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BENGALURU
CITY UNIVERSITY

Office of the Registrar, Central College Campus, Dr. B.R. Ambedkar Veedhi, Bengaluru – 560 001.
PhNo.080-22131385, E-mail: registrar@bcu.ac.in

No.BCU/BoS/SEP/Rehabilitation Science / 162/2024-25

Date: 13.09.2024.

NOTIFICATION

Sub: B.Sc. I & II Semesters Rehabilitation Science Syllabus of Bengaluru City University-reg.

Ref: 1. Recommendations of the Board of Studies in the Speech & Hearing (PG & UG)
2. Approval of the Vice-Chancellor dated. 09.09.2024.

In pursuance to the recommendations of the BoS in Speech & Hearing (PG & UG) and the approval of the Vice-Chancellor cited at reference (1 & 2) above, the B.Sc. I & II Semester Rehabilitation Science Syllabus of Bengaluru City University effective from the academic year 2024-25, is hereby notified for information of the concerned.

The copy of the Syllabus is notified in the University Website: www.bcu.ac.in for information of the concerned.


REGISTRAR

To:

The Registrar (Evaluation), Bengaluru City University, Bengaluru.

Copy to;

1. The Dean, Faculty of Science, BCU.
2. The Chairman & Members of BoS in Speech Hearing (PG & UG), BCU.
3. The P.S. to Vice-Chancellor/Registrar/Registrar (Evaluation), BCU.
4. Office copy / Guard file / University Website: www.bcu.ac.in



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BE BOUNDLESS

BENGALURU CITY UNIVERSITY

SCHEME BASED CREDIT SYSTEM

(Semester Scheme with Multiple Entry and Exit Options for
Under Graduate Course – as per NEP 2020)

SYLLABUS for B.Sc. Rehabilitation Science

2024 – 2025 Onward

aM d

SAMVAAD INSTITUTE OF SPEECH AND HEARING

Affiliated to Bengaluru City University and Recognized by Rehabilitation Council of India

MINUTES OF THE BOS MEETING VIA EMAIL CIRCULATION ON 28/12/21 SAMVAAD INSTITUTE OF SPEECH & HEARING

Agenda: Approval of the Rehabilitation Science course syllabus.

The Rehabilitation Science course syllabus was circulated among the BOS members, via email, for approval on 28th of December 2021.

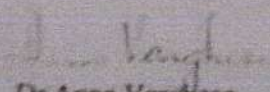
The following members participated and sent their responses via email.

- | | |
|------------------------------|-------------|
| 1. Dr. Anne Varghese | Chairperson |
| 2. Ms. Radhika Poovayya | Member |
| 3. Dr. Jayshree Bhat | Member |
| 4. Mr. Suresh Thontadarya | Member |
| 5. Dr. Narasimhan | Member |
| 6. Ms. Prajna Bhatt | Member |
| 7. Mr. Avinash Krishnamurthy | Member |

All the members gave their approval for the Rehabilitation Science course syllabus. The response of each member is attached with the minutes.

Thanking You,

Yours Sincerely,



Dr. Anne Varghese
CHAIRPERSON
BOARD OF STUDIES - UG

Dr. ANNE VARGHESE
CHAIRPERSON
BOARD OF STUDIES - UG / PG
Samvaad Institute of Speech & Hearing
#18, 1st Cross, 5th Main, Anandagiri Extension
Hebbal, Bangalore - 560 024



SD
3/1/2022

SEMESTER I

PAPER1.1	LANGUAGE – I (PAPER – 1)	100 MARKS
PAPER 1.2	LANGUAGE – II (PAPER – 1) (ENGLISH)	100 MARKS
PAPER 1.3	REHABILITATION SCIENCE- HEALTH CARE AND PREVENTION OF DISABILITIES (PAPER – 1)	100 MARKS
PAPER 1.4	PSYCHOLOGY – FOUNDATION OF PSYCHOLOGY (PAPER – 1)	100 MARKS
PAPER 1.5	SEC/AEC	100 MARKS
PAPER 1.6	OPEN ELECTIVE	100 MARKS
	TOTAL	600 MARKS

SEMESTER II

PAPER 2.1	LANGUAGE – 1 (Paper 2)	100 MARKS
PAPER 2.2	LANGUAGE – II (Paper – 2) (ENGLISH)	100 MARKS
PAPER 2.3	REHABILITATION SCIENCE – INTRODUCTION TO DISABILITY (Paper - 2)	100 MARKS
PAPER 2.4	PSYCHOLOGY- FOUNDATION OF BEHAVIOUR (Paper – 2)	100 MARKS
PAPER 2.5	OPEN ELECTIVE	100 MARKS
PAPER 2.6	SEC/AEC	100 MARKS
	TOTAL	600 MARKS

