SYLLABUS

Integrated B.A. / B.Com. / B.Sc.
B.Ed. Special Education

Norms, Regulations & Course Content

REHABILITATION COUNCIL OF INDIA
(Statutory Body under the Ministry of Social Justice and Empowerment)
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2010
1. Preamble

2015 is a crucial year and the countries around the World have to report their status on education for all children in response to the Dakar Declaration and the Millennium Developmental Goals (MDGs). The goal of Education for All can be realized only when the unreached population including children with disabilities is fully brought under the umbrella of education.

In the light of the MDGs efforts are under way to universalize primary education and in the case of children with disabilities, inclusive approach is advocated to reach out to all children with special needs who are found in large numbers in the rural areas of the Country. In India, several models of integrated education and inclusion were practiced in the past, but the coverage of children with disabilities in general stream is far from satisfactory. For making inclusion successful many parameters should be applied and Human Resource Development is one of the vital ingredients to make inclusion successful. With a view to strengthen Human Resource Development in the areas of disability, Government of India through an Act of Parliament established Rehabilitation Council of India (RCI) in 1992. Though significant achievements have been made in human resources development, the supply of Special Teachers is far lesser than the huge demand. This is evident from the fact that only 11,000 Special Teachers are available to serve the currently enrolled 27 lacs of children with special needs with whooping teacher pupil ratio of nearly 1: 250. Therefore, alternative methods of Human Resource Development are necessary to strengthen the disability sector in India.

2. Aims of the Programme

The Integrated B.A. / B.Com. / B.Sc. B.Ed. Special Education programme aims to prepare teachers for children with disabilities for various educational settings. The programme will prepare human resources to enable them to acquire knowledge in various disciplines and develop competencies and skills in teaching all children.

The objectives of Integrated B.A. / B.Com / B.Sc. B.Ed. Special Education programme are:

- To advance and disseminate knowledge of Special Education in the overall context of national and global developments;
- To develop a broad and holistic perspective which would help the students to understand Special Education and its intricate relationship with society, economy, polity and history;
• To develop professional skills and highest standards of professional behavior and personal integrity;
• To inculcate in every student a sense of responsibility towards the society and respect for human life and dignity;
• To help students to develop qualities of leadership, initiative and drive;
• To develop their overall personality and enhance their abilities to formulate, structure and resolve intricate and complex problems;
• To develop multi-disciplinary enquiry and practical appreciation of problems through the use of class lectures, extension lectures, discussions, case-method of study, simulations, project assignments, field-work and visits;
• To promote co-operative teaching where two or more teachers offer a course and jointly interact with the same class particularly to facilitate multi-disciplinary analysis of problems;
• To prepare and use of reading material containing the course outlines, teaching plan, reading list and study material, articles and excerpts from books, journals and reports;
• To promote internship / placement programme, which will help students in manifold ways besides preparing them for a smooth transition from institutions to their professional careers;
• To provide opportunity for diploma holders in Special Education to upgrade their qualification.

3. General Framework of the Program:

Integrated B.A. / B.Com. / B.Sc. B.Ed special education Programme consists of theory courses as per the following scheme:

<table>
<thead>
<tr>
<th>Year wise Courses of the Program</th>
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<tbody>
<tr>
<td>Course</td>
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<tr>
<td>1st Year</td>
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<td>Course-1</td>
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<td>Practical</td>
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<tr>
<td>Foundation Course</td>
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<tr>
<td>Elective Courses</td>
</tr>
<tr>
<td><strong>Total</strong></td>
</tr>
</tbody>
</table>

| 3rd Year |                                                  |       |         |
| Course-8 | Assessment and curriculum planning for students with Mental Retardation | 60    | 2       |
| Practical | Practical-I: Mental Retardation                  | 120   | 4       |
| Course-9 | Learning Disabilities: Introduction and Assessment | 60    | 2       |
| Practical | Practical-I: Learning Disabilities               | 120   | 4       |
| Elective Courses | Elective Courses* of B.A. / B.Com. / B.Sc. | 720   | 24      |
| Application oriented Courses | Application oriented Courses* of B.A. / B.Com. / B.Sc. | 240   | 8       |
| **Total** | **44**                                         |       |         |

| 4th Year |                                                  |       |         |
| Course-10 | Introduction to Locomotor Impairment and Cerebral Palsy | 60    | 2       |
| Practical | Practical-I: Locomotor Impairment & Cerebral Palsy | 90    | 3       |
| Course-11 | Learning methods and strategies for teaching children with Visual Impairment | 60    | 2       |
| Course-12 | Teaching strategies and curriculum adaptations for children with Mental Retardation | 60    | 2       |
| Course-13 | Education and Curricular Practices for Children with Hearing Impairment | 60    | 2       |
| Course-14 | Curricular and Remedial Strategies for Learning Disabilities | 60    | 2       |
| Course-15 | Assessment and Intervention for Students with Locomotor Impairment and Cerebral Palsy | 60    | 2       |
| Course-16 | Methodology of Teaching in Inclusive Setting    | 60    | 2       |
Practical | VI-3 credits, HI-3 credits, MR-3 credits, LD-3 credits, and LI & CP-3 credits | 450 | 15  
| School Experience Programme | 360 | 12  
| **Total** | **44** |  
| **Total Credits in Four years including Practical** | 5280 | 176

* See **Part-B** for Year wise Courses of Study for B.A. / B.Sc. / B.Com.

**Note:**

i. In view of the distribution of theory and practical in the ratio of **40:60**, a weightage of a total of **48 credits of which 32 Credits will be given for Practical** of five respective disabilities areas and **16 Credits for School Experience Programme**.

ii. The Guidelines provided by RCI pertains to Disability components only. The implementing University / Institutions may follow their existing guidelines of B.A. / B.Sc. / B.Com.

iii. In the case of institutes following the prescribed pattern, there is no change in the weightage. However, in the case of Universities / Colleges offering semester system, the weightage for theory and practicum may be re-appropriated accordingly with the approval of RCI.

iv. Universities follow RCI prescribed syllabi. In case of difficulty in deciding the number of papers including the practicum, the course content provided in the RCI syllabi need to be incorporated. If needed, some units may be added or combined to satisfy the University requirements. Additionally, content areas to suit local / regional needs may be included without compromising with the minimum contents approved by RCI. The Universities may be permitted to offer specific core papers with the thrust on disability.

4. **Adequacy of the Syllabus**

At present teacher preparation in the disability sector is offered at the diploma and B.Ed. level, and it is opined that such cadre of teachers will be able to work effectively in the general classroom setting, inclusive education and also special school settings. Therefore, an integrated programme for duration of four years is envisaged as an ideal model for preparing a large number of multi-skilled teachers. In order to encourage students to take advantage of this programme, it is necessary to offer such a programme through distance mode too and the programme may be called as Integrated B.A. / B.Com. / B.Sc. B.Ed. Special Education.

5. **Duration of the Programme**

The duration of the course is four academic years. Weightage for marks will be as per the
guidelines of the implementing Universities. Weightage in terms of hours will be as per guidelines prescribed by RCI in the course curriculum.

6. **Eligibility for Admission**

This programme is open to any students having qualification for entry level is 10+2 with atleast 50% marks and aspires to become a teacher in general education & Special Education. Considering the uniqueness of the programme there is no exit facility at the end of third year. Therefore, every student should compulsorily complete four years once they decide to pursue this programme. There are a large number of two year diploma holders in Special Education who may also look at this programme as a source of career development. Though they have to undergo the four years programme, certain areas such as practicum, internship in particular disability area, skill based courses, some core courses where they have already attained mastery may be awarded weightage in Credits.

**Note:** Students who have qualified with two year diploma in Special Education in a single disability area will be given credits as per the following schemes:

1. First year- (i) Introduction to Disabilities; (ii) Education in India: A Global Perspectives
2. Second year – (i) Educational Psychology and Children With Disabilities

The student teacher will get credit for these papers and average mark in other papers will be awarded for these papers. In case, student teacher does not want average marks to be added then they may be allowed in the written examinations in these papers also. If the student teacher does not want to avail any credits, they may be allowed to do so and go through the whole course.

7. **Course Pattern (Semester/Non-Semester)**

The decision on Semester or non-semester nature of the course depends upon the pattern followed in the University concerned to which the College is affiliated.

8. **Passing Minimum**

The minimum marks for passing in the theory papers are 40% in each theory paper, 50% in practical and 50% in aggregate.

9. **Nature of Evaluation**

The institute implementing the course may decide on the internal or external or both the system of evaluation subject to the approval of the University concerned.

10. **Reappearing facility**

The student who fails in any paper may be allowed to appear in that particular paper only
for a maximum of 3 times within three years. If the student fails to pass the examination after three appearances, he/she will be expected to undergo the entire course again.

11. Improvement of Marks

The student will also be given opportunities for improvement of marks in the particular examination by reappearing in the specific paper in the next examination. The examination pattern of the special education programmes may be as per the regulations of the implementing Universities / Colleges.

12. Transitory Regulations

Whenever a course or scheme of instruction is changed in a particular year, two more examinations immediately following thereafter shall be conducted according to the old syllabus / regulations. Candidates not appearing at the examinations or failing in them shall take the examinations subsequently according to the changed syllabus / regulations.

13. Faculty Requirement

The University / College wishing to offer this course should have one Special Teacher Educator from each disability area namely Visual Impairment (VI), Hearing Impairment (HI), Mental Retardation (MR), Learning Disabilities (LD), Locomotor Impairment & Cerebral Palsy (LI & CP). In addition, one teacher educator for the courses on foundations of education and teacher educator for relevant academic disciplines are required.

14. Infrastructural Facilities

As this programme requires faculty for various disciplines, it is ideal to offer this programme through Universities which have faculties in all disciplines including that of disability sectors. For practicum in disability sector the University can always collaborate with specialized institutes working in the areas of disabilities in their vicinity. It is also advisable to implement this programme through face to face mode and in this context Regional Institutes of Education (RIE) are perfect locations as they are already conducting four year integrated programme in various disciplines and at the same time have adequate infrastructure.

Hearing Impairment

Aids and Appliances Required
1. Portable Audiometer
2. Diagnostic Audiometer
3. Speech Trainer
4. Tape Recorder and Cassettes
5. Clinical Psychology test material
   a) Bhatia’s Battery Performance Test
   b) Binet-Kamath’s Test of Intelligence
   c) Seguin Form Board
   d) Draw-A-Man Test
   e) Denver’s Developmental Screening Test
   f) Chatterjee’s Non-Language Preference Record
   g) Benton’s Visual Retention Test
   h) Minnesota Multi-phasic Personality Inventory

6. Mirrors – 4
7. Toys and Play Material
8. Ear Model and Larynx Model

**Learning Disabilities**

**Devices and Material Required**

**Devices:**

- Audio visual materials
- Sensory training material

**Materials:**

a. Text books of all school subjects i.e. language, maths, science, history, geography, environmental sciences,
b. General knowledge books and encyclopedias
c. Educational Materials like games, puzzles, reading material worksheets etc.
d. Montessorie Equipment
e. Computer Aided Instructions
f. Art craft materials
g. Case Studies of students with Learning Disability (L.D.)
h. Jig:Saw Puzzles, games,
i. Sensory training material,
j. Stopwatch,
Tests:

a. Weschlers intelligence scale
b. Bender: Gestalt V- M. Test
c. P.P.V.Test
d. Indian Adaptation of Stanford Binet Test of Intelligence by S.P.Kulshresta
e. Marianne Frostig Test of Visuo Motor Perception
f. Aston Index for Screening children with Learning Difficulties
g. Behavioural checklist to screen the L.D.(BCSLD)
h. Diagnostic Test of Disorder
i. Test of Thinking Strategies
j. Diagnostic Test of Learning Disabilities

(g, h, i, j, are by Dr. S. Swarup and Dr. D. H. Mehta –Centre of Special Education, SNDT Women’s University, Mumbai-49)

