

Curriculum for Four Years (8 Semester) B.El.Ed. Programme

2020-21 Academic Year and Onwards

Department of Teacher Education

Nehru Gram Bharati Deemed To Be University Prayagraj,UP

Preface

Education reforms invariably accord highest priority to improve teacher effectiveness. It requires consistent upgradation of teacher-education programmes. Over the last two decades in India, the issue of curriculum renewal and extended duration of Primary stage teacher education has received serious attention.

The student-teacher has to critically examine the conditions of the school, reflect and have the potential to perform the desired role even in conditions of scarcity and deficiency of various kinds which a large number of schools face in our country. A student-teacher has not only to reorganize his/her understanding of the subject specialization learnt previously, but also has to be well-equipped with the essentials of pedagogy, competencies and skills required to create a conducive learning environment in schools for each and every learner. Accordingly, the four-year integrated B.El.Ed. Course aims at a complete development of the student-teacher; particularly in knowledge and skills, in individual care of the learner and also in methods and evaluation designed to facilitate learning. It aims at developing understanding of and competence to render disciplinary knowledge into forms relevant to stage specific understanding of teachinglearning situation apprehended through intensive study of conceptual explanations, observation and analysis of live classroom situations as well as hand-on experiences and longer duration of field experience. Interactive processes, i.e. group reflection, critical thinking and meaningmaking have been encouraged. The maturity of student-teachers has been kept in mind while visualizing modes of learning engagements; instead of continuous teacher monitoring, greater autonomy to learners has been given in accordance with andragogic principles of learning. The syllabus retains the essence of student-teachers being active participants in the learning process and prepares the student-teachers for facing the emerging challenges resulting out of globalization and its consequences. Four-year B.El.Ed. programme corresponding to the emerging vision in teacher education incorporating inputs as suggested in the NCTE Regulation 2014.

The **Bachelor of Elementary Education (B.El.Ed.)** programme is a four-year integrated professional degree programme of Elementary Teacher Education offered after the senior secondary (class XII) stage of school. The programme is an attempt towards fulfilling the need for professionally qualified elementary school teachers. B.El.Ed. is designed to integrate the study of subject knowledge, human development, and pedagogical knowledge and

communication skills. Both professional and academic options are available to the students who graduate with a B.El.Ed. Degree. It has also upgraded the professional status of the elementary school teacher by providing for a University degree for elementary education. At present, the programme is being offered in Nehru Gram Bharati Deemed to be University Prayagraj,UP

The B.El.Ed. Graduates

The B.El.Ed. programme aims to produce graduates trend Elementary Teachers of high calibre in the field of teacher education. A lot of effort is spent in the training of students and giving them a supportive and stimulating environment. The programme is at present being offered by Nehru Gram Bharati Deemed to be University Prayagraj. Given below are some of theprofessional and academic options available for the B.El.Ed. Graduates: Teaching in elementaryschools (Classes I to VIII) B.El.Ed. graduates are eligible for appointment in State Schools, Sarvodaya Vidyalayas, Kendriya Vidyalayas and Navodaya Vidyalayas and Private Schools across India. Leading the elementary school systems in various capacities. Teaching and research in elementary education in the government and non-government sectors. Post-graduate and research studies in education and related disciplines.

The specific objectives at this stage may be to:

- Enable the prospective teachers to understand the nature, purpose and philosophy of education.
- Develop among perspective teachers an understanding of psychology of their pupils.
- Enable to acquire, competencies relevant to stage specific pedagogy, curriculum development, its transaction and evaluation.
- Enable to foster creative thinking among pupils for reconstruction of knowledge.
- Acquaint them with factors and forces affecting educational system and classroom situation.
- Develop to communication skills and use of modern information technology for school purpose;
- Develop aesthetic sensibilities.
- Acquaint with research in education including action research.
- Develop awareness about role of education in building up a democratic, secular and socialistic pattern of society.

Programme of Study

The programme offers both compulsory and optional theory courses, compulsory practicum courses and a comprehensive school internship. The different areas of study are as follows:

1. Theory Courses

- Foundation Courses
- Pedagogy Courses
- Liberal Courses

• Specialized Courses in Education

2. Practicum Courses

- Performing and Fine Arts, Crafts and Physical Education
- School Contact Programme
- Observing Children
- Self-Development Workshops
- Classroom Management and Material Development
- School Internship
- Projects
- Tutorial/Colloquia
- Academic Enrichment Activities