SEMESTER III

PAPER 3.1	LANGUAGE – I (PAPER-3)	100 MARKS
PAPER 3.2	LANGUAGE – II (PAPER – 3) (ENGLISH)	100 MARKS
PAPER 3.3	REHABILITATION SCIENCE – VISUAL IMPAIRMENT (PAPER – 3)	100 MARKS
PAPER 3.4	PSYCHOLOGY – CHILD DEVELOPMENT (PAPER – 3)	100 MARKS
PAPER 3.5	OPEN ELECTIVE	100 MARKS
PAPER 3.6	SEC/AEC	100 MARKS
	TOTAL	600 MARKS

SEMESTER IV

PAPER 4.1	LANGUAGE – 1(Paper – 4)	100 MARKS
PAPER 4.2	LANGUAGE – II (Paper – 4) (English)	100 MARKS
PAPER 4.3	REHABILITATION SCIENCE – HEARING IMPAIRMENT (Paper – 4)	100 MARKS
PAPER 4.4	PSYCHOLOGY – DEVELOPMENT PSYCHOLOGY (Paper – 4)	100 MARKS
PAPER 4.5	OPEN ELECTIVE	100 MARKS
PAPER 4.6	SEC/AEC	100 MARKS
	TOTAL	600 MARKS

SEMESTER V

PAPER 5.1	REHABILITATION SCIENCE – MENTAL RETARDATION (INTELLECTUAL DISABILITY) (Paper – 5)	100 MARKS
PAPER 5.2	REHABILITATION SCIENCE – LEARNING DISABILITY, MULTIPLE DISABILITY, DEAF BLIND, AUTISM & ADHD (Paper – 6)	100 MARKS
PAPER 5.3	PSYCHOLOGY – HEALTH PSYCHOLOGY (Paper – 5)	100 MARKS
PAPER 5.4	PSYCHOLOGY – SOCIAL PSYCHOLOGY (Paper – 6)	100 MARKS
PAPER 5.5	SEC/AEC	100 MARKS
	TOTAL	500 MARKS

SEMESTER VI

PAPER 6.1	REHABILITATION SCIENCE – EARLY INTERVENTION PROGRAMME FOR THE DISABLED (Paper – 7)	100 MARKS
PAPER 6.2	REHABILITATION SCIENCE – MANAGEMENT ISSUES IN EDUCATION & REHABILITATION (Paper – 8)	100 MARKS
PAPER 6.3	PSYCHOLOGY – ORGANIZATIONAL PSYCHOLOGY (Paper – 7)	100 MARKS
PAPER 6.4	PSYCHOLOGY – COUNSELLING PSYCHOLOGY (Paper – 8)	100 MARKS
PAPER 6.5	SEC/AEC	100 MARKS
	TOTAL	500 MARKS

QUESTION PAPER PATTERN

I - VIII Semester

PART A

I. Answer any **THREE** questions 3 out of 5 (3 x 10Mark = 30 Marks)

PART B

II. Answer any **FOUR** questions 4 out of 6 (4 x 5Mark = 20 Marks)

PART C

III. Answer all the **TEN** questions compulsory out of 10 (10 x 2Marks = 20Marks)

PART D

IV. Answer **TEN** questions compulsory out of 10 (10x1Mark=10Marks)

COURSE PATTERN AND SCHEME OF EXAMINATION FOR

B.Sc. REHAB

AS PER NEP 2022

S. No	Semester	Course Type	Title of the paper	Total hour	Hours per week	Course Component	Examination pattern max & min marks / paper			Total credits
							Practical	CIE	ESE	
1	I	D S C	HEALTH CARE AND PREVENTION OF DISABILITY (PAPER - 1)	5 2	4	-	20	80	100	4
2	I	D S C L	PRACTICAL-1	3 0	4	4	25	25	50	2
3	II	D S C	INTRODUCTION TO DISABILITY (PAPER - 2)	5 2	4	-	20	80	100	4
4	II	D S C L	PRACTICAL-2	3 0	4	4	25	25	50	2
5	III	D S C	VISUAL IMPAIRMENT (PAPER - 3)	5 2	4	-	20	80	100	4
6	III	D S C L	PRACTICAL-3	3 0	4	4	25	25	50	2

7	IV	D S C	HEARING IMPAIRMENT (PAPER - 4)	5 2	4	-	20	80	100	4
8	IV	D S C L	PRACTICAL - 4	3 0	4	4	25	25	50	2
9	V	D S C	MENTAL RETARDATION (INTELLECTUAL DISABILITY) (Paper - 5)	5 2	4	-	20	80	100	4
10	V	D S C L	PRACTICAL - 5	3 0	4	4	25	25	50	2
11	V	D S C	LEARNING DISABILITY, MULTIPLE DISABILITY, DEAF BLIND, AUTISM & ADHD (Paper - 6)	5 2	4	-	20	80	100	4
12	V	D S C L	PRACTICAL - 6	3 0	4	4	25	25	50	2
13	VI	D S C	EARLY INTERVENTION PROGRAMME FOR THE DISABLED (Paper - 7)	5 2	4	-	20	80	100	4
14	VI	D S	PRACTICAL - 7	3 0	4	4	25	25	50	2