Locomotor Impairment & Cerebral Palsy

Space, Devices and Material Required

Material Required

(A) Locomotor Impairment

1. Below Elbow Prosthesis
2. Above Elbow Prosthesis
3. PTB BK Prosthesis
4. Above Knee Prosthesis
5. Below Knee Orthosis

(B) Cerebral Palsy

1. Learning and functional Aids
2. Achievement Tests
3. Adaptive equipments for teaching activities for daily living

(C) General

1. Rexine mats and bolsters, wedges, low stools for physical management Samples of
mobility aids - crutches, walkers, wheelchairs
2. Samples of prosthetic and orthotic appliances (in centres where there are no referral centres such as Rehabilitation Unit such as NIOH, RRTC, DDRC) Samples of adaptive furniture and wheelchairs - cut-out trays, floor tables, adaptive seating
3. Samples of material used for ADL (mealtime management, bathing, use of toilet, dressing etc.)
4. Samples of Alternative and Augmentative Communication devices - display boards message books, Voice Output communication Aids (VOCAS),
5. ICT systems for persons with complex communication needs and severe physical disabilities
6. Mirror
7. Toys
8. Assessment tests and checklists on all developmental areas
9. Audio-visuals on assessment and intervention

Mental Retardation

Devices and Material Required

<table>
<thead>
<tr>
<th>Item</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Slide Projector with screen</td>
<td>1</td>
</tr>
<tr>
<td>Cassette Recorder</td>
<td>1</td>
</tr>
<tr>
<td>Cassettes (Audio)</td>
<td>20</td>
</tr>
<tr>
<td>Black Board</td>
<td>1</td>
</tr>
<tr>
<td>Montessori set</td>
<td>1</td>
</tr>
<tr>
<td>Kindergarten set</td>
<td>1</td>
</tr>
<tr>
<td>Nursery set</td>
<td>1</td>
</tr>
<tr>
<td>Miscellaneous Materials set</td>
<td>1</td>
</tr>
<tr>
<td>Psychological test material set (for demonstration)</td>
<td>1</td>
</tr>
<tr>
<td>Slides set (for all subjects)</td>
<td>1</td>
</tr>
<tr>
<td>Play therapy equipment set (for demonstration)</td>
<td>1</td>
</tr>
</tbody>
</table>

Visual Impairment

Aids and Appliances Required

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

15. Certification as a Registered Professional

It is mandatory for every teacher of special education to obtain a “Registered 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 teachers as well as educators in special education should undergo in-service programme periodically to update their professional knowledge. Amendments, if any, to the regulations of the course will be made periodically by the Rehabilitation Council of India. Any deviation from the above regulations should have the prior approval of the Rehabilitation Council of India.

16. Award of Degree:

The Implementing Universities will award degree in the following nomenclature suitably:

Integrated B.A. B.Ed. Special Education

OR

Integrated B.Com. B.Ed. Special Education

OR

Integrated B.Sc. B.Ed. Special Education
PART- A

1st Year

Course-1

NATURE AND NEEDS OF DISABILITIES

OBJECTIVES: (60 Hours)

After studying this paper, the student teachers are expected to

1. Explain the different concepts, characteristics, trends and issues in special education
2. Discuss the nature, types, characteristics and educational implications of sensory impairment
3. Discuss the nature, types, characteristics and educational implications of orthopedic conditions, and neurological impairments.
4. Explain the nature, types, characteristics and educational implications of Intellectual Disabilities.
5. Explain the nature, types, characteristics and educational implications of Multiple Disabilities.
6. Examine the nature, scope and issues in career education and rehabilitation of persons with disabilities.

Course Content:

Block 1: Introduction to Disabilities (10 Hours)

Unit 1 Concept, Definitions and Characteristics of disability (ICIDH, ICF)
Unit 2 Exceptionality: Concept and Types
Unit 3 Special Education: Definition and History
Unit 4 Service Delivery Systems
Unit 5 Changing Trends and Issues in Special Education

Block 2: Sensory Impairment (Hearing Impairment and Visual Impairment) (10 Hours)
Unit 1 Hearing and Visual Impairment: Concept, Definitions and Characteristics
Unit 2 Classification and Types of Hearing Impairment and Visual Impairment.
Unit 3 Multi-sensory impairments (Deafblindness) and Associated Conditions
Unit 4 Etiological factors and Prevention
Unit 5 Emerging trends, Issues and Educational Implications.

**Block 3: Locomotor Disabilities & Neurological Dysfunctions** (10 Hours)

Unit 1 Concept, Definitions and Characteristics of Orthopedic Conditions: Muscular Dystrophy, Spine Bifida, Osteogenesis Imperfecta, Poliomyelitis and Leprosy-cured
Unit 2 Concept, Definitions and Characteristics of Neurological Dysfunctions: Cerebral Palsy, LD, ADD and ADHD
Unit 3 Classification and Types
Unit 4 Etiological factors and Prevention
Unit 5 Emerging trends, Issues and Educational Implications

**Block 4: Developmental Disabilities (MR, Slow Learners, ASD)** (10 Hours)

Unit 1 Concept, Definitions and Characteristics of MR and Slow Learners
Unit 2 Concept, Definitions and Characteristics of ASD
Unit 3 Classification and Types
Unit 4 Etiological factors and Prevention
Unit 5 Emerging trends, Issues and Educational Implications

**Block 5: Multiple Disabilities** (10 Hours)

Unit 1 Concepts, Definition and Characteristics
Unit 2 Types / combinations
Unit 3 Etiological Factors and Prevention
Unit 4 Emerging trends and Issues
Unit 5 Educational Implications

**Block 6: Career Education and Rehabilitation** (10 Hours)

Unit 1 Habilitation and Rehabilitation: Concept, Nature and Need
Unit 2 Education for Independent Living
Unit 3 Transition from school to work, Vocational training and job opportunities
Unit 4 Legal issues in rehabilitation
Unit 5 Emerging trends, Challenges and Implications
Reference books

After studying this paper, the student teachers are expected to

1. Provide information and support to families and communities towards acceptance of children with disabilities.

2. Select organize and/or develop linkages to provide suitable services to persons with disabilities.

Block 1 –Parent Empowerment

Unit 1 Needs of Parents- Psycho-social, economic, and Cultural
Unit 2 Parental reaction and attitudes to the child with disabilities
Unit 3 Types of stress and coping mechanism
Unit 4 Parent as equal partners in intervention
Unit 5 Parent as advocates

Block 2 - Family Involvement

Unit 1 Needs and Resources of Family
Unit 2 Types of family and their impact on the child with disabilities
Unit 3 Myths, Misconceptions and Prejudices : Intervention
Unit 4 Role of family members (siblings, grand parents and others)at various developmental stages
Unit 5 Support and Services for family

Block 3 - Community Participation

Unit 1 Needs and Resources of Family
Unit 2 Types of family and their impact on the child with disabilities
Unit 3 Myths, Misconceptions and Prejudices : Intervention
Unit 4 Role of family members (siblings, grand parents and others)at various developmental stages
Unit 5 Support and Services for family
Unit 1 Social structure- types of communities, cultural identity, multi-lingualism
Unit 2 Community Resources and its Mobilization
Unit 3 Role of community in prevention, identification, and intervention of disabilities
Unit 4 Supporting families
Unit 5 Promoting voluntarism

**Block 4 - Facilitating education of children with disabilities** (12 Hours)

Unit 1 School readiness-Role of family and community
Unit 2 Transition: Home to school
Unit 3 Educational options- home, centre and school based
Unit 4 Family, school, and community partnership
Unit 5 Indicators of effective family and community support

**Block 5 - Community Based Rehabilitation** (12 Hours)

Unit 1 Scope, need and importance
Unit 2 Organization of CBR-WHO Matrix
Unit 3 Types of programmes for community awareness and participation
Unit 4 Mass media and materials for community awareness
Unit 5 Universal design- barrier free environment

**Reference books**


**Course-3**

**EDUCATION IN INDIA: A GLOBAL PERSPECTIVE**

60 Hours

**Objectives**

After studying this paper, the student teachers are expected to

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

**Course Content**

**Block 1: Definition, process and philosophy of education**

(10 Hours)

Unit 1 – Definition and Meaning of Education
Unit 2 – Aims of Education
Unit 3 – Functions of Education
Unit 4 – Philosophies and includes idealism, naturalism, pragmatism humanism and constructivism
Unit 5 – Historical perspective of Education in India and Abroad

**Block 2: Education and Various Commissions**

(10 Hours)

Unit 1 – Principles of education and special education and Inclusive Education
Unit 2 – Aims, objectives and functions of special education and inclusive education
Unit 3 – Direction and priorities of general and special education and inclusive education
Unit 4 – Recent trends in Indian Education and special education and inclusive education
Unit 5 – Education For All movement, Education through 21st Century, Various Commissions.

**Block 3: Education in the Social Context**  
(10 Hours)

Unit 1 – Formal, Informal and Non-formal Education.
Unit 2 – Functional literacy, continuous and Life Long Education.
Unit 3 – Community Based Rehabilitation including education.
Unit 4 – Open Learning, Distance Education with reference to General and Special Education and inclusive education
Unit 5 – Value –Oriented Education.

**Block 4: Educational Agencies for the National Development**  
(10 Hours)

Unit 1 – Educational challenges for economic and socio-political development.
Unit 2 – Role of home, community school, society, and mass media.
Unit 3 – Role of Governmental and non-governmental agencies in general and special education.  
Such as –NCERT, SCERT, RCI, NCTE.
(a) Resource mobilization through funding agencies and concessions/facilities for the disabled. Education
(C) International Legislation for Special Education
Unit 4 –International organizations, National Institutes for Handicapped, UN Organizations and International Non-Governmental Organizations (INGOs) such as UNICEF, UNESCO, WHO, UNDP, Action Aid and CBM
Unit 5 – International and national legislation including UNCRPD

**Block 5: Education and the Modern Ethos**  
(10 Hours)

Unit 1 – Democracy, socialism and secularism.
Unit 2 – Constitutional provisions in human rights.
Unit 3 – Equalization of educational opportunities.
Unit 4 – Education and human resource development.
Unit 5 – Planning and management of human resource development.
Unit 6 – Environmental Education

**Block 6: Emerging trends in Special and Inclusive Education**  
(10 Hours)
Unit 1 – Concept of impairment, disability (activity limitation) and participation restrictions and their implications
Unit 2 – Concepts and principles of inclusion.
Unit 3 – Inclusive Education a rights based model
Unit 4 – Community linkages and partnership of inclusion
Unit 5 – Role of special schools and special teachers/educators in facilitating inclusive education

Reference books

Course-4

INTRODUCTION TO AND PERSPECTIVES OF VISUAL IMPAIRMENT

(60 Hours)

Objectives

After studying this course, the student-teacher will be able to:

1. narrate the evolutionary process of the development of services for children with visual impairment;
2. define blindness, low vision and other related terminology;
3. describe anatomy and physiology of eye including eye diseases;
4. describe the impact of visual impairment on the personality development of the child with visual impairment; and
5. describe various educational service options available for children with visual impairment.

