check Mark, Ditto Mark, Percentage, Ratio of Proportion, since, therefore)

Unit 2: Letters

Format of different types of letters.

Unit 3: Use of Thermoform machine/other duplicating devices, Braille embosser including Braille Translation software, Braille Note-Taker/refreshable Braille Display.

DPV 305

Paper-II - Use of Special Appliances

Total Marks: 100

Hours: 50

Unit 1: Use of Low Vision Devices – optical, non-optical, electronic

Unit 2: Abacus:

Exercises involving:

- 2.1 Fraction
- 2.2 Decimal fraction—addition, subtraction, multiplication and division

Unit 3: Taylor Frame:

Exercises involving:

- 3.1. Percentage
- 3.2. Ratio
- 3.3. Average

DPV 306

Paper-III—Orientation and Mobility

Total Marks: 50

Hours: 75

Unit 1: Use of cane techniques – Grip, Rhythm, Swing, Gait, Arc, Taking Direction using Cane.

Unit 2:

- 2.1 Two-point touch technique
- 2.2 Three- point touch technique
- 2.3 Trailing, Shoreline-- both inside and outside the campus
- 2.4 Ascending and descending stairs with cane

Unit 3: Using cane with sighted guide

Unit 4: Preparing tactile/auditory maps for blind and low vision children.

Unit 5: Indoor and outdoor travel with long and folding canes and with use of residual vision.

DPV 307**VII--Preparation of Tactile/Audio Maps****Total marks: 50****Hours: 25**

Each student-teacher is expected to prepare 2 tactile/audio maps and present the same for evaluation.

DPV 308**Paper-V- Practice Teaching****Total Marks: 100****Hours: 60**

Each pupil-teacher is expected to plan and teach 20 lessons—10 in English and 10 in Hindi/ State language.

DPV-309**Paper-VI-Project Work****Total Marks: 50****Hours: 60**

Each student-teacher is expected to plan, execute and present a report on any three of the following activities relating to elementary education of visually impaired children:

- 1.1 Functional assessment of vision of at least two low vision children
- 1.2 Visual stimulus training for at least two low vision children
- 1.3 Remedial teaching in any one of the curricular/expanded Core Curricular areas for at least two children
- 1.4 Preparation of individualized education plan for at least two pre-schoolers/multiply disabled visually impaired children
- 1.5 Preparation of Braille Reading Readiness Kit
- 1.6 Case histories of at least two children
- 1.7 Need-assessment in respect of regular schools for meaningful inclusion of visually impaired children and preparing a brief set of guidelines for regular classroom teachers
- 1.8 Preparing a small pamphlet in Hindi/State language in conversational mode with illustrations, on raising awareness regarding visually impaired children
- 1.9 Adapting a short story book for visually impaired children to make pictorial illustrations/visual images accessible.

Objectives:

On completion of this paper, the student-teachers will be able to:

1. Define inclusion
2. Relate inclusion to all aspects of life and service delivery
3. Discuss the advantages and potential challenges of inclusion
4. Understand and use the methods and strategies of enhancing/promoting inclusion
5. Describe the roles of the community and society in general for successful inclusion

Unit 1: Introduction to Inclusive Education (15 hours)

- 1.1 Understanding Inclusive Education: Meaning and Definition
- 1.2 Benefits of Inclusion
- 1.3 Difference between special, integrated and inclusive education
- 1.4 SSA, IEDSS and RMSA
- 1.5 Barriers to Inclusion: Systemic barriers, Societal barriers and Pedagogical barriers

Unit 2: Accessing Inclusive Education (15 hours)

- 2.1 Fundamental elements of inclusive school
- 2.2 Strategies for making schools inclusive
- 2.3 Need for Curriculum differentiations and assessment
- 2.4 Classroom Management and Teaching Strategies–Cooperative Learning and Peer Tutoring
- 2.5 Physical accessibility of schools and Universal Design Model

Unit 3: Including Children with Disabilities in Education (15 hours)