		C L								
15	VI	D S C	MANAGEMENT ISSUES IN EDUCATION & REHABILITATION (Paper - 8)	5 2	4	-	20	80	100	4
16	VI	D S C L	PRACTICAL - 8	3 0	4	4	25	25	50	2

ST. ANNE'S DEGREE COLLEGE FOR WOMEN, BENGALURU

DEGREE COURSE IN

B.Sc.(REHABILITATION SCIENCE)

SYLLABUS

THEORY

THE FOLLOWING PAPERS WILL BE OFFERED UNDER SPECIAL EDUCATION MAJOR:

1. HEALTH CARE AND PREVENTION OF DISABILITIES
2. INTRODUCTION TO DISABILITY
3. VISUAL IMPAIRMENT
4. HEARING IMPAIRMENT
5. INTELLECTUAL DISABILITY (MENTAL RETARDATION)
6. LEARNING DISABILITY
7. EARLY INTERVENTION FOR THE DISABLED
8. MANAGEMENT ISSUES IN EDUCATION AND REHABILITATION

**REHABILITATION SCIENCE
MODEL PAPER 1
PAPER III
VISUAL IMPAIRMENT**

HOURS : 3

MARKS : 100

PART A

Answer any THREE of the following

3x30 = 30

- 1. Explain in detail about the historical development of services for the blind in India.**

The answer should have the timeline of historical development from 1887 to 1979

- 2. Discuss the implication of blindness on cognitive development**

Construct of World	(2 Marks)
Object Permanence	(2 Marks)
Classification	(1 Mark)
Conservation	(1 Mark)
Spatial knowledge	(1 Mark)
Constancy	(1 Mark)
Cause and effect	(1Mark)
Perspective taking	(1 Mark)

3. Discuss about the orientation and mobility techniques.

Orientation	(1 Mark)
Mobility	(1 Mark)
Sighted Guide	(2 Marks)
Offer Assistance	(1 Mark)
Basic Technique – Grip	(1 Mark)
Doorways	(1 Mark)
Travelling	(1 Mark)
Ascending & Descending stairs	(1 Mark)
Seating	(1 Mark)

4. Write notes on vision tests

Vision Tests – Definition / Introduction	(2 Marks)
Visual Acuity	(2 Marks)
Definition, Procedure, Evaluation	
Refraction Test	(2 Marks)
Definition, Procedure, Evaluation	
Visual Field Test	(2 Marks)
Definition, Procedure, Evaluation	
Colour Vision Test	(2 Marks)
Definition, Procedure, Evaluation	

9. Define color blindness.

Color blindness is an abnormal condition characterized by the inability to clearly distinguish different colors of the spectrum. The difficulties can be mild to severe. It is a misleading term because people with color blindness are not blind. (1 Mark)

10. Expand FVA

Functional Vision Assessment – (1 Mark)

5. List any two screen reading software. JAWS (1 Mark), NVDA
- (1 Mark)

PART – D

IV. Answer all the Questions

10x1 = 10

1. Types of field loss.

Central and Peripheral Vision Loss

(1 Mark)

2. Expand NVDA

Non Visualized Desktop Access (1 Mark)

3. What is verbalism?

Verbalism is defined as a lack of meaning of Visually Impaired Children's word.

(1 Mark)

4. Expand NIVH

National Institute for Visually Handicapped

(1 Mark)

5. Expand NAB

National Association for the Blind (1 Mark)

6. Write any two names of electronic devices.

Electronic Desktop Magnifiers, Portable Digital Magnifiers, Smartphones for Reading (any two) (1 Mark)

7. Expand JAWS

Job Access with Speech (1 Mark)

8. Write the measurements of Distance visual Acuity chart

6/5, 6/6, 6/9, 6/12, 6/18, 6/24, 6/36, 6/60

20/16, 20/20, 20/30, 20/40, 20/60, 20/80, 20/120, 20/200 (any one) (1 Mark)

PART – C

III. Answer all the Questions

10x2 = 20

1. Define –Blindness.

Blindness' is defined as visual acuity of less than 3/60, or a corresponding visual field loss to less than 10°, in the better eye with the best possible correction.

'Visual impairment' includes both low vision and blindness (2 Marks).

2. Write the implication of peripheral field loss.

Test objects during tangent screen testing.

- Movements or light flashes during perimetry testing.
- Not being able to see the black dot at the center of the grid.
- Not being able to see all four edges of the grid.
- Having blank spots or dark spots on the grid (other than the black dot at the center).
- Seeing lines that look wavy or curved.