Framework of Assessment and Granting of the Degree

- At the end of each academic year, Annual Examination will be conducted all the theory courses taught during that particular year.
- 20% weightage is given to internal assessment in the theory courses.
- Practicum courses are based on internal & external assessment.
- Students have the option to write the examination in Hindi or in English.
- Sessional Evaluation will be done by departmental committee under the supervision of Head of department.
- Question paper will consist of 6 questions with internal choice and 1st question is Compulsory. The compulsory question will contain 5 sub questions from each unit of the course.
- The minimum marks required to pass the examination is 45% in each theory papers with internal assessment, 50% in each practicum courses and 50% in the overall aggregate for each year.
- Examination system will be followed by NGB Vishwavidyalaya, Allahabad rules.
- Division will be awarded on the basis of total marks obtained by the students in both theory and practicalas below-
- The B.El.Ed. Degree will be awarded only if the candidate has passed the examination in each of the semester.

Conduct of Examinations :

- The examination for B.El.Ed shall be held two times every year (semester wise) on such dates as may be fixed by the University.
- (ii) A candidate shall be eligible to appear in the examination who has pursued the prescribed course of studies and has completed required attendance and all the activities related to practical/teaching/field engagement etc. as prescribed for each year.
- (iii) The examination at the end of the course shall be both in theory and practical/teaching skill/Field engagement. A candidate shall be required to pass theory and practical/ teaching skill/field work examinations separately.
- (iv) To pass in theory, a candidate must obtain 30% marks in each theory paper and 36% in the aggregate of theory papers. In practical/ teaching skill/field engagement pass percentage shall be 40%.
- (v) There shall be separate divisions in theory and practical/ teaching skill/field engagement. However, no division shall be awarded in the first/second /third year. Only Pass/Fail shall be given in these years. Divisions shall be awarded on the basis of examination of all four years.
- (vi) Classification of results (Theory as well as Practicals/ teaching skill/Field engagement) –

60% and above			F	first Division
48% and above but b	elow 60%			Second Division
36% and above but b	elow 48%		5	Third Division (For Theory
40% and above but b	elow 48%	()	Third	Division (For Practical/
			teachi	ing skill/Field Engagement)

- (vii) A candidate shall be promoted to next semester only when he/she has passed the examination of previous semester
- (viii) In each academic semester, the candidate can appear in improvement/back exam. in one paper only.
- ix) A student of B. El. Ed. course, who has completed all the desired Activities/internal tests/attendance etc. throughout the year but could not appear in the examination or appeared in the examination but failed in more than one papers, may be allowed to appear in the examination of next year as an ex-student. The internal marks received in previous academic session shall be carried over.
- (x) Mark sheet and Degrees shall be awarded as Bachelor of Elementary Education.
- (xi) In case of any obscurity, the general provision of the faculty of education and allied Sciences / university shall prevail.

FIRST SEMESTER

C N.	•	Come Code		Marks			
S.No.	Area	Course Code	Course Title	Sessional	Terminal	Total	
01		BLF 1.1	Child Development	20	80	100	
02		BLF 1.2	Nature of Language	10	40	50	
03	Theory	BLF 1.3	Core Natural Sciences	10	40	50	
04		BLF 1.4	Core Social Sciences	10	40	50	
05	Practicum	BLPR 1.1	Performing and Fine Arts	25	25	50	
06	Fracticum	BLPR 1.2	Craft and Participatory Work	25	25	50	
	Total						

SECOND SEMESTER

C N.		Course Code	Comment Title	Marks		
S.No.	Area		Course Title	Sessional	Terminal	Total
01	T1	BLF 2.1	Contemporary India	20	80	100
02	Theory	BLF 2.2	Core Mathematics	10	40	50
03	Practicum	BLPR 2.1	Colloquia, school contact programme/ Physical Education	25	25	50
Total						200

THIRD SEMESTER

C N					Marks	
S.No.	Area	Course Code	Course Title	Sessional	Terminal	Total
01	Theory	BLF 3.1	Cognition and Learning	20	80	100
02	_	BLF 3.2	Language Across the Curriculum	10	40	50
		BLO 3.1	English I			
		BLO 3.2	Hindi I			
		BLO 3.3	Sanskrit I		80	100
		BLO 3.4	Mathematics I	20		
	Liberal	BLO 3.5	Physics I			
03	Course	BLO 3.6	Chemistry I			
	(Optional-I)	BLO 3.7	Biology I			
		BLO 3.8	History I			
		BLO 3.9	Political Science I			
		BLO 3.10	Geography I			
		BLO 3.11	Economics I			
04	Ducation	BLPR 3.1	Observing Children	25	25	50
05	rracticum	Practicum BLPR 3.2	Self-development Workshops	25	25	50
Total						350