Block 1: Historical Perspectives of Education of Children with Visual Impairment

(10 Hours)

Unit 1: Historical development in India and Abroad
Unit 2: Cascade system of service delivery
Unit 3: Models of Integrated Education: resource model, itinerant model, combined model, cluster model, cooperative model, dual teaching model, multi-skilled teacher model
Unit 4: Development of inclusive education
Unit 5: Current status of education of visually impaired children with additional disabilities

Block 2: Nature of Visual Impairment

(10 Hours)

Unit 1: Concept of impairment
Unit 2: International classification of impairment including ICF 2005
Unit 3: Definition and Classification of blindness and low vision
Unit 4: Incidence and prevalence of visual impairment
Block 3: Eye and Eye Care

Unit 1: Anatomy and Physiology of the Eye
Unit 2: Visual acuity, refraction, fusion, depth perception
Unit 3: Visual deficit - tunnel vision, loss of visual field, central scotoma, low vision
Unit 4: Refractive errors – myopia, hyperopia, astigmatism
Unit 5: Common eye diseases – cataract, glaucoma, trauma, corneal ulcer, xerophthalmia, retinitis pigmentosa, macular degeneration, optic atrophy

Block 4: Psycho-social Implications of Visual Impairment

Unit 1: Psychological and Social Implications of visual impairment
Unit 2: Effects of blindness on growth and development – physical, social, intellectual and emotional
Unit 3: Effects of visual impairment on personality development, verbalism and mannerism
Unit 4: Coping with adolescence and transition planning

Block 5: Development of Inclusive Education

Unit 1: Concept and importance of inclusive education
Unit 2: Central scheme of inclusive education of children with disabilities at Secondary scheme
Unit 3: Role of functionaries – Headmasters/Headmistress/Principles, Special teachers, Classroom teachers, Parents and Peers
Unit 4: Factors responsible for successful integration and inclusion
Unit 5: Importance of Sarva Shikhsa Abhiyan

PRACTICUM

Observation of the activities and programmes of one institution serving children and youth with visual impairment and writing a report

Reference books

PRACTICAL

(Visual Impairment)

Braille (120 Hours)

(a) Reading and Writing Bharati Braille as applicable to regional languages, Standard English (Grade I & II), Braille mathematical code of India, Science notations and Introduction to Braille Hindustani/ Karnatic music code as applicable, Computer Braille code
(b) Use of the Brailler and Slate and stylus

Foundation Courses

Foundation Course (Compulsory) of B.A / B.Com / B.Sc. (See PART-B)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title of the Course</th>
<th>Credits</th>
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<tbody>
<tr>
<td>BSHF-101</td>
<td>Foundation Course in Humanities &amp; Social Sciences</td>
<td>8</td>
</tr>
<tr>
<td>FST-1</td>
<td>Foundation Course in Science &amp; Technology</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>16</strong></td>
</tr>
</tbody>
</table>

Elective Courses

Elective Courses - of B.A / B.Com / B.Sc. - 16 Credits (See Part-B)
Objectives

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

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

Course Content

Block-1 Introduction to Psychology (10 Hours)

Unit 1 – Definition, Nature and Scope of Psychology.
Unit 2 – Educational psychology: scope and relevance to general education.
Unit 3 – Role of educational psychology in special education.
Unit 4 – Theories of motivation, attention and perception and its application in education.
Unit 5 – Implications of the above with regard to specific disabilities.

Block 2: Growth and Development (10 Hours)
Unit 1 – Meaning, Definitions and Principles of Growth and Development.
Unit 2 – Influences of heredity and environment.
Unit 3 – Stages of Development with reference to children with disabilities.
Unit 4 – Developmental needs from infancy through adolescents
Unit 5 – Developmental delay and deviancies

Block 3 Learning & Individual difference (10 Hours)

Unit 1 – Definition, Meaning of Learning and Concept formation.
Unit 2 – Learning –Domains and factors affecting learning.
Unit 3 – Theories of learning (behavioural, cognitive and social), and their application to special education
Unit 4 – Memory and strategies for enhancing memory
Unit 5 - Definition, Meaning of Individual difference.
Unit 6 – Implications of the above with regard to various disabilities.

Block 4: Intelligence, Aptitude and Creativity (10 Hours)

Unit 1 – Meaning and definition of intelligence and aptitude.
Unit 2 – Theories of intelligence
Unit 3 – Concept of Creativity, its process, characteristics of creative people, and teacher’s role in stimulating creativity.
Unit 4 – Introduction to Psychological testing – objectives, principles and tests of intelligence, aptitude and creativity (SFB, DMT, WISC-R, CPM/SPM, DAT/BLAT, DST)
Unit 5 – Implications of the above with regard to various disabilities.

Block 5: Personality (10 Hours)

Unit 1 – Meaning and Definition of personality.
Unit 2 – Theories of personality
Unit 3 – Frustration and conflict, defence mechanisms and behavior deviations,
Unit 4 – Mental health and signs and symptoms of maladjustment
Unit 5 – Implications of disabilities in personality assessment.

Block 6: Guidance and Counselling (10 Hours)

Unit 1 – Meaning nature and scope of guidance and behavior and role of home.
Unit 2 – Approaches and techniques of guidance and behavior with reference to various disabilities.
Unit 3 – Vocational guidance, assessment, training, avenues and perspectives
Unit 4 – Discipline and management of classroom behavior problems.
Unit 5 – Yoga and other adjunctive aids.

Reference books

Course-6

EDUCATIONAL PLANNING AND MANAGEMENT, CURRICULUM DESIGNING AND RESEARCH

60 Hours

Objectives

1. After studying this paper, the student teachers are expected to realize the following objectives:
2. Discuss the meaning, need and scope of educational management.
3. Define the concept and meaning of curriculum and instructional strategies.
4. Explain the concept, meaning, scope and types of educational technology.
5. Describe the need and scope of educational research.
6. Discuss the meaning, scope and types of educational evaluation.

Course Content

Block 1: Educational Management (10 Hours)

Unit 1 - Definition, Meaning, Need, Scope of Educational Management.
Unit 2 - Concept and Principles of Institutional Planning and Management, Admission with focus on zero rejection
Unit 3 - Inspection, supervision and mentoring.
Unit 4 - Institutional Organization, Administration and Evaluation.
Unit 5 - Types of Leadership and Organizational Climate

Block 2: Curriculum (10 Hours)

Unit 1 - Definition, Meaning and Principles of Curriculum,
Unit 2 - Principles of curriculum development and disability wise curricular adaptations.
Unit 3 - Curriculum planning, implementation and evaluation – implications for disabilities and role of teacher.
Unit 4 - Types and importance of co-curricular activities
Unit 5 - Adaptations of co-curricular activities.

**Block 3: Instructional Strategies** (10 Hours)

Unit 1 - Theories of instruction – Bruner and Gagné.
Unit 2 - Approaches to instruction -cognitive, behavioural, and eclectic.
Unit 3 - Design instruction -macro design.
Unit 4 - Organizing individual, peer, small group, large group instructions.
Unit 5 - Teaching materials -aids and appliances, other equipment -development.

**Block 4: Educational Technology** (10 Hours)

Unit 1 - Definition, meaning and scope of educational technology and Information & Communication Technology (ICT) and its impact on education.
Unit 2 - Role and types of audio-visual aids in teaching and application of multimedia in teaching and learning
Unit 3 - Individualized instruction -Programmed instruction, computer assisted instruction and interactive learning.
Unit 4 - Environmental modifications and use of assistive technology for persons with Disabilities & Barrier free environment.
Unit 5 - TLM: Importance, need and guidelines on use of TLM with reference to various Disabilities.

**Block 5: Educational Research** (10 Hours)

Unit 1 - Definition, Need and scope of educational research
Unit 2 - Principles of Research in Education.
Unit 3 - Types of research - fundamental, applied and action
Unit 4 - Tools of research.
Unit 5 - Overview of research studies in special education in India.

**Block 6: Educational Evaluation** (10 Hours)

Unit 1 - Definition, Meaning, scope and types of evaluation.
Unit 2 - Various types of tests.
Unit 3 - Characteristics of a good test
Unit 4 - Descriptive statistics - measures of central tendencies (Mean, Median, Mode); Standard Deviation, Rank Order Correlation.
Unit 5 - Presentation of data - graphs, tables and diagrams.

Reference books

15. Young, Pauline. V. (1992). Scientific Social Surveys and Research, Bombay Asia Publishing House,
17. Govt. of India, Persons with Disability Act, 1995.
Course-7

Aural Rehabilitation of children with hearing impairment

60 Hours

Objectives:

To acquire knowledge about

1) Anatomy and Physiology of hearing and speech mechanism.
2) Development, assessment of hearing and speech milestones
3) Understanding the impact of deafness and restoration by way of amplification devices.
4) Communication options and strategies to facilitate communication in children with Hearing Impairment.
5) Role of community and media in prevention and rehabilitation of hearing loss.

Block 1: Hearing and Speech mechanism (10 Hours)

Unit 1: Structure of Ear and physiology of Hearing
Unit 2: Anatomy and Physiology of Respiratory, Phonatory, Articulatory and Resonatory System
Unit 3: Pre-requisites for development of Spoken language
Unit 4: Milestones in development of Hearing
Unit 5: Milestones in development of Spoken language

Block 2: Hearing Loss (10 Hours)

Unit 1: Prevalence and Incidence of hearing loss
Unit 2: Causes, types, Classification of hearing loss
Unit 3: Impact of hearing loss on communication, literacy, education and socio emotional aspects.
Unit 4: Measurement of hearing, interpretation of Audiological information
Unit 5: Modes of communication for Deaf and Hard of Hearing individuals.

**Block 3: Management of hearing loss** (10 Hours)

- Unit 1: Amplification and assistive listening devices, types, Care and maintenance
- Unit 2: Selection and Fitment of amplification devices and ear mould
- Unit 3: Speech perception and Auditory Training.
- Unit 4: Classroom acoustics, its management and strategies for noise reduction.
- Unit 5: Role of Technology and technological advancements

**Block 4: Speech Production and Evaluation** (10 Hours)

- Unit 1: Characteristics and parameters of Speech
- Unit 2: Segmental, Non-segmental, and supra-segmental aspects of Speech
- Unit 3: Description and Classification (Vowels, Consonants, Diphthongs)
- Unit 4: Assessment and development / teaching of Speech
- Unit 5: Speech intelligibility meaning, assessment and improvement

**Block 5: Community involvement for rehabilitation** (10 Hours)

- Unit 1: Awareness programme
- Unit 2: Institution and community based Rehabilitation
- Unit 3: Community mobilization and participation for prevention and rehabilitation
- Unit 4: Role of media in prevention, identification and rehabilitation
- Unit 5: Creating a barrier free environment for Deaf and Hard of hearing Children

**Audiology**

**Practicum:** (5 hours)

Observing and studying a model of hearing mechanism and collecting information on various individual (including cochlear implants) and group amplification system and making a journal for it.

**Practical:** (90 Hours)

*An observation report of each of the following may be compiled into a journal*

1. Audiometer, its parts and functions (10 hour)
2. Audiometry (2 cases one each of pure tone and free field) (4 hours)
3. Mapping of two children with cochlear implants. (8 hours)
4. Hearing Aid Trial of 2 children with hearing impairment (8 hours)
4. Interpretation of Un-aided and aided Audiogram (10 hours)
5. Ear-mould making (10 hours)
6. Administration and interpretation of Ling’s six sound test (10 hours)
7. 10 lessons of auditory training on 2 children with hearing impairment (20 hours)
8. Trouble shooting of hearing aids and cochlear implants (10 hours)

Speech

Practicum: (5 hours)

Observing and studying the model of speech mechanism, classification of speech errors in children with hearing impairment and making a journal for it.

Practical: (90 Hours)

An observation report of each of the following may be compiled into a journal

1. Observing and reporting identification of various non segmental, segmental and suprasegmental parameters of speech of five children with hearing impairment. (10 hours)
2. Assessing speech characteristics and evaluating intelligibility of two children with hearing impairment (10 hours)
3. Preparing word list for speech sounds of own language with the target speech sounds in initial medial and final position (10 hours)
4. Developing kit for speech assessment (10 hours)
5. Developing kit for teaching speech (10 hours)
6. Journal comprising description of production of various speech sounds (10 hours)
7. Transcribing speech sounds using IPA. (10 hours)
8. Lessons on evaluating and teaching speech (20 hours)
Reference books

## Foundation Course

Foundation Course (Compulsory) of B.A. / B.Com. / B.Sc.  

(See PART-B)

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Optional Courses: (Choose any one) Modern Indian Languages a Foundation Course in any of the following Modern Indian Languages is to be opted:

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Elective Courses

Elective Courses - of B.A./B.Com./B.Sc. - 28 Credits (See Part-B)

3rd Year

Course-8

Assessment and curriculum planning for students with Mental Retardation

(60 Hours)

Objectives:

After going through this course the student will be able to:

- Explain nature, needs, characteristics and classification of children with MR.
- Describe various assessment tools, procedure and evaluation tools.
- Develop curriculum for various age levels.
- Conduct assessment at the stage of transition from school to work.

Block 1: Nature and needs of children with Mental Retardation (10 Hours)

Unit 1: Definition, identification of children with MR, difference between mental retardation and mental illness, mental retardation and learning disability.
Unit 2: Incidence and prevalence, causes and prevention
Unit 3: classification, characteristics of children with mild, moderate, severe and profound intellectual disability.
Unit 4: Intervention and educational models.
Unit 5: Schemes and facilities of Govt. of India.