3. Give a meaning of optical and non-optical devices.

Low vision optical devices include a variety of devices, such as stand and hand- held magnifiers, strong magnifying reading glasses, loupes, and small telescopes. Because these devices can provide greatly increased magnification powers and prescription strengths, along with higher-quality optics (i.e., the way the lens bends or refracts light), they are different from regular glasses and commercially available magnifiers. (1 Mark)

Non-optical aids help patients deal with everyday problems where sight is impaired. A review of the many non-optical devices is discussed including relative size devices, writing and communication aids, posturing and positioning aids, illumination control and non-optical sensory substitution devices. (1 Mark)

4. Who invented Braille on which year? Louis Braille – (1 Mark) 1820 (1 Mark)

PART – B

II. Answer any FOUR of the following

4x5 = 20

- 1. Discuss about any three eminent personality in the field of visual impairment.** (2 Marks each)

Helen Keller, Stevie Wonder, Franklin Delano Roosevelt, Harriet Tubman, Louis Braille, Alec Templeton, Galileo Galilei, Andrea Bocelli, John Milton, James Thurber, Claude Monet, Horatio Nelson, Sabriye Tenberken, Dr. Jacob Bolotin, Jorge Luis Borges, Joseph Plateau, Marla Runyan, Ray Charles, Sidney Bradford Thomas Gore, William Prescott

- 2. Explain about optical devices. Any 5 optical devices and description** (Each carries 2 Marks)

- 3. List the implication of blindness on social development.**

Social interaction (2 Marks each)

Play behavior and symbolic play (2 Marks each)

Social Development (2 Marks each)

- 4. List few points for selection of learning medium.**

Paper Strategies (2 Marks each)

E-text Strategies (2 Marks each)

Auditory Strategies (2 Marks each)

- 5. Write a note on mobility devices. Any 5 Mobility devices and description** (Each carries 2 Marks)

5. Briefly explain about the Assistive technology.

Educational Devices

(2 Marks)

Braille Duplicators and Writers, Braille Writers, Talking Books and Tape Recorders, Reading Machines, Mathematical Devices, Talking Calculator, Compass Set, Science Devices

Mobility Devices

(2 Marks)

Mobility Show Card, Canes, Mini Beeper

Vocational Devices

(1 Mark)

Goniometer, Spot Welding

Daily Living Devices

(2 Marks)

Talking Time, Wrist Watch, Ringer Timer, Pocket Watch, Travel Alarm Clock, Clocks and Watches.

Games and Puzzle

(1 Mark)

Playing Cards, Chess, Dominoes, Brahma Puzzle, Audible Ball, Draught Board

Sports

(1 Mark)

Football, Basket Ball and Soccer Ball, Cricket, Stick Walking, Swimming, Athletics, Table Tennis

Kitchen Equipment

(1 Mark)

Egg Poaching Ring, Measuring Jug, Bread Cutting Box, Liquid Level Indicator, Self Adhesive Labels

B.Sc. (REHABILITATION SCIENCE)

I Semester

PAPER 1- HEALTH CARE AND PREVENTION OF DISABILITIES

Unit 1 – Introduction to Health and Disease

- 1.1 Definitions, Concepts, Dimensions, Determinants
- 1.2 Indicators of Health and Health Service Philosophies
- 1.3 Disease: Concepts of Disease, Concepts of Causation
- 1.4 Natural History of Disease
- 1.5 Concepts of Disease Control and Concepts of Disease Prevention

Unit 2 – Epidemiology

- 2.1 Epidemiology: Definition, Measurements of Mortality, Morbidity & Disability
- 2.2 Descriptive epidemiology, Analytical epidemiology, Experimental Epidemiology
- 2.3 Infectious disease epidemiology: Dynamics of Disease Transmission, Disease Prevention and Control
- 2.4 Immunity and Immunizing agents
- 2.5 Chronic Non – Communicable disease epidemiology: Risk factors, Prevention and Control

Unit 3 – Nutrition in Health, Disease and Disability

- 3.1 Classification of foods. Relationship between health and nutrition.
- 3.2 Carbohydrates, Proteins, Fats, Vitamins, Minerals, Water and Fiber – Functions & deficiency.
- 3.3 Nutritional Profiles of Foods – Cereals and Millets, Pulses, Vegetables, Fruits, Animal foods e.g. meat, fish, Fats and oils, Sugar and Jaggery, Condiments and Spices and miscellaneous foods. E.g. beverage
- 3.4 Nutritional Requirements: Concepts. Energy, Recommended dietary allowances for adult man, woman, children and adolescent. Balanced Diet, Assessment of Nutritional status. Feeding methods for the disabled.
- 3.5 Nutritional Problems in Public Health. Protein energy malnutrition, Xerophthalmia, Nutritional anemia, Iodine Deficiency disorders, endemic fluorosis, Lathyrism.