FOURTH SEMESTER

C N.			Comment Title	Marks		
S.No.	Area	Course Code	Course Title	Sessional	Terminal	Total
01	There	BLF 4.1	Language Acquisition	10	40	50
02	Theory	BLF 4.2	Human Relation & Communication	10	40	50
03	Ducation	BLPR 4.1	Physical Education	25	25	50
04	- Practicum	BLPR 4.2	Colloquia & Enrichment	25	25	50
Total						200

FIFTH SEMESTER

C N					Marks	
S.No.	Area	Course Code	Course Title	Sessional	Terminal	Total
01	Theory	BLF 5.1	Basic Concepts in Education	20	80	100
02		BLF 5.2	School Planning & Management	10	40	50
		BLO 5.1	English II			
		BLO 5.2	Hindi II	20	80	
		BLO 5.3	Mathematics II			100
		BLO 5.4	Physics II			
03	Liberal	BLO 5.5	Chemistry II			
03	Course (Optional-II)	BLO 5.6	Biology II			
	(Optional-II)	BLO 5.7	History II			
		BLO 5.8	Political Science II			
		BLO 5.9	Geography II			
		BLO 5.10	Economics II	1		
05	Practicum	BLPR 5.1	Classroom Teaching (4 Weeks)	50	50	100
Total						350

SIXTH SEMESTER

C No		Comme Code	Correct Title	Marks		
S.No.	Area	Course Code	Course Title	Sessional	Terminal	Total
01		BLF 6.1	Logico-Mathematics Education	10	40	50
02	Theory	BLF 6.2	Pedagogy of Environmental Studies	10	40	50
03	Practicum	BLPR 6.1	Material Development and Evaluation	25	25	50
04		BLPR 6.2	Colloquia & Enrichment and Health Education	25	25	50
	Total					

SEVENTH SEMESTER

C N-			Comment Title		Marks		
S.No.	Area	Course Code	Course Title	Sessional	Terminal	Total	
01	Theory	BLF 7.1	Gender & Schooling	10	40	50	
02	Practicum	BLPR 7.1	Innovative teaching Aids	25	25	50	
03	Tracticum	BLPR 7.2	School Internship (16 weeks)	125	125	250	
	Total						

EIGHTH SEMESTER

C N.	•	C. C. I			Marks	
S.No.	Area	Course Code	S	Sessional	Terminal	Total
01	Theory	BLF 8.1	Curriculum Studies	10	40	50
		Option A*	Pedagogy (one of the following)			
		BLOA 8.1	Language]		
	Ontional	BLOA 8.2	Mathematics		40	
	Optional Course	BLOA 8.3	Natural Science	10		
02	12	BLOA 8.4	Social Science			50
	(Select any one group)	Option B*	Option B*Pedagogy (one of the following)			
	one group)	BLOB 8.1	Computer Education &			
		BLOB 8.1	understanding ICT			
		BLOB 8.2	Special Education			
03	Drastiaum	BLPR 8.1	Project Work	25	25	50
04	Practicum B	BLPR 8.2	Physical Education & Its Lesson Plan	25	25	50
			Total			200

Course Code: BLF 1.1 CHILD DEVELOPMENT

Course Objectives:

The course will enable student-teachers to-

- understand the concept of Human Development.
- understand the influences of heredity and environment on Human Development.
- develop an understanding about the impact of socio-cultural context in shaping human development, especially with respect to the Indian context;
- acquire theoretical perspectives and develop an understanding of dimensions and stages of human development and developmental tasks;
- understand a range of cognitive capacities and affective processes in human learners;
- become aware of different contexts of learning and situate schools as a special environment for learning;
- understand the Children with special Needs.
- Gain an understanding of different theoretical perspectives on learning with a focus on cognitive views of learning as well as social–constructivist theories;
- Explore the possibilities of an understanding of processes in human cognition and meaning-making them as basis for designing learning environments and experiences at school

UNIT- I

Concept, Issues and theories of Human Development - Concept of Human Development and reason to study it, Developmental Principles, influences of heredity and environment, developmental periods in the human life span, methods for studying Human Development, concept of socialization, education and actualization in the concept of developmental theories of Ericson, Piaget and Kohlberg,

UNIT - II

Pre-Natal Development- Importance of conception, physical and mental development of infants, emotions in infancy, the infant in the family and implications for personality development.

UNIT - III

The Pre-school Child-Physical growth and motor development, Intellectual characteristics, development of personality with special reference to identification and child rearing techniques, gender-stereotyping, morality, play pattern of pre-school children.