- 3.1. Identifying special needs of children with disabilities
- 3.2. Curriculum Adaptations
- 3.3. Use of Technology, Teaching Learning Material and Educational Aids
- 3.4. Continuous and Comprehensive Evaluation in Disabilities
- 3.5. Developing resource room and resource facilities

Unit 4: Networking for Inclusive Education (10 hours)

- 4.1. Developing partnerships with family
- 4.2. Developing partnership with school functionaries and peer group
- 4.3. Collaborative Teaching and team work
- 4.4. Mobilizing support for learners-role of voluntary organizations, community, special school, Health care professional and local bodies
- 4.5. Understanding the role of BRCs, CRCs and school management committees

Unit 5: Major components of successful change toward Inclusion (10 hours)

- 5.1 Communication
- 5.2 Interpersonal skills
- 5.3 Positive attitudes
- 5.4 Flexibility
- 5.5 Success Stories, Financial Resources and Infrastructure.

Experiential Learning (15 Hours)

(The students are expected to visit one inclusive setting and observe classroom teaching and prepare case studies of students with disabilities in this school.)

Reference material:

- Fernandez, G., Koenig, C., Mani M.N.G., and Tensi, S. (1999). See with the Blind. Bangalore : Books for Change and CBM International.
- ICEVI (1995). Proceedings of the Asia Regional Conference on “Reaching the Unreached”. Organized by the International Council for Education of People with Visual Impairment at Ahmedabad, India.
- Jangira, N.K. and Mani, M.N.G. (1990). Integrated Education for the Visually Handicapped: Management Perspective. Gurgaon: Academic Press Rehabilitation Council of India (2000). Status Report on disability 2000.
- Mani, M.N.G. (2001). Inclusive Education in Indian Context. Coimbatore, IHRDC
- Murickan S.J.J, and Kareparampil, G. (1995). Persons with Disabilities in Society. Trivandrum: Kerala Federation of the Blind.
- Mukhopadhyay, S. and Mani.M.N.G. (1999). Education of Children with Special Needs, Country Report, New Delhi: National Institute of Educational Planning and Administration.
- Punani, B., and Rawal, N. (1993). Handbook: Visual Impairment. New Delhi: Asish Publishing House.
- Awareness Package for Upper Primary teachers: NCERT, New Delhi, 2003
- Inclusive Education: An Orientation Package for Teacher Educators. Department of Education of Groups with Special Needs, NCERT, New Delhi, 2002 (both in Hindi & English).
- Planning and Managing Inclusive Education in the Indian Context. Department of Education of Groups with Special Needs, NCERT and UNESCO, 2004.
- Assessment of Needs for Inclusive Education: Report of the First Regional Workshop of NCERT and UNESCO, 2000.

Paper XII

DSV 402

Early Childhood Care and Education (Visual Impairment)

Total Marks: 75

Total Hours: 90

Objectives:

On completion of this paper, the pupil-teachers will be able to:

1. Understand and apply concept, principles and methods of early childhood care and education in the context of children with visual impairment.
2. Provide support through early detection and intervention services.
3. Make necessary help available to parents of young children with visual impairment.
4. Develop and implement individualized educational plan for young visually impaired children.
5. Facilitate successful transition to primary education.

Unit 1: Concept, Principles and Methods of Early Childhood Care and Education with reference to the Visually Impaired (20 Hours)

- 1.1 Concept and scope of early childhood care and education
- 1.2 Principles of early childhood care and education for young visually impaired children:
 - 1.2.1 Supporting sensory development
 - 1.2.2 Creating safe and stimulating environments
 - 1.2.3 working with families
 - 1.2.4 Developing a sense of self and capacity
 - 1.2.5 Encouraging independence
- 1.3 Importance of early childhood care and education for young visually impaired children.
- 1.4 Methods: Montessori, Kindergarten, Playway, Gijubhai Badheca system
- 1.5 Implications of the above methods for the early care and education for visually impaired children.