Unit 4 – Diseases and Disability

- 4.1 Congenital Diseases causing disability. Genetic and metabolic disorders
- 4.2 Communicable Diseases causing disability: Polio, Leprosy, Small pox, Measles, Filariasis, Japanese B Encephalitis
- 4.3 Chronic Non Communicable diseases causing disability: Program
- 4.4 Nutritional deficiency or disorders causing disability
- 4.5 Occupational diseases causing disability

Unit 5 National Efforts in Prevention of Disability

- 5.1 Health care and Health care delivery system in India. Overview of the health Administration setup at Central and State level and health care delivery system in urban and rural areas. Preventive obstetrics and pediatrics.
- 5.2 Prevention and Early detection of disabilities – PWD Act 1995
- 5.3 National Communicable disease control, Eradication programs – Universal Immunization Program, Leprosy Eradication Program, Filaria Control Program, Vitamin A Prophylaxis Program, Anemia Control Program.
- 5.4 National Non - Communicable disease control, Eradication programs – Blindness Control Program, Cancer Control Program, Mental Health Program
- 5.2 National Nutritional Programs – Bal wadi Nutrition Program, Special Nutrition Program, Midday Meal Program, National Goiter Contra diabetes mellitus, Hypertension, Cancers

PRACTICUM

- 1. Immunizing agents – Vaccines storage, is transmission and administration.
- 2. Visit to an immunization clinic.
- 3. Problem solving exercises in epidemiology.
- 4. Demonstration of various foods.
- 5. Nutritional demonstration.
- 6. Exposure visits to hospitals to see patients with disabilities caused by different diseases.
- 7. Protective devices against occupational hazards causing disability.

8. Exposure visits to Anganwadi / Bal wadi center, antenatal clinic, Primary health center & Urban health center.

REFERENCES

1. Park K., (2005). 18th Edition text book of preventative & Social Medicine, India; M/s Banarsidas Bhanot
2. Shils, M.E., Olson, J.A, Shike, M. (2002), Modern Nutrition in Health and Disease (Vol I & II). Philadelphia: Lea & Febiger.
3. Kaushik (1999), Applied Science of food studies. Jaipur: Book Enclave.
4. Krishnaswamy. K . (1998) Dietary Guidelines for individuals – A Manual. Hyderabad: NIN, ICMR.
5. Werner David, (1980). Where there is no doctor, London ; Macmillan Press Ltd.

II Semester

PAPER 2 - INTRODUCTION TO DISABILITY

Unit 1 Introduction to Disability

- 1.1 Definitions/ Concepts- Impairment,
- 1.2 Disability, Handicap, Exceptional child
- 1.3 Classification of disabilities – definition/concept & importance, approaches, Advantages, Disadvantages in classification
- 1.4 Labeling of disabilities- definition, concept, advantages, disadvantages, Prevalence of disabilities – definition, epidemiology, prevalence, incidence, Difference between prevalence & incidence, Factors affecting prevalence
- 1.5 Rights of the disabled

Unit 2 Visual Impairment

- 2.1 Anatomy & Physiology of eye – Common eye diseases
- 2.2 Definitions – PWD Act, WHO, Educational and Functional for blind & low vision
- 2.3 Prevalence & causes of Visual Impairment
- 2.4 Classification of Visual Impairment – Based on Onset – Congenital and Acquired, Based on Degree of Impairment –blind & low vision
- 2.5 Misconceptions and Facts regarding Visually Impaired

Unit 3 Hearing Impairment

- 3.1 Anatomy & Physiology of ear – common ear diseases
- 3.2 Definitions–PWD Act, Psychological, Educational and Functional for hearing impairment & Hard of hearing
- 3.3 Prevalence & causes of Hearing Impairment
- 3.4 Classification– Based on Onset – Congenital and Acquired, Based on Degree of Impairment – deaf & hard of hearing, Based on language acquisition – pre lingual and post lingual deafness
- 3.5 Misconceptions and Facts regarding Hearing Impaired

Unit 4 Mental Retardation

- 4.1 Anatomy & Physiology – Nervous System
- 4.2 Definition – PWD Act, AAMR
- 4.3 Prevalence & Causes of Mental Retardation
- 4.4 Classification - Based on IQ – mild, moderate, severe, profound, based on functioning – educable, trainable, custodial care
- 4.5 Misconceptions & Facts regarding the mentally retarded

Unit 5 Locomotor Disability

- 5.1 Anatomy of Musculo – Skeletal system and disorders of locomotor System
- 5.2 Definitions – PWD Act – leprosy cured, locomotor disability,
- 5.2 Definitions of physical & health impairments, orthopedic disabilities
- 5.3 Prevalence & Causes of physical disability
- 5.4 Classification – Neurological & Musculoskeletal Impairments, Congenital Malformations, Classification based on body Functioning
- 5.5 Accessibility, Misconceptions & Facts regarding the physically impaired

PRACTICUM

- 1. Visit to special schools and rehabilitation programs.
- 2. Exposure & understanding of various therapy devices
- 3. Observation of clinical assessment and functional assessment of various disabilities
- 4. Accessibility Audit Case study on persons with special needs.