UNIT-IV

The School Child- Physical growth and development, the developing mind - Intelligence, language and thought, the social world of the child, parents and children, friends, school and media, play, moral attitudes and behavior, development of self – identity, self-concept, gender, role play, interest and activities of the elementary school child.

UNIT -V

Children with special Needs -Concept of special children- talented, creative, gifted children, slow learners and under achievers, emotionally disturbed children, culturally and socially disadvantaged children. Meaning, Characteristics and principles of mental health.

Practicum

Assignment/Project	5 Marks
Seminar Presentation/GD	5 Marks
Sessonal Test	10 Marks
Total	20 Marks

Books Recommended :

- गुप्ता, एस०पी० एवं गुप्ता, अलका (२००८) ''उच्चतर शिक्षा मनोविज्ञान'' शारदा पुस्तक भवन, इलाहाबाद।
- गुप्ता, एस०पी० एवं गुप्ता, अलका (२०१६) ''बचपन और विकास '' शारदा पुस्तक भवन, इलाहाबाद।
- सारस्वत, मालती (2007) ''शिक्षा मनोविज्ञान की रूपरेखा'' आलोक प्रकाशन लखनऊ।
- मंगल, एस०के० (२००८) ''शिक्षा मनोविज्ञान'' प्रिन्टर्स हाल आव इण्डिया प्रा०लि० नई दिल्ली।
- भटनागर, सुरेश एवं सक्सेना, अनामिका (2008) ''शिक्षा मनोविज्ञान'' लायल बुक डिपो मेरठ।
- पाठक पी०डी० (२००९) ''शिक्षा मनोविज्ञान'' विनोद पुस्तक मंदिर, आगरा।
- Panda, K.C. (1997) "Education of Exceptional children" New Delhi : Vikas Publishing House.
- Cattell, R.B. (1957) "Personality & Motivation" New York, Harcourt.
- Davis, R.A. (1948) "Educational Psychology" New York : McGraw Hill Book Company.
- Piaget, J. (1960) "The Psychology of Intelligence", Paterson : N.J. Littlefield, Adams

Course Code: BLF 1.2 NATURE OF LANGUAGE

पाठ्यक्रम उद्देश्य –

- विद्यार्थियों को सैद्वान्तिक व्याकरण का ज्ञान प्रदान करते हुए, सिद्वान्तों के प्रयोग करने का अवसर प्रदान करना।
- विद्यार्थियों को भाषा के ध्वनि तत्व से परिचित कराना।
- विद्यार्थियों को भाषायी व्यवहार के विविध पक्षों से परिचित कराना।
- विद्यार्थियों को शब्दों के विभिन्न रूपों का ज्ञान प्रदान कराना।
- विद्यार्थियों को विविध भाषायी कौशलों से परिचित कराना।
- विद्यार्थियों में भाषा के प्रति सामान्य अनुराग उत्पन्न करना।

इकाई 1.

भाषायी व्यवहार के विविध पक्ष : शाब्दिक तथा अशाब्दिक सम्प्रेषण,मानव तथा मानवेतर संप्रेषण, मानव संप्रेषण पद्धति के निर्धारक लक्षण, भाषा तथा मन, भाषा और समाज, नियम—नियंत्रित व्यवहार के रुप में भाषा तथा भाषायी परिवर्तनशीलता।

इकाई 2.

पाठ्य—विषय तथा भाषायी व्यवस्थाएं : पाठ—प्रेषित संरचना का गठन, मौखिक तथा लिखित,कक्षा—प्रेषित का स्वरुप पाठ्य—सामग्री के प्रभावी शिक्षण में किसी कहानी, कविता, निबन्ध आदि की संरचना।

इकाई 3.

भारतीय भाषाएं : बहुभाषिकता, कक्षा के बहुभाषी संसाधनों का प्रयोग, त्रिभाषा सूत्र का कक्षागत प्रयोग।

भाषायी कौशल : अर्थ, महत्व एवं प्रकार, लेखन,पठन, श्रवण तथा वाक् कौशलों को विकसित करने के विभिन्न उपाय,राष्ट्रीय पाठ्यक्रम प्रारूप(2005) में भाषा ।

इकाई 4.

हिन्दी अवबोध : स्वन–संगठन, शब्द शक्तियां, वाक्य संरचना, सार्वभौमिक व्याकरण की संकल्पना, अर्थ की प्रकृति संरचना, स्वनिमविज्ञान, रुपविज्ञान, वाक्यविज्ञान तथा अर्थविज्ञान की मूलभूत संकल्पनाएं।

इकाई 5.