Unit 2: Early Intervention (15 Hours)

- 2.1 Need and importance of early childhood intervention, particularly for the young child with visual impairment
- 2.2 Roles of early childhood-teacher of children with visual impairment
- 2.3 Utilizing services of Anganwadi and Balwadi workers
- 2.4 Models of early childhood services with reference to the visually impaired
- 2.5 Overcoming challenges to service-delivery to young children with visual impairment in India

Unit 3: Supporting Families (15 Hours)

- 3.1 Understanding how disability impacts the family (mother, father, siblings, grandparents, extended family)
- 3.2 Helping families see the child's strengths and understand his rights
- 3.3 Helping families deal with difficult social situations
- 3.4 Helping families integrate the child's developmental goals into their daily routine
- 3.5 Accommodating special circumstances:
 - a. Parents with disability
 - b. Single parent families
 - c. Working parents
 - d. Parents in rural areas or below poverty line

Unit 4: Special Assessments and Interventions (25 Hours)

- 4.1 Assessment of sensory capacity
- 4.2 Assessment of orientation and mobility
- 4.3 Learning medium and language assessment

- 4.4 Developing an individualized family service plan: birth to 3 years
4.5 Developing and implementation of individualized education plan: 3 to 6 years

Unit 5: Successful Transition into Primary School (15 hours)

- 5.1 Range of service options
5.2 Preparing the child
5.3 Preparing the school, the head and the teachers in inclusive settings
5.4 Utilizing community resources
5.5 Obtaining simple assistive devices and accessible books: sources, affordability

Books Recommended:

- Costello, P.M. (2000). *Thinking Skills & Early Childhood Education*. London: David Fulton Publishers.
- Dunn, S.G., & Dunn, K. (1992). *Teaching Elementary students through their individual learning styles: Practical approaches for grades 3-6*. Massachusetts: Allyn & Bacon.
- Guralnick, M.J. (2005). *The Developmental Systems Approach to Early Intervention*: Brookes Publication.
- Klausmeir, H.J., & Sipple, T.S. (1980). *Learning & Teaching Concepts. A strategy for testing applications of theory*. New York: Academic Press.
- Mohanty, J., & Mohanty, B. (1999). *Early Childhood Care and Education*. Delhi: Offset Printers.
- Barbour, N., & Seefeldt, C. (1998). *Early Childhood Education. An Introduction* (4th Eds). U.K: Prentice Hall.
- Broman, B. C. (1978). *The Early Years in Childhood Education*. Chicago: Rand McNally College Publishing Company.
- Catron, C.E., & Allen, J. (1993). *Early Childhood Curriculum*. New York: MacMillan Publishing Company.
- Dahlberg, G., Moss, P. & Pence, A. (2007). *Beyond Quality in Early Childhood Care and Education* (2nd Ed.). New York: Routledge Publication.
- Dopyera, M.L., & Dopyera, J. (1977). *Becoming a Teacher of Young Children*. New York: Random House Publications.
- Gordon, I.J. (1972). *Early Childhood Education*. Chicago: Chicago University Press.
- Hamilton, D.S. & Flemming, (1990). *Resources for Creative Teaching in Early Childhood Education* (2nd Edition). Tokyo: Harcourt Brace Jovanovich.
- Hilderbrand, V. (1991). *Introduction to Early Childhood Education*. New York: MacMillan Publishing.
- Krogh, S.L., & Slentz, K. (2001). *Early Childhood Education, Yesterday, Today & Tomorrow*. London: Lawrence Erlbaum Associates Publishers.
- Range, D.G., Layton, J.R. & Roubinek, D.C. (1980). *Aspects of Early Childhood Education. Theory to Research to Practice*. New York: Academic Press.
- Spodek, B., Saracho, O.N., & Davis, M.D. (1987). *Foundations of Early Childhood Education*. Englewood Cliffs, New Jersey: Prentice Hall,
- Wortham, S.C. (NK). *Measurement & Evaluation in Early Childhood Education* (2nd Eds.), Ohio: Merrill Prentice Hall.