REFERENCE

1. NSSO (2003) Disabled Persons in India. New Delhi: Ministry of Statistics and Programme Implementation, Govt of India.
2. Punani. B. & Rawal. N (2000) Visual Impairment Handbook, Ahmedabad, Blind Peoples Association.
3. Berton, L. (Ed.), (1996) Disability in Society, London; Addison Wesley Longman Ltd.
4. Northern L. Jerry, Downs P. Marian, (1991). Hearing in Children. USA: Willaims & Wikings Ltd.
5. Harley R.K. and Lawrence G.A. (1984). Visual Impairment in Schools (2ndEd.), U.S.A.; Charles C. Thomas Publishers

III Semester

PAPER – 3 VISUAL IMPAIRMENT

Unit 1 – Historical Perspectives of Visual Impairment

- 1.1 Historical development in India and Abroad
- 1.2 Evolutionary process in attitude change towards blindness
- 1.3 Psychological Implications of Blindness
- 1.4 Sociological Implications of Blindness
- 1.5 Eminent Personalities in the field of Visual Impairment in India and Abroad

Unit 2 – Effects of Blindness

- 2.1 Psychological and Behavioural Characteristics – Subjective and Objective
- 2.2 Implications of Blindness on Personality and Cognitive development
- 2.3 Implications of Blindness on Motor development
- 2.4 Implications of Blindness on Language and Social development
- 2.5 Mannerism, Verbalism and Concept development

Unit 3 – Plus Curricular Skills

- 3.1 Sensory
- 3.2 Orientation and Mobility and its Importance
- 3.3 Concept of Braille – Braille reading and writing
- 3.4 Daily Living Skills and training strategy
- 3.5 Mathematical devices – Abacus and Taylor frame

Unit 4 – Low Vision

- 4.1 Screening of Visual disability – Distance, Near, Colour Vision, Field of Vision, Contrast Sensitivity
- 4.2 Assessment of Functional Vision – Procedures, Materials used, Visual efficiency training
- 4.3 Selection of learning medium
- 4.4 Orientation and Mobility for Low Vision
- 4.5 Low vision devices – Optical, non – Optical and Electro Optical devices

Unit 5 – Equipment's and Devices – High tech and Low tech

- 5.1 Conventional devices
- 5.2 Electronic devices – Talking calculator, diary, watches, note taking equipment screen reading software and reading machine

5.3 Electronic Mobility devices

5.4 Technological advances in Braille and Audio material

5.5 Indigenous devices and adaptation

PRACTICUM

1. Learning Braille & Abacus
2. Applying the orientation and mobility skills with visually impaired
3. Understanding the use of assistive technology
4. Case study

REFERENCE

1. Lowenfield. B (1973) The Visually Handicapped Child in School
2. Mani M.N.G. (1997) Amazing Abacus. Coimbatore. S.R.K. Vidyalaya
Mani M.N.G. (1992). Concept Development of Blind Children.
Coimbatore: S.R.K Vidyala
3. NCERT (1987). Source Book for Teachers of Visually Impaired:
NCERT, New Delhi.
4. Rehabilitation Council of India (2000) Status of Disability
Report 2000 &2003.

IV Semester

PAPER – 4 HEARING IMPAIRMENT

Unit 1 – Historical aspects of Hearing Impairment

- 1.1 Historical development in India, Abroad
- 1.2 Psychological, Behavioural Characteristics
- 1.3 Social, Work adjustment of Hearing Impaired
- 1.4 Implications of Hearing Impairment on Personality development
- 1.5 Effects of Hearing Impairment on Intellectual abilities, Personality, Verbalism

Unit 2 Assessments

- 2.1 Purpose, Type of Assessment
- 2.2 Types of Assessments, Audiometer, Different types of Audiometers
- 2.3 Audiology, Audiogram, Uses of Audiogram
- 2.4 Survey techniques, Methods in Survey
- 2.5 Sustenance & Viability

Unit 3 Communication Methods

- 3.1 Oral method – development of residual hearing, auditory training,

Speech reading, AVT

- 3.2 MRM – definitions, types, usage
- 3.3 Manual method – Sign Language, Finger Spelling, Sign supported English, Gesture, Body language, Cued Speech
- 3.4 Total Communication – definition, classification, significance, Structure
- 3.5 Other methods – Rochester Method

Unit 4 – Speech and Language

- 4.1 Definition – Speech & Language development
- 4.2 Process & development of speech and language (age 1- 5 years)
- 4.3 Speech problems, promoting speech & language development
- 4.4 Speech therapy, Speech correction
- 4.5 Place and manner of articulation

Unit 5 Hearing aids

- 5.1 Hearing aids
- 5.2 Types of hearing aids – Group Amplification Systems
- 5.3 Functions of hearing aids
- 5.4 Care & Maintenance of hearing aids
- 5.5 Cochlear Implantation

PRACTICUM

1. Identifying hearing impaired children in communities
2. Practice in speech, language training, auditory & sign language training.
3. Planning intervention programmes for speech and language
4. Understanding the use of assistive technology
5. Case study

REFERENCE

1. Ballantyne Martin and Martin. A. (1996) Deafness, Delhi, AITBS Publishers and Distributors
2. Bamford and Sundaes (1996) Hearing Impairment, Auditory, perception and Language Disability ,Delhi, ATIBS Publishers and Distributors
3. Myra, Kersner, (1996) Tests of Voice, speech and language, AITBS Publishers and Distributors
4. Marc Marschark, Hurry G. Lang, John A Albertini (2000) Educating Deafstudents (From research to Practice)
5. Bethesda MDNIH, (1995) Cochlear Implants in adults and children. (Online NIK consensus Statement), National Institutes of Health.