अंग्रेजी अवबोध : स्वन—संगठन, वाक्य सरचना, सार्वभौमिक व्याकरण की संकल्पना, अर्थ की प्रकृति संरचना, स्वनिमविज्ञान, रुपविज्ञान, वाक्यविज्ञान तथा अर्थविज्ञान की मूलभूत संकल्पनाएं।

Practicum

	Total	10 Marks
•	Sessonal Test	4 Marks
•	Seminar Presentation/GD	3 Marks
•	Assignment/Project	3 Marks

Books Recommended:

- Text Books of class VI to X of UP Board
- Text Books of class VI to X of CBSC Board

Course Code: BLF 1.3 Core Natural Science

Course Objectives:

After Completion of Course the Students will be able to-

- appreciate that science is a dynamic and expanding body of knowledge;
- appreciate the fact that every child possesses curiosity about his/her natural surroundings;
- o identify and relate everyday experiences with learning Natural science;
- o appreciate various approaches of teaching-learning of Natural science;
- o understand the process of science and role of laboratory in teaching learning situations;
- use effectively different activities/demonstrations/laboratory experiences for teachinglearning of Natural science;
- o integrate in physical science knowledge with other school subjects;
- analyse the contents of Natural science with respect to its branches, process skills, knowledge organisation and other critical issues;
- o develop process-oriented objectives based on the content themes/units;
- identify the concepts of Natural science that are alternatively conceptualised by teachers and students in general;

UNIT-I

Natural Science : Concept, Scope and Importance of, Science as a domain of enquiry, as a dynamic and expanding of knowledge; as a process of constructing knowledge, Developing scientific attitude and scientific temper, Nurture the natural curiosity, Classification, property, concept, relation, law.

UNIT-II

Properties and Measurement: Measurement of length, mass and time, density, pressure, work and energy, weight, falling of bodies, gravitation, heat and temperature, states of matter, properties of magnets, electricity, refraction, and dispersion.

UNIT-III

Physical and chemical changes: separation of mixture, atoms and molecules, metals and non-metals, oxide, acids, bases and salts, air and combustion, water, hard and soft.

UNIT-IV

Living and non-living thing: classification of living world, germination of seeds, life process e.g. respiration, digestion, reproduction, photosynthesis, transportation, phenomena, food chain, interdependence of plants and animals.

UNIT-V

Practical Natural Science and applications: importance and uses of laboratory work, library references, field survey group discussion, expert opinion in Natural Science, brain storming on natural phenomena, environmental and adoption, technology and health.

Practicum

Assignment/Project	3 Marks
Seminar Presentation/GD	3 Marks
Sessonal Test	4 Marks
Total	10 Marks

Books Recommended:

- Text Books of class VI to X of UP Board
- Text Books of class VI to X of NCERT
- <u>https://en.wikipedia.org/wiki/Outline_of_biology</u>
- Singh, Sardar(2012), General Science, Agra: Sahitya Publication.

Course Code: BLF 1.4 Core Social Science

Course Objectives:

After Completion of Course the Students will be able to-

- develop an understanding of the nature of Social Sciences,
- comprise Social Sciences, and also of Social Sciences as an integrated/interdisciplinary area of study;
- to acquire a conceptual understanding of the processes of teaching and learning Social Sciences;
- Understand the relationship between human experience and the growth of institution
- Understand the Relationship between human life, space and resources
- Understand the Relationship between human life and environment
- to enable student teachers examine the prevailing pedagogical practices in classrooms critically and to reflect on the desired changes;
- Understand the Study of the relationship and interaction of people in group
- to acquire basic knowledge and skills to analyse and transact the Social Sciences curriculum effectively following wide-ranging teaching learning strategies in order to make it enjoyable and relevant for life;

UNIT-I

Nature of Social Science: Data, method and evidence to be discussed in the context of history, Geography, civics, economics and sociology. Role of social science discipline in the learner's development. Significance of perspective and context in the study of social sciences.

UNIT-II

Relationship between human experience and the growth of institution: Special reference to monarchy, aristocracy, imperialism, fascism, nationalism, democracy, and citizenship.

UNIT-III

Relationship between human life, space and resources: Special reference to movement from a subsistent economy to a surplus economy, demography and the distribution of wealth in society, spatial interaction in Indian society.

UNIT-IV

Study of the relationship and interaction of people in group: human rights, human duty, culture and cultural lag, social stratification and social change.

UNIT-V

Relationship between human life and environment: Introduction of Solar system in the special context to earth, human environment, wild life and eco-system, population growth and its problems, major rivers and mountain series.