Block 2: Identification and Assessment (10 Hours)

Unit 1: Concept and importance of screening and identification, tools for screening and identification.
Unit 2: Assessment - concept, definition, purpose and & types
Unit 3: Assessment tools: MDPA, FACP, BASIC-MR, GLAD. Aarambh package, BASAL-MR
Unit 4: Maladaptive behavior – Types and assessment
Unit 5: Early intervention: importance, models and strategies

**Block 3: Transitional and vocational assessment** (10 Hours)

Unit 1: Support Intensity assessment,
Unit 2: Vocational assessment
Unit 3: Transition from school to work
Unit 4: Vocational Training
Unit 5: Employment Models – Supported, Sheltered, self employment. Inclusive employment, home based employment.

**Block 4: Curriculum planning at Pre primary and Primary level** (10 Hours)

Unit 1: Principles, approaches and types of curriculum development
Unit 2: Approaches to curriculum transaction – child centred, activity centred and holistic
Unit 3: Curriculum domains and planning curriculum at pre primary level
Unit 4: Curriculum domains and planning curriculum at primary level
Unit 5: Curriculum planning for individual needs and group teaching for pre primary and primary level children including curricular and cocurricular activities with focus on inclusive education.

**Block 5: Curriculum planning at secondary and prevocational levels** (10 Hours)

Unit 1: Curriculum domains and planning curriculum for secondary level - Curriculum transaction – at special and inclusive settings.
Unit 2: Functional Academics and Community based curriculum
Unit 3: Curriculum planning for transition from school to work
Unit 4: Teaching of co-curricular activities – music, drama, art & craft, physical education & yoga.
Unit 5: Evaluation of Curriculum outcome.

**PRACTICUM** (10 Hours)

Observe class rooms – one special class for children with MR and one inclusive class with children with MR. Analyze and write a report in terms of structure, physical facilities, teaching learning environment, content method, and evaluation.
Reference books


**Practical I: (120 hrs)**

**(MR)**
- Institutional Visits – Special School (minimum 5 special educational settings for MR) 30hrs
- Case Studies – I.E.Ps (Mild & Moderate) 30hrs

**Practicals in Therapeutics**
- Occupational Therapy (2 Cases) 15 hrs
- Physio therapy (2 Cases) 15 hrs
- Speech Therapy (2 Cases) 15 hrs
- Behavioral Modification (2 Cases) 15 hrs
Course-9
Learning Disabilities: Introduction and Assessment

Objectives: (60 Hours)

By successfully completing this course, students will be able to:

- Describe characteristics of learning disabilities.
- Summarize types and prevalence of learning disabilities.
- Summarize causes of learning disabilities.
- Explain the concept of screening, identification, and assessment of children with learning disabilities.
- Illustrate the cognitive deficiencies and assessment in cognitive and curricular areas.
- Demonstrate skills in diagnosing the educational problems encountered by learning disabled children.

BLOCK 1 Introduction to learning Disability (10 Hours)

Unit 1: Definition, Incidence and prevalence of Learning Disabilities.
Unit 2: Etiology, Types and Characteristics of Learning Disability
Unit 3: Associated Conditions
Unit 4: Contributions of -Contribution of Orton-Gillingham, Myklebust, Kephart, Fernald, Cruickshank, Kirk, Kim Reid & Resko
Unit 5: Services for the LD: National and International scenario.

BLOCK 2: Assessment of Children with Learning Disability (10 Hours)

Unit 1: Concepts of screening and Identification of learning disabled children
Unit 2: Assessment of the educational needs of disabled children
Unit 3: Identification of criteria –Inclusion Criteria and Exclusion Criteria, Discrepancy
Unit 4: Need for early identification and intervention
Unit 5: Intervention of late identified children and intervention strategies
BLOCK 3: Deficiencies in Cognitive Processes and Assessments of: (10 Hours)

Unit 1: Attention, Perception memory and Thinking
Unit 2: Motor
Unit 3: Readiness skills
Unit 4: Language
Unit 5: Reading, Writing, Spellings and Maths skills

BLOCK 4: Language and Children with Learning Disabilities (10 Hours)

Unit 1: Language Development and Bilingualism
Unit 2: Systems of Language
Unit 3: Oral Language – Listening and Speaking
Unit 4: Written Language – Reading and Writing
Unit 5: Language implications in LD

BLOCK 5: Methods, tools and tests of assessment (10 Hours)

Unit 1 Use of assessment tests
   a) Wechlers Intelligence Scale/ Indian adoption of Standard-Binet Test of Intelligence by S.P. Kulsreshtha/ Malins intelligence scale for children
   b) Ravens Progressive Matrices
   c) Bender Gestalt Visuo-Motor Test
   d) Grade Level Assessment Test (GLAD)
   e) Diagnostic Test of Learning Disability (DTLD)
   f) Diagnostic Test of Reading Disorders (DTRD)
   g) Aston Index for Screening Children with Learning difficulties.

Unit 2: Interpretation of tests reports / results for educational programming
Unit 3: Observations and Interviews, Questionnaires, Rating Scales and Checklists
Unit 4: Differential Diagnosis
Unit 5: Writing a case report

PRACTICUM (10 Hours)

1. Prepare and use interviews schedule for educational assessment.
2. Observe two different classrooms for students with learning disabilities.
3. Prepare a checklist for screening Learning Disability

Reference books


15 Venkateswanshu, D.,( 2005) Diagnosis and remediation of mathematical difficulties, New Delhi: Neel Kamal publications:

**PRACTICAL-I**

*(Learning Disabilities)*- 120 Hours

1. Adaptation of at least three topics (maximum five) in any two curricular areas. (50 Hours)

2. Preparation of a transition plan of any level for students with Learning Disabilities (50 Hours)

3. Visit to a inclusive School & Learning Disability School (20 Hours)

**Elective Courses**
Elective Courses - of B.A./B.Com./B.Sc. 20 Credits (See Part-B)

Application oriented Courses

Application oriented Courses of B.A./B.Com./B.Sc. 8 Credits (See Part-B)

4th Year

Course 10

Introduction to Locomotor Impairment and Cerebral Palsy

Objectives: (60 Hours)

The trainees are expected to acquire a basic knowledge on nature, needs, characteristics and identification of children with locomotor impairment and cerebral palsy.

BLOCK 1: Nature and Needs of Locomotor Impairment and Cerebral Palsy (10 Hours)

Unit 1: Definition, Incidence and Prevalence
Unit 2: Types/Classification, Characteristics, Identification
Unit 3: Etiology, Prevention, Immunization
Unit 4: Identification and Screening
Unit 5: Early Intervention and models of rehabilitation,

BLOCK 2: Developmental Milestones and Theories (10 Hours)

Unit 1: Growth and Development - principles, stages, factors affecting development
Unit 2: Holistic development – all domains
Unit 3: Implications of atypical development
Unit 4: Learning to and through play, Communication
Unit 5: Applying typical developmental approach to screening and diagnosis of CP

BLOCK 3: Introduction to Basic Anatomy and Physiology of the human body (10 Hours)

Unit 1: General introduction to the various systems of the body and their functions
Unit 2: The organizations of the nervous system: CNS, PNS, ANS and their functions
Unit 3: Anatomy, Structure and functions of sense organs – eye, ear, speech organs
Unit 4: The mechanism of sound production, chewing, swallowing
Unit 5: Anatomy, structure and function of musculo-skeletal system, Maintenance of posture and balance and Gait

**BLOCK 4: Locomotor Impairment** (10 Hours)

Unit 1: Definitions and causes – Polio, Club foot, Congenital Disorders of Hip, Muscular Dystrophy, Deficiency disorders, Hansen’s disease, Post Fracture complications, Congenital disorders

Unit 2: Spinal cord conditions - definitions and classification of spinal bifida, syringomelia, pott’s spine, deformities of spine, kyphosis, scoliosis, lordosis

Unit 3: Orthosis and Prosthesis – definitions, classifications, functions

Unit 4: Mobility aids and low cost equipments

Unit 5: Sensitization to the assistive devices

**BLOCK 5: Cerebral Palsy** (10 Hours)

Unit 1: Conditions, Classification and Characteristics

Unit 2: Associated conditions – MR, DHH, VI, Speech disorders, Epilepsy ADHD, Autism, Microcephaly and Hydrocephaly

Unit 3: Augmentative and Alternative communication

Unit 4: Differential Diagnosis with other disabilities

Unit 5: Mobility aids, low cost equipments and sensitization to the assistive devices

**PRACTICUM** (10 Hours)

Observation and Visits to community based inclusive settings

**References**

2. Pandey R.S. and Advani L. (1955), Perspectives in Disability and Rehabilitation, New Delhi; Vikas Publication
4. MSJ & E (1999), Difficulties, Indian Association for Special Education & Rehabilitation & Handicapped Welfare Federation, New Delhi
6. Rehabilitation Council of India. Status of Disability in India – 2000; Ministry of SJ & E.

**Practical-I**  
*(LI & CP)*

Three Case Studies (1- Locomotor Impairment, 2- Cerebral Palsy)  
*(90 Hours)*

**Course-11**

**LEARNING METHODS AND STRATEGIES FOR TEACHING CHILDREN WITH VISUAL IMPAIRMENT**  
*(60 Hours)*

**Objectives:**

After studying this course, the student-teacher will be able to:
1. list out various approaches to be adopted in teaching children with visual impairment;
2. demonstrate expertise in teaching expanded core curricular skills to children with visual impairment;
3. demonstrate techniques of teaching language skills to children with visual impairment;
4. explain the educational needs and practice of children with low vision; and
5. explain the nature and needs of visually impaired children with associated disabilities

**Block 1: Need for Various Approaches in Teaching Children with Visual Impairment**  
*(10 Hours)*

Unit 1: Process of providing non-visual experience to visual ideas
Unit 2: Learning stage – sensory motor, concrete operation and abstract thinking (logical operations)
Unit 3: Compensatory instruction for concept development and learning
Unit 4: Pedagogy of inclusive education
Unit 5: Learning style and Child centered teaching

**Block 2: Teaching Expanded Core Curricular Skills**  
*(10 Hours)*

Unit 1: Introduction and techniques of teaching various daily living skills to children with visual impairment
Unit 2: Techniques of teaching of orientation and mobility, importance of orientation and mobility for persons with visual impairment
Unit 3: Braille – Techniques of teaching Braille, reading and writing skills, reading readiness activities
Unit 4: Knowledge of various aids and applications
Unit 5: Sensory training: Importance, objectives and procedures; Tactile sense; Auditory sense; Olfactory sense; Kinesthetic sense and Multi-sensory approach

**Block 3: Curricular Adaptation**  
(10 Hours)

Unit 1: Importance of curricular adaptations
Unit 2: Direct and indirect services, material development and presentation
Unit 3: General principles of material preparation: Duplication, modification, substitution and omission
Unit 4: Use of adapted instructional material for teaching and learning subjects such as language, mathematics, science, social science
Unit 5: Creative arts and adapted physical education activities, yoga, strategies for coping with stress

**Block 4: Education of Children with Low Vision**  
(10 Hours)

Unit 1: Assessment of low vision
Unit 2: Educational issues and challenges of children with low vision
Unit 3: Visual stimulation and visual efficiency
Unit 4: Low vision aids: magnifiers, large print materials and computers
Unit 5: Education of low vision children with associated intellectual impairment, hearing impairment and neurological impairment including classification, assessment and teaching strategies

**Block 5: Visually Impaired Children with Associated Disabilities**  
(10 Hours)

Unit 1: Concept of associated disabilities
Unit 2: Types of associated disabilities – Hearing impairment, Mental retardation, Locomotor and Neurological disorders and Learning disabilities
Unit 3: Deafblindness – learning needs, teaching strategies and material adaptations
Unit 4: Importance of Early intervention
Unit 5: Support services – Modification and Implications

**PRACTICUM**  
(10 Hours)

1. Observation of teaching children with visual impairment in different classes and preparing a list of learning needs of children with visual impairment in different subject areas
2. Reading Readiness: Preparation and use of reading readiness material
3. Preparation and use of functional vision assessment tests and visual efficiency training for children with low vision
References books


PRACTICAL-II
Visual Impairment

1. Orientation and Mobility (30 Hours)
   a) Sighted Guide Technique
   b) Pre-cane skills
   c) Cane techniques
   d) Knowledge and practice (if available) on electronic mobility devices
   e) Preparation and use of Mobility Maps (Audio and Tactile)

2. Teaching Daily Living Skills (20 Hours)

3. Assistive Devices (30 Hours)
   a) Use of Taylor frame, abacus and other mathematical devices
   b) Use of screen reading, magnification software and other talking equipments
   c) ICT in the classroom
   d) Use of adapted physical education equipment and appliances

4. Transcription of Braille materials into print in English and Regional language and vice versa (10 Hours)
Course 12
Teaching strategies and curriculum adaptations for children with Mental Retardation
(60 Hours)

Objectives:
After going through this course the student will be able to:
- Describe and implement the various teaching strategies.
- Develop and implement educational plans.
- Prepare and use curriculum adaptations as per the individual needs of the students
- Manage the behavioural, communication and motor problems of students with MR.
- Prepare and use teaching learning material.