Objectives:

After completion of this paper, the pupil-teachers will be able to:

- 1 Describe the importance of Mathematics in school-curriculum and objectives of teaching the subject at the elementary stage.
- 2 Understand and make use of appropriate methods and procedures of teaching Mathematics and coping with challenges.
- 3 Consolidate knowledge about various special Mathematical appliances.
- 4 Appreciate the importance and working of mental mathematics and apply related rules to teaching.
- 5 Carry out evaluation effectively.
- 6 Be familiar with and make use of basic Arithmetic concepts.
- 7 Be able to comprehend and teach advanced Arithmetic.
- 8 Be able to teach basic Geometry and Algebra as also polynomials.

Unit 1: Role of Mathematics and Objectives of Teaching Mathematics (10 hours)

- 1.1 Role of Mathematics in day-to-day living
- 1.2 The place and importance of Mathematics in the school curriculum for children with visual impairment
- 1.3 Problems encountered by teachers in teaching Mathematics
- 1.4 Relationship of Mathematics with other subjects
- 1.5 Objectives of teaching Mathematics – general and specific

Unit 2: Methods of Teaching Mathematics, teaching aids and evaluation (27 hours)

- 2.1 Inductive-deductive and Analytic-synthetic procedures
- 2.2 Familiarization with web resources & Mathematics phobias and coping with failure
- 2.3 Workbook and TLM; Mathematics laboratory; Teaching aids: Taylor frame; Geo board; Abacus; Geometry kit
- 2.4 Construction of test items for evaluating learning of Mathematics of pupils
- 2.5 Diagnosing pupil difficulties in learning Mathematics and Designing remedial teaching

Unit 3: Mental Mathematics (10 hours)

- 3.1 Concept, Need and Importance
- 3.2 Importance of Tables and Partner numbers
- 3.3 Tricks of solving: a. Addition; b. Subtraction; c. Multiplication; d. Division
- 3.4 Simple methods for finding squares and square roots.
- 3.5 Mathematical Games and Puzzles.

Unit 4: Basic and advance Arithmetic (14 hours)

- 4.1 Types and Properties of numbers – natural, whole, integers, rational and irrational numbers, real numbers, number line; basic Arithmetic operations– addition, subtraction, multiplication and division
- 4.2 Prime and composite numbers, laws of divisibility, LCM, HCF; Ratio and proportion
- 4.3 Practical Arithmetic – problems related to time and work, percentage, profit and loss, simple and compound interest, average
- 4.4 Fractions – Simple fractions, decimal fractions, conversion of simple fractions into decimal fractions and vice versa

4.5 Weights and measures – length, distance, weight, mass, area, volume, metric system, measurement of time; Indices – square and square root, cube and cube root

Unit 5: Geometry, Algebra and Polynomials (24 hours)

5.1 Point, line, segment, rays, angles, perpendiculars, Perimeters Parallels, properties of parallel lines and types of angles

5.2 Concept and types of triangles, quadrilaterals; Circle – parts of a circle, circumference, area; Polygons -- interior and exterior angles, convex and concave polygons; Concept of congruent, equivalent and lateral, lateral axis

5.3 Polynomials – concept and definition; Addition, Subtraction, Multiplication and Division of polynomials

5.4 Presenting Arithmetic principles in Algebraic formulae, addition, subtraction, multiplication and division of algebraic expression

5.5 Expansion formulae & Equations – simple, quadratic, binomial

Books Recommended:

Rani T.S. (2007). Teaching of Mathematics. APH Publishing Corporation: New Delhi

Scholl, G. T. (Ed.) (1986). Foundations of the education for blind and visually handicapped children and youth: Theory and Practice. AFB Press: New York.