Practicum

Total	10 Marks
Sessonal Test	4 Marks
Seminar Presentation/GD	3 Marks
Assignment/Project	3 Marks

Books Recommended:

- Text Books of class VI to X of UP Board
- Text Books of class VI to X of CBSC Board

BLPR 1.1 Performing and Fine Arts

Objectives

- To provide a theoretical background on the relation between education and society
- To initiate a process for independent, enjoyable and motivated learning by the learners themselves on the basis of their own experiences
- To help realize one's own potential for self-enhancement
- To help recognize the importance of group work and socialization
- To develop organizational skill, interpersonal relationship and discipline
- To draw linkage between various art forms
- To work on linkages between dramatics and school subjects
- To develop a repertoire of skills for use in teaching-learning situations
- To grow with an attitude and philosophy about life learning

Task

The student must be guided to acquaint with four thrust areas.

- 1. Related to developing students on personality and capacity.
- 2. Related to help develop the potentialities of school children to the point of driving home the fact that child is the creator of knowledge
- 3. Related to develop communication and interaction capabilities
- 4. Related to find linkages between various art forms and school subjects so as to develop a holistic view about learning.

The practicum can fulfill the objectives only when a series of workshops are organized in continuity and under professional guidance, over the academic year. Suggested activities are given below.

- 1. **Performing Arts related Task-** Theatrical background, Drama as playful transformation, Enhancement of 'self', Creating space, Taking the floor, Communication, Verbal Communication, Non-Verbal Communication, Improvisation, Problem solving, Relaxation, Linkage activities, Drama and school objects, Listening/viewing and exploring Regional Art forms of music, dance, theatre and puppetry
- 2. **Fine Arts related Task-** Experimentation with different materials of Visual Art, such as pastel, poster, pen and ink, rangoli materials, clay, etc. Drawing, painting of different kinds with water colours, oil paste, batik, tye and dye, fabric colours, block printing, etc.

Record keeping.

Each student will be expected to maintain a reflective report which includes:

- a detailed record of the sessions
- reflective analysis of the activities
- insights gained

• linkages with school subjects, with examples

Time frame

The student will be required to attend a minimum of 22 workshops, out of a total of 26. Every Workshop will be of 3 hours duration.

Supervisory support

Workshops must be conducted and supervised by a professional (trained in drama, theatre,) and must be co-ordinate by faculty members. There are following facts included in supervision and helps provided by supervisors:

- Plan and conducting of activities
- Maintaining a diary of comments on each session and each students
- Initiating discussion and build up an environment for critical and reflective shared

Assessment

There will be an ongoing internal assessment of each student by the concerned professional and faculty member, using the following basis and criteria.

Basis and Criteria	Marks
1. Activities assessment based on Regularity, Participation, interest, Self-	5
discipline, Interpersonal adjustments, Organizational skill and Confidence	
2. Performance assessment based on Attitude towards work, Initiative taking,	10
Originality and resourcefulness, Skills acquired, Flexibility and adoptability,	
Problem solving and Creativity	
3. Reflection assessment based Description of sessions, Analysis of activities,	10
Linking dramatics to pedagogy with examples, Reflections and critical	
assessment of dramatics in education, Overall presentation, including the	
arrangement and look the journal, as a record for future reference.	
Total	25

Note:

No separate guideline has been provided first and third year students. However, for the third year students the theoretical aspects, linkage with art forms & curricular subjects and all – round communication skills would be of major importance.

BLPR 1.2 Craft and Participatory Work

Objectives

To learn to-

- Recognize and actualize one's own potential for creativity
- Develop a repertoire of skill in craft
- Use craft skill in education in order to stimulate creative expression, imagination and generate confidence among children
- Enable children to express their emotions
- Provide ways for promoting decision-making in children
- Enable children to plan, collect and perform activities on their own using various creative media

Workshops

Craft activities are to be conducted in the form of workshops for groups of 12-16 students, under the supervision and guidance of professionals. Workshops will include individual and group work. The focus of these workshops should not only be to develop skills of craft but also skills for the use of craft in education.

Some of the suggested media that need to be used for developing craft skills in students;

Paperwork

Origami, paper cutting, collage making, collage, clay modelling, paper cutting and folding, etc.

Modeling

Model making, mask making using clay, plaster of Paris or any other medium

Waste material

Making different forms of animal and human figures using natural materials such as flowers, twigs, leaves, making objects or puppets out of waste material such as ice-cream sticks, empty match boxes, wool, cotton, socks, thread, sticks etc.

Puppet making

Using paper, cloth and other materials to make puppets

Paper Mache

Making various objects and masks using the skill and the technique of paper Mache.