Block 1: Teaching Strategies (10 Hours)
Unit 1: Principles of teaching
Unit 2: Stages in learning – Acquisition, maintenance, fluency and generalization - concept learning
Unit 3: Teaching Approaches and strategies: Multisensory, Visual-Auditory-Kinesthetic-Tactile (VAKT), Behavioral approach and strategies – Task analysis, chaining, modeling, shaping, prompting and fading, reinforcement, cognitive approach – cognitive behavior modification.
Unit 4: Record maintenance and monitoring progress
Unit 5: Importance, preparation and use of teaching learning material for children with MR and importance of computer Assisted Instruction (CAI).

Block 2: Co-curricular Activities (10 Hours)
Unit 1: Relevance, importance and types of co-curricular skills
Unit 2: Visual Arts (Art and Crafts)
Unit 3: Performing Arts (dance, music, drama, mimicry and puppetry)
Unit 4: Physical Education – Yoga, Play, Sport & games
Unit 5: Emerging trends and activities – Special Olympics, Very Special Arts.
Block 3: Management of behavioural, Communication and motor aspects of children with Mental Retardation (10 Hours)

Unit 1: Behaviour management – Functional analysis and strategies for intervention. Ethical considerations
Unit 2: Communication – definition, prerequisite skills, disorders and intervention, augmentative and alternative communication, functional communication.
Unit 3: Physiotherapy - functional assessment, activities to enhance motor functions.
Unit 4: Occupational therapy – implication and adaptations in classroom management, Activities to enhance motor functions.
Unit 5: Importance of working in team. Role of special educator in multidisciplinary team.

Block 4: Development of Educational Plan (10 Hours)

Unit 1: Instructional Design
Unit 2: Individualized educational plan – need and components
Unit 3: Development of goals – long term goals, short term specific objectives
Unit 4: Development and implementation of Educational Plan and evaluation.
Unit 5: Record maintenance related to educational planning.

Block 5: Curriculum adaptations for children with MR (10 Hours)

Unit 1: Curriculum adaptations – concept, meaning, suitability to children with MR.
Unit 2: Continuous and comprehensive evaluation – planning and monitoring
Unit 3: Teaching children with intellectual disability in large group – peer tutoring and cooperative learning.
Unit 4: Teaching Learning Material – Adaptation
Unit 5: Life Skills – Adaptation

Practicum (10 Hours)

1. Carry out comprehensive assessment for a child with MR in a regular class and write a report.
2. Develop/adapt a cocurricular activity that will enhance the overall development (motor, social, language, cognitive) of the student with MR.

Reference books


**Practical II (90 hrs)**

**(MR)**

- Group teaching in Special Schools 15 Lessons (Curricular) 30hrs
- 05 Lessons (Co-curricular) 10hrs

**Teaching practice in Inclusive Setup**

- 10 Lesson (1st Subject) Optional 20hrs
- 10 Lesson (2nd Subject) 20hrs
Teaching Learning Material preparation for group teaching  10 hrs

- Functional aids
- Learning aids
- Technology aids

Course 13

Education and Curricular Practices for Children with Hearing Impairment  

(60 Hours)

Objectives: To acquire knowledge about

1) Historical developments and current practices in education of children with HI.
2) Issues in various aspects of education of children with HI including communication, literacy family participation and involvement.
3) Curricular strategies, adaptation and their implications for children with HI.
4) Strategies facilitating Inclusive Education.
5) Transitions of children with HI across different levels of education.

Block 1: Education of Children with HI  

(10 Hours)

Unit 1: Evolution of educational programmes, Policies and Practices.
Unit 2: Availability and suitability of educational programmes for Hearing impaired children
Unit 3: Organization and Management of Educational Programme.
Unit 4: Early intervention for school readiness.
Unit 5: Educational Bilingualism

Block 2: Challenges in Education of Children with HI  

(10 Hours)

Unit 1: Language and Communication
Unit 2: Literacy development
Unit 3: Instructional strategies
Unit 4: Educational Assessment and Evaluation
Unit 5: Family Participation and Involvement in education

Block 3: Curricular Strategies for Children with HI  

(10 Hours)

Unit 1: Principles and methods of language development
Unit 2: Techniques of developing language
Unit 3: Development of literacy skills
Unit 4: Curricular Strategies and adaptations
Unit 5: Assessment and development of IEP
Block 4: Inclusive Education of Children with HI (10 Hours)

Unit 1: Pre-requisites for inclusion
Unit 2: Functionaries and their role-responsibilities
Unit 3: Resource Room and Resource facilities
Unit 4: Facilitating and sustaining inclusive education
Unit 5: Co-curricular Adaptation and Behavior management

Block 5: Transition of Children with HI (10 Hours)

Unit 1: Definition, meaning and concept of transition
Unit 2: Supporting Lateral and Vertical Transitions.
Unit 3: Measuring child, family and programme outcomes
Unit 4: Developing an Individualized and Transition Plan.
Unit 5: Transition to Higher and Vocational Education.

Practicum (10 hours)

Visiting and writing reports of school/centre as follows:
2 special schools for children with hearing impairment (at least 1 having early intervention centre)
1 special centre of AVT
1 school/centre for multidisability
1 inclusive school

Practical (90 Hours)

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<tbody>
<tr>
<td>1.</td>
<td>Evaluating written language samples of 2 children with hearing impairment</td>
<td>(2 hrs)</td>
</tr>
<tr>
<td></td>
<td>Observation and practice of Microteaching skills -4 lessons</td>
<td>(8 hrs)</td>
</tr>
<tr>
<td>2.</td>
<td>20 Classroom observations in special schools at preschool, primary and secondary levels</td>
<td>(10 hrs)</td>
</tr>
<tr>
<td>3.</td>
<td>10 Classroom observations in inclusive schools at preschool, primary and secondary levels</td>
<td>(5 hrs)</td>
</tr>
<tr>
<td>4.</td>
<td>Planning and execution of 20 lessons (8 special + 12 Regular)</td>
<td>(20 hrs)</td>
</tr>
<tr>
<td>5.</td>
<td>Observation and practice of Individualized intervention in early childhood intervention centres</td>
<td>(10 hrs)</td>
</tr>
<tr>
<td>6.</td>
<td>Skill Development in communication</td>
<td>(5 hrs)</td>
</tr>
<tr>
<td>7.</td>
<td>Skill development in Sign Language</td>
<td>(10 hrs)</td>
</tr>
<tr>
<td>8.</td>
<td>Skill development in Sign System</td>
<td>(5 hrs)</td>
</tr>
<tr>
<td>9.</td>
<td>Adaptation of curriculum</td>
<td>(5 hrs)</td>
</tr>
<tr>
<td>10.</td>
<td>Development of a kit for teaching Grammar</td>
<td>(5 hrs)</td>
</tr>
<tr>
<td>11.</td>
<td>Observation of Language assessment tests</td>
<td>(5 hrs)</td>
</tr>
</tbody>
</table>
Reference books

10. Dale P. Language development, New York Holt Rinehart & Winston
Course 14

Curricular and Remedial Strategies for Learning Disabilities

(60 Hours)

Objectives:

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

1. Illustrate the methods of teaching
2. Describe the principles, types and area of curriculum
3. Demonstrate skills in applying different intervention programmes for the children with learning disability.
4. Make effective use of appropriate teaching strategies as per the specific needs of children with learning disability.
5. Prepare Transitional Programme for children with LD.
6. Demonstrate techniques and practices to be used with individuals with L.D. and their parents.

BLOCK 1: Introduction to teaching and Curriculum Design (10 Hours)

Unit 1: Principles and maxims of Teaching, Micro Teaching & diagnostic prescriptive Teaching
Unit 2: Methods of teaching (Cooperative learning, peer tutoring, team teaching, CAI, Role play)
Unit 3: Concept and types of Curriculum – core, collateral, support, alternative and plus
Unit 4: Need Based Curriculum and Individual Education Plan (IEP)
Unit 5: Further Education plan (FEP) and Life Long Education

BLOCK 2: Remedial Approaches (10 Hours)

Unit 1: Concept: Principles and Perspectives
Unit 2: Behavioural approach
Unit 3: Cognitive approach
Unit 4: Multi sensory approach
Unit 5: Collaborative teaching approach

BLOCK 3: Remediation in Cognitive Processes and Curricular areas (10 Hours)

Unit 1: Attention, Perception, Memory and Thinking
Unit 2: Language
Unit 3: Reading, Writing and spellings
Unit 4: Math
Unit 5: Social skills

**BLOCK 4: Transition Programming for Students with Learning Disabilities (10 Hours)**

Unit 1: Transition for Preschool children
Unit 2: Transition for Adolescence
Unit 3: Adults with LD: School to Work and issues related to training and placement.
Unit 4: Relationship of LD to other Concerns (Multiculturalism, English as a Second Language, Students with other disabilities)
Unit 5: Home-School Relationship and Community partnership.

**BLOCK 5: Management of Children with LD in inclusive setting: (10 Hours)**

Unit 1: Concept, Importance & Needs of inclusion.
Unit 2: Curriculum Adaptation: Concept, need, scope and Process
Unit 3: Curriculum Adaptation in subject areas: language, social studies, maths, and Science
Unit 4: Co-curricular adaptation
Unit 5: Behaviour modification

**PRACTICUM (10 Hours)**

- Prepare a FEP for a selected case
- Preparation of Remedial material in Given skill

**Reference books**


19. Reid. K ( 1988 ) Teaching the Learning Disabled, Allyn and Bacon,Baston,


**PRACTICAL-II**  
(Learning Disabilities)

1. Development and tryout of an Assessment tool in any two curricular areas  **(50 Hours)**

2. Develop a remedial tool in two areas of cognitive processes.  **(40 Hours)**
Course 15

Assessment and Intervention for Students with Locomotor Impairment and Cerebral Palsy

(60 Hours)

Objective: The trainees are expected to do assessment and implement educational plans and various teaching strategies

BLOCK 1: Identification and Methods of Assessment

(10 Hours)

Unit 1: Concept, Definition, Purpose and Scope
Unit 2: Various types of assessment tests and their uses, Characteristics of a good test
Unit 3: Developmental checklists, various assessment forms
Unit 4: Record maintenance and monitoring progress
Unit 5: Evaluation – definition and scope

Block 2: Assessment and Intervention of Physical and Functional skills

(10 Hours)

Unit 1: Screening and Identification, Assessment of LI and CP
Unit 2: Assessment and Management of Functional skills – bladder control, eating, Dressing-undressing,
Unit 3: Management techniques – posture, positioning, lifting, carrying, transferring
Unit 4: Therapeutic support – their implications and adaptations in classroom, Guidance and counseling – role of home and school
Unit 5: Special furniture and its uses, Sensitization to architectural barriers at school, home, public areas

Block 3: Assessment and Intervention for Augmentative and Alternative Communication

(10 Hours)

Unit 1: Overview of AAC
Unit 2: Assessment and Access for students with neuromuscular disorders
Unit 3: Representations of vocabulary and vocabulary selection
Unit 4: Using and making communication displays
Unit 5: Use of technology for AAC, ICT and its impact on education

Block 4: Assessment and Intervention for Reading, Spelling, Mathematics and Writing difficulties

(10 Hours)

Unit 1: Overview of Reading and Mathematics difficulties
Unit 2: Nature, characteristics and manifestations
Unit 3: Process and principles of reading development, factors associated with reading, Skills related to development of mathematics

Unit 4: Assessment techniques

Unit 5: Application of intervention strategies

**Block 5: Inclusive education, Classroom management and Curriculum Design (10 Hours)**

Unit 1: Inclusion – concept, importance and needs, Government policies

Unit 2: Curriculum – Definition, Principles of curriculum construction, Planning, Implementation and Evaluation