V Semester

PAPER 5 - MENTAL RETARDATION (INTELLECTUAL DISABILITY)

Unit 1 – Historical Development of Services for Mentally Retarded

- 1.1 Social attitude towards disabled in olden days
- 1.2 Current Scenario of person with ID
- 1.3 Stage of religious cure and Creations of Asylum
- 1.4 Birth and rise of Special education
- 1.5 Historical development of services for mentally retarded in India

Unit 2 – Psychological and behavioural characteristics of mentally Retarded

- 2.1 Adaptive behavior in the mentally retarded children
- 2.2 Characteristics based on the Severity level
- 2.3 Characteristics based on the Educational Classification
- 2.4 Characteristics based on the Psychological Classification
- 2.5 Physical, cognitive, social and behavioural characteristics in general.

Unit 3 – Psychological Assessment of Mental Retardation

- 3.1 Guidelines to be followed in doing the Assessment
- 3.2 Problems in assessing the mentally retarded
- 3.3 Uses of Psychological test
- 3.4 Commonly used psychological test
- 3.5 Adaptive behavior Scale

Unit 4 – Psycho educational Assessment

- 4.1 Steps for ideal psychological assessment
- 4.2 Characteristics of accurate psycho educational assessment
- 4.3 Guideline for accurate assessment
- 4.4 MDPS- Madras Development Programming System
- 4.5 BASIC – MR – Behavioural Assessment Scale for Indian Children

Unit 5- Behaviour Modification

- 5.1 Identification of the problem
- 5.2 Defining Target Behaviour
- 5.3 Behaviour Recording
- 5.4 Functional Analysis
- 5.5 Techniques of Behaviour Modification

PRACTICUM

1. Identifying mentally retarded children in community
2. Psychological Educational Assessment
3. Psycho Educational Assessment
4. Case study

REFERENCE

1. Betiz N.E, Walsh W.P., Tests and Assessment, Englewood Cliffs, Prentice Hall,1990
2. Bernie- Smith, Mary - Mental Retardation Prentice Hall International, London. 1994
3. Reeta Peshwaria (1990) "manual for psychologist" secunderabad; National Institute for Mentally Handicapped.
4. Pushparan, Reddy. P. P. Mental Retardation, Hyderabad; Management systems consultants, 1990.
5. The Mentally Retarded in the 2000's Society- Fabrizio Fea.

V Semester

PAPER 6 - LEARNING DISABILITY, MULTIPLE DISABILITY, DEAF BLIND, AUTISM & ADHD

Unit 1 – Learning Disabilities

- 1.1 Definitions
- 1.2 Causes- genetic and organic, biological, and environmental
- 1.3 Classification- dyslexia, dysgraphia, dyscalculia
- 1.4 Characteristics – cognitive, perceptual, academic, language, motor
- 1.5 Early Intervention – signs of learning disabilities, intervention methods

Unit 2 – Multiple Disabilities

- 2.1 Definitions – National Trust Act, IDEA
- 2.2 Causes – prenatal, prenatal, postnatal
- 2.3 Classifications – Combinations of disabilities
- 2.4 Characteristics – cognitive, perceptual, academic, language, motor
- 2.5 Early Intervention

Unit 3- Deaf Blind

- 3.1 Definitions
- 3.2 Causes – prenatal, prenatal, postnatal
- 3.3 Classifications – based on onset, degree

- 3.4 Characteristics
- 3.5 Early Intervention

Unit 4 – Autism

- 4.1 Definitions – National Trust Act
- 4.2 Causes – psychogenic, genetic causes
- 4.3 Classifications
- 4.4 Characteristics – Triad of Impairment, Social Interaction
- 4.5 Early Intervention – Dietary Intervention, Intervention for parents

Unit 5 – ADHD

- 5.1 Definitions
- 5.2 Causes- inherited, neurobiological, external factors
- 5.3 Classification – ADHD, combined, predominantly inattentive types
- 5.4 Characteristics of ADHD
- 5.5 Early Intervention – Clinical management of ADHD, Medication and
Treatment

PRACTICUM

1. Identifying children with learning disabilities, multiple disabilities, autism & ADHD
2. Planning intervention programme
3. Case study

REFERENCE

1. Karanath, P & Roszario J. (2003). Learning Disabilities in India-Willing the Mind to learn. New Delhi: Sage Publications
2. Paul, A. S. (2000) Persons who are Deaf blind in Punani, B. & Rawal,N., (2000) Visual Impairment Handbook, Ahmedabad; Blind Peoples Association
3. Brown, D. (2000) Trends in Population of Children with Multi-sensory Impairments. Paper presented at Joint Asian Conference, Ahmedabad; ICEVI & DBI.
4. "Teach Me Language" (2000). A Language Manual for children with Autism, Asperger's Syndrome and related Developmental Disorders by Sabrina Freeman Ph.D., Lorelei Dake, B.A. Hard Cover: ISBN 0-9657565-0-5
5. Grandin, T. (2000). An Inside View of Autism. Fort Collins: Colorado State University.