Self- Development Workshops

The self-development workshops have been conceptualized to facilitate the studentteacher's process of personal development. The workshops aim to cover broad areas of awareness of: one's own strengths and limitations, developing sensitivity, open mindedness, and positive attitudes. It further seeks to develop the ability to communicate and relate with children and adults and developing one's own personal aim and vision as a teacher and as a person.

Record keeping

Each student will keep regular written records of the workshop sessions. This would include-

- detailed description of the activities undertaken
- use of the learnt skill in pedagogy by giving specific examples
- Students reflection and critical assessment of the use of the craft skill in education

Time frame

Each student will be required to attend a minimum of 25 craft workshops in a year. Craft workshop could be conducted either twice a week over half the academic year or once of week over the entire academic year.

Space

Craft workshops require enough floor space for individual and group work. The allotted room mast also have storage and appropriate display space.

Supervisory support and professional guidance

Students will participate in craft workshops under the supervision and guidance of professional crafts person. In addition, a faculty member will coordinate the craft workshops with the professional resource person(s).-

The professional trainer will:

- facilitate the process of learning, covering various media
- help students to draw linkage between specific activities and the teaching-learning process

Assessment

Each student will be assessed by the concerned professional on the following basis and criteria :

Basis and Criteria	Marks
1. Various media and Craft assessment based on Selection, skill development	5
and originality	
2. Individual reports assessment based on description of the activity, visual	10
layout and sample items, specific pedagogic examples, reflection and critical	
assessment of crafts skills in education	
3. Performance assessment based on Regularity, participation, interest,	10
creativity, cooperation with group members, initiative taking and repertoire of	
skill	

Total

25

Course Code: BLF 2.1

Contemporary India

Aims of the Course

The course will enable student-teachers to-

- gain a critical understanding of issues in historical Foundation of Indian Education
- understand the key concepts, such as Education Commissions and Committees, Policy on Education
- be exposed to different Problems in primary education
- become the use of a Educational provision in Indian constitution
- engage with learners' minds in order to further dimensions of education
- promote development in cognitive, social and emotional aspects.

UNIT-I

India as 'society' 'civilization' nation-state', Historical perspective- Ancient, medieval & British period, India's freedom struggle, Post independent India.

UNIT-II

The constitution: its framework and scope; major social policies enshrined in the constitution, provision related to childhood and education, concurrent status of education, national policies on education, Constitutional value and Directive Principles of Constitution.

UNIT-III

Economic Issues: poverty and inequality; employment; private and public sector; new economic policy. Other major issues in contemporary India¹.

UNIT-IV

Political Issues: main features of the democratic system; central, state- level and local systems of government. Reservation as egalitarian policy.

UNIT-V

Social and cultural Issues: Major characteristics of India's pluralist make-up; gender-related issues; childhood in India; environment and development, family and child-rearing in India, social conflict.

Practicum

Assignment/Project	5 Marks
Seminar Presentation/GD	5 Marks
Sessonal Test	10 Marks
Total	20 Marks

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- Sahoo P.K. et al (eds) (2014), Quality Education in India Vol I &Vol II New Delhi Concept.

Course Code: BLF 2.2 Core Mathematics

Course Objectives:

After completion of course the students will be able to:

- develop insight into the meaning, nature, scope and objective of mathematics
- understand mathematics as a tool to engage the mind of every student;
- appreciate mathematics to strengthen the student's resource;
- appreciate the process of developing a concept;
- appreciate the role of mathematics in day-to-day life;
- channelize, evaluate, explain and reconstruct their thinking;
- know the importance of mathematics laboratory in learning mathematics;
- construct appropriate assessment tools for evaluating mathematics learning;
- develop ability to use the concepts for life skills;
- stimulate curiosity, creativity and inventiveness in mathematics;
- develop competencies for teaching-learning mathematics through various measures
- focus on understanding the nature of children's mathematical thinking through direct

UNIT-I

Number and Measurement: Nature of Mathematics assumptions, role of mathematics in daily life, counting and place value, arithmetic's operations, approximations, estimation, fraction and decimals, concept and measurement of length, mass/weight, area, volume and time, Set theory.

UNIT-II

Space and shape: symmetry and pattern-properties of two three dimensional objects e.g. Symmetries, projection, perspectives, tessellation, closest packing etc. height and distance.

UNIT-III

Algebra: number pattern, forming and solving simple linear equations and other mathematical investigations and puzzles, Basic Trigonometry.

UNIT-IV

Geometrical constructions: Basic geometry, Perimeter, Area of shapes, point, Line, Angle, Triangle, Rectangle & circle. Menstruation.