Unit 3: Need based curriculum, Role of teacher in curriculum construction, Need of Individual Educational plan (IEP),

Unit 4: Meaning, Importance and types of co-curricular activities, Vocational counseling and guidance

Unit 5: Method of teaching in inclusive classroom – group teaching, peer tutoring, Co-operative learning, role play

**Practicum (10 Hours)**

Assignments in content areas of Locomotor & Cerebral Palsy

**References**

2. Pandey R.S. and Advani L. (1955), Perspectives in Disability and Rehabilitation, New Delhi; Vikas Publication
4. MSJ & E (1999), Difficulties, Indian Association for Special Education & Rehabilitation & Handicapped Welfare Federation, New Delhi
6. Rehabilitation Council of India. Status of Disability in India – 2000; Ministry of SJ & E.
9. Set of publications available with NIMH, Secunderabad, AYJNHH, Mumbai and National Trust, New Delhi.
10. Set of publications available with IICP, Kolkata on Cerebral Palsy and Neuromotor Disorders Physical and ADL Management, Parent Training and Guidance, Curriculum Activities & Classroom Management, Language and Augmentative & Alternative Communication, and Training Packages for Professionals

**Practical- II**  
(LI & CP)

1. Assessment and Management in all Developmental areas (60 Hours)

2. Basic skills on handling, positioning, lifting, transference, and carrying  
3. Effective use of furniture and equipment & Access and Mobility  
   
   (30 Hours)
Course-16

Methodology of Teaching in Inclusive Setting

(60 Hours)

Objectives:

After studying this paper, the student teachers are expected to describe the methods and techniques for teaching various curricular areas and prepare TLM for their use to teach Children with:

i. Visual Impairment
ii. Hearing Impairment
iii. Mental Retardation
iv. Learning Disabilities
v. Loco-motor & Cerebral Palsy

Block1 Teaching Children with Hearing Impairment

(10 Hours)

Unit 1 Methodology of Teaching English- Aims, objectives, principles, approaches, teaching techniques, skills, adaptations in content & process, TLM and Evaluation
Unit 2 Methodology of Teaching Mathematics- Aims, objectives, principles, approaches, principles, teaching techniques, skills, adaptations in content & process, TLM and Evaluation
Unit 3 Methodology of Teaching Social Studies- Aims, objectives, principles, approaches, teaching techniques, skills, adaptations in content & process, TLM and Evaluation
Unit 4 Methodology of Teaching Science- Aims, objectives, principles, approaches, teaching techniques, skills, adaptations in content & process, TLM and Evaluation
Unit 5 Methodology of Teaching National / Regional Language- Aims, objectives, principles, approaches, teaching techniques, skills, adaptations in content & process, TLM and Evaluation

Block2 Teaching Children with Mental Retardation

(10 Hours)

Unit 1 Methodology of Teaching English- Aims, objectives, principles, approaches, teaching techniques, skills, adaptations in content & process, TLM and Evaluation
Unit 2 Methodology of Teaching Mathematics- Aims, objectives, principles, approaches, principles, teaching techniques, skills, adaptations in content & process, TLM and Evaluation
Unit 3 Methodology of Teaching Social Studies- Aims, objectives, principles, approaches, teaching techniques, skills, adaptations in content & process, TLM and Evaluation
Evaluation
Unit 4 Methodology of Teaching Science- Aims, scope, objectives, principles, approaches, teaching techniques, skills, adaptations in content & process, TLM and Evaluation
Unit 5 Methodology of Teaching National / Regional Language- Aims, scope, objectives, principles approaches, teaching techniques, skills, adaptations in content & process, TLM and Evaluation

Block 3 Teaching Children with Visual Impairment  (10 Hours)

Unit 1 Methodology of Teaching English- Aims, scope, objectives, principles, approaches, teaching techniques, skills, adaptations in content & process, TLM and Evaluation
Unit 2 Methodology of Teaching Mathematics- Aims, scope, objectives, principles approaches, principles, teaching techniques, skills, adaptations in content & process, TLM and Evaluation
Unit 3 Methodology of Teaching Social Studies- Aims, scope, objectives, principles approaches, teaching techniques, skills, adaptations in content & process, TLM and Evaluation
Unit 4 Methodology of Teaching Science- Aims, scope, objectives, principles, approaches, teaching techniques, skills, adaptations in content & process, TLM and Evaluation
Unit 5 Methodology of Teaching National / Regional Language- Aims, scope, objectives, principles approaches, teaching techniques, skills, adaptations in content & process, TLM and Evaluation

Block 4 Teaching Children with Learning Disabilities  (10 Hours)

Unit 1 Methodology of Teaching English- Aims, scope, objectives, principles, approaches, teaching techniques, skills, adaptations in content & process, TLM and Evaluation
Unit 2 Methodology of Teaching Mathematics- Aims, scope, objectives, principles approaches, principles, teaching techniques, skills, adaptations in content & process, TLM and Evaluation
Unit 3 Methodology of Teaching Social Studies- Aims, scope, objectives, principles approaches, teaching techniques, skills, adaptations in content & process, TLM and Evaluation
Unit 4 Methodology of Teaching Science- Aims, scope, objectives, principles, approaches, teaching techniques, skills, adaptations in content & process, TLM and Evaluation
Unit 5 Methodology of Teaching National / Regional Language- Aims, scope, objectives, principles approaches, teaching techniques, skills, adaptations in content & process, TLM and Evaluation
**Block 5 Teaching Children with Loco-motor & Cerebral Palsy**  
(10 Hours)

Unit 1 Methodology of Teaching English- Aims, scope, objectives, principles, approaches, teaching techniques, skills, adaptations in content & process, TLM and Evaluation  
Unit 2 Methodology of Teaching Mathematics- Aims, scope, objectives, principles approaches, principles, teaching techniques, skills, adaptations in content & process, TLM and Evaluation  
Unit 3 Methodology of Teaching Social Studies- Aims, scope, objectives, principles approaches, teaching techniques, skills, adaptations in content & process, TLM and Evaluation  
Unit 4 Methodology of Teaching Science- Aims, scope, objectives, principles, approaches, teaching techniques, skills, adaptations in content & process, TLM and Evaluation  
Unit 5 Methodology of Teaching National / Regional Language- Aims, scope, objectives, principles approaches, teaching techniques, skills, adaptations in content & process, TLM and Evaluation

**Practicum**  
(10 Hours)

Select any three lessons from textbooks of class VI and above  
1. one from English or language (National or Regional)- compulsory  
2. one from Science  
3. one Social Studies  
4. one from Mathematics

**Instruction:**

Prepare teaching plan for above three lessons including content adaptation, methods of teaching, TLM & Evaluation as required for teaching children with 1. VI 2. MR 3. HI 4. LD 5. LI & CP
School Experience Programme (Compulsory) 12 Credits (360 Hours)

The student trainees are expected to be placed in inclusive schools at Primary and secondary level for a minimum of 3 Credits in each and remaining 6 Credits in specific disability areas in Special education settings. The student is expected to maintain a daily log book of activities carried out during each placement which should be endorsed by the designated supervisors of the institute offering the programme.

<table>
<thead>
<tr>
<th>10 lesions- Special Education</th>
<th>225 Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>10- lesions- remedial strategy</td>
<td></td>
</tr>
<tr>
<td>10 lesions- subject teaching-1</td>
<td></td>
</tr>
<tr>
<td>10 lesions- subject teaching-2</td>
<td></td>
</tr>
</tbody>
</table>

1. Case study – **50 Hours** (10 Hours for each disability area)
2. Preparation TLM- **25 Hours** (5 Hours for each disability area)
3. Project work- **60 Hours (common):**

**Example:**

i. Creating awareness on inclusive education of children with disabilities through preparation of booklets, posters, TV / Radio, use of multimedia (uploading on U tube), theatre, puppet / street play or other methods

   OR

ii. Visit a community, appraise the dynamics, resources and needs of children with disabilities, interact with the members of community develop a workable programme through participatory method and submit a report.

   OR

iii. Any other innovative measures towards inclusive education.
Details of Year wise Scheme of Study of B.A. / B.Com / B.Sc.

The University offers Bachelor’s Degree Programme leading to Bachelor’s Degree in the following fields:

1. B.A. Bachelor of Arts
2. B.Com. Bachelor of Commerce
3. B.Sc. Bachelor Degree in Science

The university follows the credit system. One credit is equal to 30 hours of learners study time. To earn Bachelor’s Degree in any of the disciplines mentioned above a learner has to earn 96 credits in three years period. i.e. 32 credits per year. For earning 96 credits, a student has to opt for from three categories of courses (i) Foundation Course (2) Elective Courses and (3) Application-Oriented Courses as given hereunder

<table>
<thead>
<tr>
<th>Prog.</th>
<th>Foundation Courses</th>
<th>Elective Courses</th>
<th>Application Oriented</th>
</tr>
</thead>
<tbody>
<tr>
<td>B.A.</td>
<td>24 Credits</td>
<td>56 Credits to 64 Credits</td>
<td>8 to 16 Credits</td>
</tr>
<tr>
<td>B.Com.</td>
<td>24 Credits</td>
<td>56 Credits (not less than 48 Credits from Commerce) to 64 Credits</td>
<td>8 to 16 Credits</td>
</tr>
<tr>
<td>B.Sc.</td>
<td>24 Credits</td>
<td>56 Credits to 64 Credits At least 25% of the Total credits in Physics, Chemistry and Life Sciences have to be obtained from Laboratory Courses</td>
<td>8 to 16 Credits</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Total 96 Credits</td>
</tr>
</tbody>
</table>
SCHEME OF STUDY

In order to enable you to complete Bachelor’s Degree Programme within the minimum period of three years, you are allowed to take courses worth 32 credits in each year. In the first year of study you should take 16 credits in Foundation Courses (FHS-1, FEG-1 or FHD-2 and FEG-2 or any one of MILs), and 16 credits in Elective Courses. In the second year you should take 8 credits of Foundation Course (FST-1) and 24 credits of Elective Courses. In the third year you should take 24 credits in Elective Courses and 8 credits in Application-Oriented Courses. Alternatively, you can take 16 to 24 credits of electives and 8 to 16 credits Application-Oriented Courses.

**Year-wise Scheme of Study**

<table>
<thead>
<tr>
<th>Year of Study</th>
<th>Foundation Courses</th>
<th>Elective Courses</th>
<th>Application-Oriented Courses</th>
<th>Total Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Year</td>
<td>16 Credits as under</td>
<td>16 Credits from</td>
<td></td>
<td>32 Credits</td>
</tr>
<tr>
<td></td>
<td>1. FST-1 8 Credit (Compulsory)</td>
<td>PHE-01,02, BPHL-103, PHE-04,05,06</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2. FEG-1 or FHD-2 4 Credits</td>
<td>CHE-01,02,03(L),05,07(L),08(L)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. FEG-2 or BHDF-101 4 Credit or any one of MILs</td>
<td>LSE-01,02,03,04(L)</td>
<td>MTE-01,02,03*, 04,05,06</td>
<td></td>
</tr>
<tr>
<td>Second Year</td>
<td>8 Credit (FHS-1) (compulsory)</td>
<td>24 Credit from</td>
<td></td>
<td>32 Credit</td>
</tr>
<tr>
<td></td>
<td>8 credit</td>
<td>PHE-01,02,04,05,06,07,08(L),09,10,15, BPHL-103, CHE-01,02,03(L), 04,05,06, 07(L), 08(L), 09,11(L)</td>
<td>LSE-01,02,03,04(L),05,06,07,08(L)</td>
<td>MTE-01,02,03*,04(L),05,06,07,08,09,10</td>
</tr>
<tr>
<td>Third Year</td>
<td>16 Credits to 24 Credits from</td>
<td></td>
<td></td>
<td>32 Credits</td>
</tr>
<tr>
<td></td>
<td>PHE-01,02,04,05,06,07,08(L),09,10,11, 12(L), 13,14,15,16 BPHL-103, CHE-01,02,03(L),04,05,06,07(L),08(L),09,10, 11(L), 12(L), LSE-01,02,03,04(L),05,06,07,08(L),09,10,11(L), 12,13,14(L), MTE-01,02,03*,04,05,06,07,08,09,10,11,12 13,14,</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Credit</td>
<td>24 Credit</td>
<td>64 Credits or 56 Credits</td>
<td>8 Credits or 16 Credits</td>
<td>96 Credits</td>
</tr>
</tbody>
</table>
Note: * MTE-03 credits will not be counted towards mathematics electives. In other words if you are choosing mathematics courses on electives, you are not allowed to opt MTE-3.