VI Semester

PAPER 7- EARLY INTERVENTION PROGRAMME FOR THE DISABLED

Unit 1 – Early Intervention

- 1.1 Definition /Concept of Early Intervention
- 1.2 Aims – Early Intervention
- 1.3 Individuals who need early intervention services – high risk mothers, infants /children
- 1.4 Types of Early Intervention Services
- 1.5 Services/Activities – Early Intervention

Unit 2 – Early Intervention for Visual Impairment

- 2.1 Early Identification – Signs of Visual Impairment, Screening in Early Childhood
- 2.2 Medical Intervention
- 2.3 Assistive devices – Optical, Non-Optical aids
- 2.4 Educational Intervention – Vision Stimulation
- 2.5 Parental Training

Unit 3 – Early Intervention for Hearing Impairment

- 3.1 Early Identification – Signs of Deafness, Screening in Early Childhood
- 3.2 Audiology, Hearing Aids –Types, Uses

- 3.3 Medical Intervention – Medication, Cochlear Implantation
- 3.4 Intervention for language development
- 3.5 Maternal Training – Maternal Reflective Method

Unit 4 – Early Intervention for Mental Retardation

- 4.1 Prenatal diagnosis
- 4.2 Early Identification
- 4.3 Medical Intervention
- 4.4 IQ testing – Formal, Informal Methods
- 4.5 Mother Training Program

Unit 5 – Early Intervention for Physical Disability

- 5.1 Early Identification – Signs of Locomotor disability, reflexes
- 5.2 Medical Intervention
- 5.3 Physiotherapy –Importance, Objectives
- 5.4 Aids, Appliances
- 5.5 Procuring aids and appliances

PRACTICUM

1. Screening, Assessing, Planning & Intervention Programmes for children with:
 - a. Visually impaired
 - b. Hearing impaired
 - c. Mentally retarded

- d. Physically disabled &
- e. Multiple disabilities.

REFERENCE

1. Agarwal, K., (2000). A Handbook for Parents of Children with Disabilities. New Delhi: Planning Commission, Government of India.
2. Aloka Guhaet.al, (1994). Readings in Special Education, Madras, Spastics Society of Tamil Nadu.
3. Reeta Peshwaria (1990). "Manual For Psychologists", Secunderabad National Institute for Mentally Handicapped
4. Werner D. (1987). Disabled village children (1st Ed.), U.S.A.; Hesperian Foundation
5. Sol Adler, (1986). Early Identification & Intensive Remediation of Language Retarded Children. U.S.A.: Charles C. Thomas.

VI Semester

PAPER – 8 MANAGEMENT ISSUES IN EDUCATION & REHABILITATION

Unit 1 – Education Systems for children with disabilities

- 1.1 Aims, Objectives, Educational Implications of disability
- 1.2 Principles of teaching for the disabled– Concreteness, individualization, self activity
- 1.3 Cascade system & Special school programs
- 1.4 Integrated & Inclusive Educations
- 1.5 National Open Schools, non-formal, Informal education

Unit 2 – Historical Perspectives

- 2.1 Rehabilitation – Definition, Concept, Need
- 2.2 Historical overview of Rehabilitation in India
- 2.3 Historical Perspectives in Asian countries, Abroad
- 2.4 Rehabilitation in social perspective
- 2.5 Components of Rehabilitation

Unit 3 – Types of Rehabilitation

- 3.1 Institution Based Rehabilitation
- 3.2 Community Based Rehabilitation
- 3.3 Need Based Rehabilitation
- 3.4 Disability related Rehabilitation

3.5 Cross disability approach

Unit 4 – Vocational Rehabilitation

4.1 Pre vocational skill development

4.2 Vocational training for independent living

4.3 Employment – Self, Private, Government sectors

4.4 Rehabilitation & partnership roles – family, community, local bodies, NGO's

4.5 Legal issues

Unit 5 Project Management

5.1 Administration – Methods, Techniques

5.2 Time Management

5.3 Field Work Management

5.4 Leadership qualities

5.5 Project proposals & Reports

PRACTICUM

1. Visit to
 - a. Institution based rehabilitation
 - b. Community based rehabilitation
 - c. Diagnostic centers

2. Conducting awareness campaigns
3. Maintenance of reports
4. Preparation of reports.

REFERENCE

1. Berton., L (Ed), (1996) *Disability in Society*, London; Addison Wesley Longman Ltd.
2. Panda, K.C., (1997) *Education of Exceptional Children*, New Delhi; Vikas Publishers
3. Kirk. S.A and Gallagher J.J (1989), *Educating Exceptional Children*. Boston; Houghton Mifflin Company
4. Hallan D.P, and Kauffman J.M (1976) *Introduction to Learning Disabilities- A Psycho- Behavioural*
5. Approach. New Jersey. Prentice Hall Punani B, Rawal N., and Sajit. J (2004) *Manual Community Rehabilitation – Visually Impaired*.