Sharan, R., Teaching of Mathematics (2006), APH Publishing Corporation: New Delhi

Siddique, M.H., Teaching of Mathematics (2005), APH Publishing Corporation: New Delhi

Sidhu Kulbir Singh, Teaching of Mathematics (2006), Sterling Publishers Private Limited: New Delhi

PRACTICUM (Semester-IV)

DPV 404

I--Practice Teaching

Total Marks: 60

Hours: 60

Each student-teacher is expected to plan and teach 20 lessons in the concerned subject keeping in view the needs of low vision children, as appropriate.

DPV 405

II--Teaching of Expanded Core Curriculum (ECC) Skills

Total Marks: 60

Hours: 50

Each student-teacher is expected to plan and teach at least 10 lessons of ECC skills to children with visual impairment.

DPV 406

III—Braille

Total Marks: 100

Hours: 75

Unit 1: Braille Mathematics Code

- 1.1 Fraction-Complex and Hyper-Complex
- 1.2 Shape signs
- 1.3 Superscript and subscript
- 1.4 Radicals
- 1.5 Greek letters
- 1.6 Mensuration and Logarithm
- 1.7 Reference signs
- 1.8 Negation sign
- 1.9 Degree, infinite, prime, English letters
- 1.10 Compounded shape signs
- 1.11 Spatial arrangement of fractions

Unit 2: Transcription of a 20-page Maths text into Braille of the last class of primary /elementary education.

DPV 407

IV- Use of Special Appliances

Total Marks: 80

Hours: 70

Unit 1: Abacus:

- 1.1 Exercises involving: Square root and percentage
- 1.2 Revision and practice on Abacus

Unit 2: Taylor Frame:

- 2.1 Exercises involving: percentage, profit and loss, simple and compound interest
 - 2.2 Use of Algebra Types and doing Algebra sums as indicated in Unit 5 of the theory paper "Teaching of Mathematics"
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DPV 408

V. Teaching and organizing co-curricular activities for visually impaired children

Total Marks: 100

Hours: 100

Unit 1: Physical Education

Hours: 20

- 1.1 Body posture and gait

- 1.2 Physical exercises and Yoga
- 1.3 Athletics
- 1.4 Outdoor games with appropriate modifications/modifications for visually impaired.

Unit 2: Music **Hours: 20**

- 2.1 Nursery Rhymes and Children’s Songs
- 2.2 Patriotic songs
- 2.3 Introduction to the octave, scales, notations and basics of playing Harmonium as accomplishments
- 2.4 Basic rhythmic patterns and orientation to playing of percussion instruments.
- 2.5 Techniques of using a microphone for individual group songs.

Unit 3: Arts and Craft **Hours: 20**

- 3.1 Tactile graphics for Art and Drawing
- 3.2 Paper craft/Origami
- 3.3 Pottery
- 3.4 Clay Modeling and sculpture

Unit 4: Dramatics **Hours: 20**

- 4.1 Body Language/non-verbal communication
- 4.2 Dialogue delivery – voice modulation, pronunciations and stress, etc.
- 4.3 Facial expressions
- 4.4 Stage management
- 4.5 Script writing for short play.

Unit 5: Dance **Hours: 10**

- 5.1 Basic steps and body movement
- 5.2 Dance costumes
- 5.3 Group dance
- 5.4 Stage Management
- 5.5 Techniques of coordination dance with playback music

Unit 6: Literary Activities **Hours: 10**

- 6.1 Elocution
- 6.2 Extempore Speech
- 6.3 Debate
- 6.4 Language Games
- 6.5 Miming

NOTE:

1. This is a practical subject being introduced for the first time and Unit-wise teaching hours have been listed for the guidance of teacher-educators.
2. On the basis of learning acquired, each student-teacher will be required to teach and organize at least two of the above listed activities for visually impaired children.
3. Evaluation will be carried out on the basis of planning by the student-teacher and the quality of performance of activities by visually impaired children.

DPV 409

VI- Community Work

Total Marks: 50

Hours: 35

Each student-teacher is expected to work with visually impaired children and their parents in the community.