As per the above table, in the first year of study, you should take 16 Credits in Foundation Courses (FST-1, FEG-1 or FHD-2 and FEG-2 or BHDF-101 or any one of the MILs) and 16 credits in Elective Courses. In the second year, you should take 8 credits of Foundation Course in Humanities and Social Sciences (FHS-1) and 24 credits of Elective Courses. In the third year, you can take 16 to 24 credits of electives and 8 to 16 credits of application-oriented courses (together it should be 32 credits).

ELECTIVE COURSES - B.A./B.Com./B.Sc.

Following are the Elective Courses:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title of the Elective Courses</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>HINDI</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EHD-1</td>
<td>Hindi Gadya</td>
<td>8</td>
</tr>
<tr>
<td>EHD-2</td>
<td>Hindi Kavya</td>
<td>8</td>
</tr>
<tr>
<td>EHD-3</td>
<td>Hindi Sahitya ka Itihas evam Sahitya Parichaya</td>
<td>8</td>
</tr>
<tr>
<td>EHD-4</td>
<td>Madhya Kaleen Bhartiya Sahitya: Samaj aur Sanskriti</td>
<td>8</td>
</tr>
<tr>
<td>EHD-5</td>
<td>Adhunik Bhartiya Sahitya Rashtriya Chetna aur Navjagran</td>
<td>8</td>
</tr>
<tr>
<td>EHD-6</td>
<td>Hindi Bhasha : Itihas aur Vartman</td>
<td>8</td>
</tr>
<tr>
<td>BHDE-107</td>
<td>Hindi Samrachna</td>
<td>8</td>
</tr>
<tr>
<td>EHD-8</td>
<td>Prayojanmoolak Hindi</td>
<td>8</td>
</tr>
</tbody>
</table>

**ENGLISH**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title of the Elective Courses</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BEGE-101</td>
<td>From Language to Literature</td>
<td>8</td>
</tr>
<tr>
<td>BEGE-102</td>
<td>The Structure of Modern English</td>
<td>8</td>
</tr>
<tr>
<td>BEGE-103</td>
<td>Communication Skills in English</td>
<td>8</td>
</tr>
<tr>
<td>BEGE-104</td>
<td>English for Business Communication</td>
<td>8</td>
</tr>
<tr>
<td>BEGE-105</td>
<td>Understanding Prose</td>
<td>8</td>
</tr>
</tbody>
</table>
### Understanding Poetry

<table>
<thead>
<tr>
<th>Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EEG-6</td>
<td>Understanding Poetry</td>
<td>8</td>
</tr>
<tr>
<td>BEGE-107</td>
<td>Understanding Drama</td>
<td>8</td>
</tr>
<tr>
<td>BEGE-108</td>
<td>Reading the Novel</td>
<td>8</td>
</tr>
</tbody>
</table>

### (ELECTIVE) URDU

<table>
<thead>
<tr>
<th>Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BULE-001</td>
<td>Elements of Urdu Structure</td>
<td>8</td>
</tr>
<tr>
<td>BULE-002</td>
<td>History of Urdu Language</td>
<td>8</td>
</tr>
<tr>
<td>BULE-003</td>
<td>Urdu Poetry</td>
<td>8</td>
</tr>
<tr>
<td>BULE-004</td>
<td>Urdu Fiction</td>
<td>8</td>
</tr>
<tr>
<td>BULE-005</td>
<td>Urdu Non-fiction Prose</td>
<td>8</td>
</tr>
<tr>
<td>BULE-006</td>
<td>History of Urdu Literature</td>
<td>8</td>
</tr>
<tr>
<td>BULE-007</td>
<td>Socio-Cultural Forms in Urdu</td>
<td>8</td>
</tr>
<tr>
<td>BULE-008</td>
<td>Women in Urdu Literature</td>
<td>4</td>
</tr>
<tr>
<td>BULE-009</td>
<td>Diasporic Urdu Literature</td>
<td>4</td>
</tr>
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</table>

### Political Science

<table>
<thead>
<tr>
<th>Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>EPS-11</td>
<td>Political Ideas and Ideologies</td>
<td>8</td>
</tr>
<tr>
<td>EPS-12</td>
<td>Government and Politics in India</td>
<td>8</td>
</tr>
<tr>
<td>EPS-03</td>
<td>Modern Indian Politics Thought</td>
<td>8</td>
</tr>
<tr>
<td>EPS-15</td>
<td>South Asia: Economy, Society and Politics</td>
<td>8</td>
</tr>
<tr>
<td>EPS-06</td>
<td>Government and Politics in East and South East Asia</td>
<td>8</td>
</tr>
<tr>
<td>EPS-07</td>
<td>International Relations</td>
<td>8</td>
</tr>
<tr>
<td>EPS-08</td>
<td>Government and Politics in Australia</td>
<td>8</td>
</tr>
<tr>
<td>EPS-09</td>
<td>Comparative Government and Politics</td>
<td>8</td>
</tr>
</tbody>
</table>

### History

<table>
<thead>
<tr>
<th>Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EHI-01</td>
<td>Modern India: 1857-1964</td>
<td>8</td>
</tr>
<tr>
<td>EHI-02</td>
<td>India: Earliest Times to the 8th Century A.D.</td>
<td>8</td>
</tr>
<tr>
<td>EHI-03</td>
<td>India: From 8th Century to 15th Century A.D.</td>
<td>8</td>
</tr>
</tbody>
</table>
### ECONOMICS

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EHI-04</td>
<td>India: From 16th to Mid-18th Century</td>
<td>8</td>
</tr>
<tr>
<td>EHI-05</td>
<td>India: From Mid-18th to Mid-19th Century</td>
<td>8</td>
</tr>
<tr>
<td>EHI-06</td>
<td>History of China and Japan : 1840-1949</td>
<td>8</td>
</tr>
<tr>
<td>EHI-07</td>
<td>Modern Europe: Mid Eighteenth to Mid Twentieth Century</td>
<td>8</td>
</tr>
</tbody>
</table>

### PUBLIC ADMINISTRATION

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EPA-1</td>
<td>Administrative Theory</td>
<td>8</td>
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<tr>
<td>BPAE-102</td>
<td>Indian Administration</td>
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<td>EPA-3</td>
<td>Development Administration</td>
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<td>EPA-4</td>
<td>Personnel Administration</td>
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<td>EPA-5</td>
<td>Financial Administration</td>
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<td>EPA-6</td>
<td>Public Policy</td>
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### SOCIOLOGY

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<tr>
<td>ESO-11</td>
<td>The Study of Society</td>
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<tr>
<td>ESO-12</td>
<td>Society in India</td>
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</tr>
<tr>
<td>ESO-13</td>
<td>Sociological Thought</td>
<td>8</td>
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<tr>
<td>ESO-14</td>
<td>Society and Stratification</td>
<td>8</td>
</tr>
<tr>
<td>ESO-15</td>
<td>Society and Religion</td>
<td>8</td>
</tr>
<tr>
<td>ESO-16</td>
<td>Social Problems in India</td>
<td>8</td>
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</table>
## PHILOSOPHY

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title of the Course</th>
<th>Credits</th>
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<tbody>
<tr>
<td>BPY-001</td>
<td>Indian Philosophy: Part I</td>
<td>4</td>
</tr>
<tr>
<td>BPY-002</td>
<td>Logic : Classical and Symbolic</td>
<td>4</td>
</tr>
<tr>
<td>BPY-003</td>
<td>Ancient and Medieval Philosophy</td>
<td>4</td>
</tr>
<tr>
<td>BPY-004</td>
<td>Religions of the World</td>
<td>4</td>
</tr>
<tr>
<td>BPY-005</td>
<td>Indian Philosophy : Part II</td>
<td>4</td>
</tr>
<tr>
<td>BPY-006</td>
<td>Metaphysics</td>
<td>4</td>
</tr>
<tr>
<td>BPY-007</td>
<td>Ethics</td>
<td>4</td>
</tr>
<tr>
<td>BPY-008</td>
<td>Modern Western Philosophy</td>
<td>4</td>
</tr>
<tr>
<td>BPY-009</td>
<td>Contemporary Western Philosophy</td>
<td>4</td>
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<tr>
<td>BPY-010</td>
<td>Epistemology</td>
<td>4</td>
</tr>
<tr>
<td>BPY-011</td>
<td>Philosophy of Human Persons</td>
<td>4</td>
</tr>
<tr>
<td>BPY-012</td>
<td>Philosophy of Science and Cosmology</td>
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<tr>
<td>BPYE-001</td>
<td>Philosophys of Religion</td>
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<tr>
<td>BPYE-002</td>
<td>Tribal and Dalit Philosophy</td>
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## (ELECTIVE) PSYCHOLOGY

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title of the Course</th>
<th>Credits</th>
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<tbody>
<tr>
<td>BPC-001</td>
<td>General Psychology</td>
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</tr>
<tr>
<td>BPC-002</td>
<td>Developmental Psychology</td>
<td>4</td>
</tr>
<tr>
<td>BPC-003</td>
<td>Research Methods in Psychology</td>
<td>4</td>
</tr>
<tr>
<td>BPC-004</td>
<td>Statistics in Psychology</td>
<td>4</td>
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<tr>
<td>BPC-005</td>
<td>Theories of Personality</td>
<td>4</td>
</tr>
<tr>
<td>BPC-006</td>
<td>Social Psychology</td>
<td>4</td>
</tr>
<tr>
<td>BPCL-007*</td>
<td>Practicals in Psychological Testing</td>
<td>4</td>
</tr>
<tr>
<td>BPCL-008*</td>
<td>Practical in Experimental Psychology</td>
<td>4</td>
</tr>
</tbody>
</table>

(BPC-003) and (BPC-004) are to be taken together.
(BPC-005) and (BPC-006) are to be taken together.
(BPC-007*) and (BPCL-008*) are to be taken together.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BPCE-011</td>
<td>School Psychology</td>
<td>4</td>
</tr>
<tr>
<td>BPCE-013</td>
<td>Motivation and Emotion</td>
<td>4</td>
</tr>
<tr>
<td>BPCE-014</td>
<td>Psychopathology</td>
<td>4</td>
</tr>
<tr>
<td>BPCE-015</td>
<td>Industrial and Organisational Psychology</td>
<td>4</td>
</tr>
<tr>
<td>BPCE-017</td>
<td>Introduction to Counselling Psychology</td>
<td>4</td>
</tr>
<tr>
<td>BPCE-018</td>
<td>Neuropsychology</td>
<td>4</td>
</tr>
<tr>
<td>BPCE-019</td>
<td>Environmental Psychology</td>
<td>4</td>
</tr>
<tr>
<td>BPCE-021</td>
<td>Forensic Psychology</td>
<td>4</td>
</tr>
<tr>
<td>BPCE-022*</td>
<td>Practicals in Clinical Psychology</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>OR Prakticals in Counselling Psychology</td>
<td></td>
</tr>
<tr>
<td></td>
<td>OR Prakticals in Industrial &amp; Organisational Psychology</td>
<td></td>
</tr>
<tr>
<td>BPCE-023*</td>
<td>Internship in Psychology</td>
<td>4</td>
</tr>
</tbody>
</table>

1. *Courses are compulsory for B.A. (Psychology) major students. These courses would not be offered to B.A. General Students.

2. The course BPCE-022 should be related to theory course BPCE-014/BPCE-015/BPCE-017.

3. To choose 8 credit course from BPCE-011/BPCE-013/BPCE-014/BPCE-015/BPCE-017/BPCE-18/BPCE-19/BPCE-021

4. Psychology courses are available in English medium only.

**RURAL DEVELOPMENT**

**ERD-1** Rural Development in India 8

Note: **(This course in Rural Development may also be opted by Sociology students for major in Sociology)

*Learners who successfully complete 48 credits in any one discipline will be given a B.A. Major degree after completion of 96 credits whereas others will be awarded B.A. General
However, for a B.A. (Major) degree in Mathematics learner should complete 40 credits including MTE-01, MTE-02, MTE-04, to MTE-09 (in all worth 28 credits).

<table>
<thead>
<tr>
<th>Discipline</th>
<th>Course Code</th>
<th>Title of the Elective Courses</th>
<th>Credits</th>
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<tbody>
<tr>
<td>COMMERCE</td>
<td>ECO-1</td>
<td>Business Organisation</td>
<td>4</td>
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<tr>
<td></td>
<td>ECO-2</td>
<td>Accountancy-I</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>ECO-3</td>
<td>Management Theory</td>
<td>4</td>
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<tr>
<td></td>
<td>ECO-5</td>
<td>Mercantile Law</td>
<td>4</td>
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<tr>
<td></td>
<td>ECO-6</td>
<td>Economic Theory</td>
<td>4</td>
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<tr>
<td></td>
<td>ECO-7</td>
<td>Elements of Statistics</td>
<td>4</td>
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<tr>
<td></td>
<td>ECO-8</td>
<td>Company Law</td>
<td>4</td>
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<tr>
<td></td>
<td>ECO-9</td>
<td>Money, Banking &amp; Financial Institutions</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>ECO-10</td>
<td>Elements of Costing</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>ECO-11</td>
<td>Elements of Income Tax</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>ECO-12</td>
<td>Elements of Auditing</td>
<td>4</td>
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<td></td>
<td>ECO-13</td>
<td>Business Environment</td>
<td>4</td>
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<td></td>
<td>ECO-14</td>
<td>Accountancy-II</td>
<td>4</td>
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<tr>
<td>MATHEMATICS</td>
<td>MTE-1</td>
<td>Calculus</td>
<td>4</td>
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<tr>
<td></td>
<td>MTE-2</td>
<td>Linear Algebra</td>
<td>4</td>
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<td>MTE-4</td>
<td>Elementary Algebra</td>
<td>2</td>
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<td></td>
<td>MTE-5</td>
<td>Analytical Geometry</td>
<td>2</td>
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<td>MTE-6</td>
<td>Abstract Algebra</td>
<td>4</td>
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<td>MTE-7</td>
<td>Advanced Calculus</td>
<td>4</td>
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<td></td>
<td>MTE-8</td>
<td>Differential Equations</td>
<td>4</td>
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<td></td>
<td>MTE-9</td>
<td>Real Analysis</td>
<td>4</td>
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<td>MTE-10</td>
<td>Numerical Analysis</td>
<td>4</td>
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<td>MTE-11</td>
<td>Probability and Statistics</td>
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<td>MTE-12</td>
<td>Linear Programming</td>
<td>4</td>
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<td>MTE-13</td>
<td>Discrete Mathematics</td>
<td>4</td>
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<td></td>
<td>MTE-14</td>
<td>Mathematical Modeling</td>
<td>4</td>
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<tr>
<td>PHYSICS</td>
<td>PHE-1</td>
<td>Elementary Mechanics</td>
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<td>Course Code</td>
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<td>Credits</td>
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<tr>
<td>PHE-2</td>
<td>Oscillations and Waves</td>
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<tr>
<td>BPHL-103</td>
<td>Physics Laboratory-I</td>
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<tr>
<td>PHE-4</td>
<td>Mathematical Methods in Physics-I</td>
<td>2</td>
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<tr>
<td>PHE-5</td>
<td>Mathematical Methods in Physics-II</td>
<td>2</td>
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<tr>
<td>PHE-6</td>
<td>Thermodynamics and Statistical Mechanics</td>
<td>4</td>
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<tr>
<td>PHE-7</td>
<td>Electric and Magnetic Phenomena</td>
<td>4</td>
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<tr>
<td>PHE-8(L)</td>
<td>Physics Laboratory-II</td>
<td>4</td>
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<tr>
<td>PHE-9</td>
<td>Optics</td>
<td>4</td>
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<tr>
<td>PHE-10</td>
<td>Electrical Circuits and Electronics</td>
<td>4</td>
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<tr>
<td>PHE-11</td>
<td>Modern Physics</td>
<td>4</td>
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<tr>
<td>PHE-12(L)</td>
<td>Physics Laboratory-III</td>
<td>4</td>
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<tr>
<td>PHE-13</td>
<td>Physics of Solids</td>
<td>4</td>
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<tr>
<td>PHE-14</td>
<td>Mathematical Methods in Physics-III</td>
<td>4</td>
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<tr>
<td>PHE-15</td>
<td>Astronomy and Astrophysics</td>
<td>4</td>
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<tr>
<td>PHE-16</td>
<td>Communication Physics</td>
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**CHEMISTRY**

<table>
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<tbody>
<tr>
<td>CHE-1</td>
<td>Atoms and Molecules</td>
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<tr>
<td>CHE-3(L)</td>
<td>Chemistry Laboratory-I</td>
<td>2</td>
</tr>
<tr>
<td>CHE-2</td>
<td>Inorganic Chemistry</td>
<td>4</td>
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<tr>
<td>CHE-4</td>
<td>Physical Chemistry</td>
<td>4</td>
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<tr>
<td>CHE-5</td>
<td>Organic Chemistry</td>
<td>4</td>
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<tr>
<td>CHE-6</td>
<td>Organic Reaction Mechanism</td>
<td>4</td>
</tr>
<tr>
<td>CHE-7(L)</td>
<td>Chemistry Laboratory-II</td>
<td>2</td>
</tr>
<tr>
<td>CHE-8(L)</td>
<td>Chemistry Laboratory-III</td>
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<tr>
<td>CHE-9</td>
<td>Biochemistry</td>
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<tr>
<td>CHE-10</td>
<td>Spectroscopy</td>
<td>4</td>
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<tr>
<td>CHE-11(L)</td>
<td>Chemistry Laboratory-IV</td>
<td>4</td>
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<tr>
<td>CHE-12(L)</td>
<td>Chemistry Laboratory-V</td>
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<tr>
<td>MTE-3</td>
<td>Mathematical Methods</td>
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**LIFE SCIENCES**

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<tr>
<td>LSE-1</td>
<td>Cell Biology</td>
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<tr>
<td>LSE-2</td>
<td>Ecology</td>
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<tr>
<td>LSE-3</td>
<td>Genetics</td>
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<tr>
<td>LSE-4(L)</td>
<td>Laboratory Course-I</td>
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<tr>
<td>LSE-5</td>
<td>Physiology</td>
<td>4</td>
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<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Credits</td>
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<tr>
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<tr>
<td>LSE-6</td>
<td>Developmental Biology</td>
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<tr>
<td>LSE-7</td>
<td>Taxonomy and Evolution</td>
<td>4</td>
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<tr>
<td>LSE-8(L)</td>
<td>Laboratory Course-II</td>
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<tr>
<td>LSE-9</td>
<td>Animal Diversity-I</td>
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<tr>
<td>LSE-10</td>
<td>Animal Diversity-II</td>
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<tr>
<td>LSE-11(L)</td>
<td>Animal Diversity Laboratory</td>
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</tr>
<tr>
<td>LSE-12</td>
<td>Plant Diversity-I</td>
<td>6</td>
</tr>
<tr>
<td>LSE-13</td>
<td>Plant Diversity-II</td>
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<tr>
<td>LSE-14(L)</td>
<td>Plant Diversity Laboratory</td>
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</tbody>
</table>

**Note:** MTE-1 is a pre-requisite for MTE-7 to MTE-10.
MTE-7 is a pre-requisite for MTE-11.
MTE-7 is a co-requisite for MTE-8.
MTE-8 is a pre-requisite for MTE-14.
CHE-1 is a pre-requisite for CHE-04, CHE-5, CHE-10, AEC-01.
CHE-3(L) is a pre-requisite for AEC-01
CHE-2 is a pre-requisite for CHE-10 and AEC-01.
CHE-5 is a pre-requisite for CHE-6, CHE-9, and CHE-10.
MTE-3 credits will not be given to any student who opts for any mathematics electives.
LSE-1 is a pre-requisite for LSE-3, LSE-5 & LSE-6.
PHE-6 is a pre-requisite and PHE-11 is a co-requisite for PHE-13.
PHE-4 and PHE-5 are pre-requisite for PHE-11 and PHE-14.
PHE-07 is a pre-requisite and PHE-10 is a co-requisite for PHE-16.

Mathematics elective courses should not be opted by students coming to B.A./B.Com through BPP. It is strongly recommended that only those students who have studied Mathematics as a subject in 10+2 should opt for the Mathematics electives.
Co-requisite and pre-requisite courses refer to the courses which the learners are strongly advised to register for and complete, so that the related courses could be followed easily. Otherwise, it is not a compulsory directive.

**Application-Oriented Courses**

The third component of the B.A. programme is Application Oriented Courses. These courses are developed to equip you in some areas of your choice, which requires applications of skills. You must select at least 8 credits worth of courses from this group. You are allowed to select a maximum of 16 credits from this group. If you have opted a total of 64 credits in elective courses, you should take only 8 credits under Application Oriented Courses. Alternatively, if you have taken only 56 credits in elective courses, you are allowed to take 16 credits in Application Oriented Courses. The detailed list of the Application Oriented Courses currently available is given below.
List of application Oriented Courses - Common to all B.A. / B.Com. / B.Sc.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AFW(E)-1</td>
<td>Feature Writing (English)</td>
<td>4</td>
</tr>
<tr>
<td>BHDA-101</td>
<td>Sama char patra or Fiture lekhan (Hindi)</td>
<td>4</td>
</tr>
<tr>
<td>AWR(E)-1</td>
<td>Writing for Radio (English)</td>
<td>4</td>
</tr>
<tr>
<td>BRPA-101</td>
<td>Radio Lekhan (Hindi)</td>
<td>4</td>
</tr>
<tr>
<td>ATR-1</td>
<td>Translation (English + 4Hindi 4 Credits)</td>
<td>8</td>
</tr>
<tr>
<td>ACC-1</td>
<td>Organizing Child Care Services</td>
<td>8</td>
</tr>
<tr>
<td>ANC-1</td>
<td>Nutrition for the Community</td>
<td>8</td>
</tr>
<tr>
<td>*AHE-1</td>
<td>Human Environment</td>
<td>8</td>
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<tr>
<td>AMK-1</td>
<td>Marketing</td>
<td>4</td>
</tr>
<tr>
<td>AED-1</td>
<td>Export Procedure and Documentation</td>
<td>4</td>
</tr>
<tr>
<td>AOM-1</td>
<td>Office Organization and Management</td>
<td>4</td>
</tr>
<tr>
<td>ASP-1</td>
<td>Secretarial Practice</td>
<td>4</td>
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<tr>
<td>BCOA-001</td>
<td>Business Communication and Entrepreneurship</td>
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</tr>
<tr>
<td>*AMT-1</td>
<td>Teaching of Primary School Mathematics</td>
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<tr>
<td>ACS-1</td>
<td>Consumer Studies</td>
<td>8</td>
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<tr>
<td>CTE-3</td>
<td>Teaching Strategies</td>
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<td>CTE-4</td>
<td>Teaching English-Elementary School</td>
<td>4</td>
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<td>CTE-5</td>
<td>Teaching English-Secondary School</td>
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<tr>
<td>AST-01*</td>
<td>Statistical Techniques</td>
<td>4</td>
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<tr>
<td>AOR-01*</td>
<td>Operational Research</td>
<td>4</td>
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<tr>
<td>AEC-1+</td>
<td>Environmental Chemistry</td>
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<tr>
<td>*APM-1++</td>
<td>Integrated Pest Management</td>
<td>8</td>
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<tr>
<td>BCOA-001</td>
<td>Business Communication and Entrepreneurship (English Medium only)</td>
<td></td>
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</tbody>
</table>

The course has a theory component of 6 credits and a lab work for 2 credits.

* +2 level of mathematics is a pre-requisite.
+ CHE-01, CHE-02 and CHE-03(L) are the pre-requisite for this course.

The course has a theory component of 6 credits and a lab work for 2 credits
+ +2 level of biology is a pre-requisite.
* All these courses have a theory component of 6 credits and a project for 2 credits. The project is to be submitted in SED at IGNOU, Maidan Garhi, New Delhi-110068.

Students are free to choose any Application Oriented Course from the list given above. Subject to fulfillment of pre-requisites. However, they have to opt at least two 4 credit courses to make it 8 credit.