UNIT-V

Practical arithmetic and handling data: collecting, representing and interpreting data, Elementary statistical techniques- Mean, Median, Mode & S.D., Graphical presentation of Data, Percentage, Ratio and Proportion.

Practicum

Assignment/Project	3 Marks
Seminar Presentation/GD	3 Marks
Sessional Test Total	4 Marks 10 Marks

Books Recommended:

- Text Books of class IX to XII of UP Board
- Text Books of class IX to XII of CBSC Board

BLPR 2.1

Colloquia, School contact programme & Enrichment

Objectives

To learn to-

- relate and communicate with children
- place emphasis on craft, theatre, music for organizing creative activities and also to plan, design and organize creative activities with children using skills of craft, theatre, music and so on.
- conduct meaningful group and individual activities with children.
- engage all children in activities and to ensure active participation and free expression.
- observe children and collate experiences of interacting with and relating to children .
- reflect upon experiences.

Tasks

Visits to Alternative schools

Students in the third year of the B.El.Ed. programme visit alternative and innovative schools. The visit to alternative schools as a practicum is aimed towards providing exposure to creative, innovative and alternative teaching practices within India.

Plan for the school contact

Planning in terms of theme or topic, method of introduction, content, and mode of presentation, duration and specific activities.

School contact

Interaction-with children using planned activities.

Post-contact

Review and discussion with group members and faculty supervisors. This would include observations of children, collation of experiences and reflection upon experiences.

Record keeping

Group reports will be informed by systematic written records of each student, reports will include:

- the plan
- description of the collation of experiences with children, children's involvement etc.
- critical assessment of the plan and the school contact in terms of :
 - choice and design of activities
 - organization
 - nature of interaction with children
 - observations of children
 - the difficulties faced and possible innovation.

Time frame

Each student should have a minimum of 6 contact session over the year.

- 2-3 hrs with faculty facilitation ♠ planning
- school contact 3-4 hrs per school contact
- 2-3 hrs with faculty supervisor post-contact discussion

Supervisory Support

Each group of 4-6 students will be supervised by a faculty member who will:

- facilitate the planning process
- observe the interaction of trainee teachers with children during the contact
- o give timely feedback and facilitate the process of analysis, interpretation, documentation and reflective learning

The colloquia

Each group will make a minimum of two presentations based on the collated experiences of all members, group presentations will be followed by questions, queries and comments from the rest of the class.

Reflective learning

It is expected that the trainees will learn to analyze critically their preparation choice of activities and materials, developments that take place in a classroom, their own and other classmates' interaction with children. They are also expected to reflect upon issues regarding children's learning, their expressions, creativity, issues of discipline and control and the influence of varying socio-cultural background of children on their learning.

Academic Enrichment

Seminars, workshops, discussions, talks and heritage walks inhabit an integral space in the B.El.Ed. programme. Heritage walk, for example, allows students to explore different sites which help them to enrich their own understanding of issues of socio-cultural, historical and ecological relevance.

Assessment

Each group will be assessed internally by the concerned supervisor on the following basis and criteria.

Basis and Criteria	
1. Planning skill assessment based on theme /topic, choice of activities, relevance	5
of materials and organization of time	
2. School contact assessment based on organization of material, communication,	5
engaging children, spontaneity and time management	

- 3. Post contact discussion assessment based on insights gained, analysis and 5 interpretation and reflective learning
- 4. Individual Report assessment based on clarity of thought, organization and 5 format, analysis and reflection and logical flow
- **5. Group presentations in Colloquia assessment** based on identification of key elements, clarity and organization of ideas, open mindedness to critique, ability to substantiate arguments, critical and reflective questioning, Cooperation and coordination among group member

Total

25

5

BLF 3.1

Cognition and Learning

Unit 1

The mind at work: Cognition and approaches to cognition; individual and cultural differences, elementary cognitive processes - sensation, perception and attention.

Unit 2

How children learn and remember: Basic processes, strategies, knowledge, met memory current issues.

Unit 3

The developing mind: Concepts and concept formation; developing concepts of time, space, number, relationship etc.

Unit 4

Child as a problem solver : Reasoning and judgment, choice Piagetian and Neo-Piagetian perspectives; nurturing creativity and developing problem solving skills.

Unit 5

Alternative conceptions of learning : Factors contributing to learning - personal and environmental. The child's personal and social world, cognition and emotion.

Practicum

	Total	20 Marks
•	Sessional Test	10 Marks
•	Seminar Presentation/GD	5 Marks
•	Assignment/Project	5 Marks

References

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- Wolfolk, A. Educational Psychology, Prentice Hall: Englewood Cliff, 1987.
- Woods, D. *How Children Think and Learn*, Basil Blackwell: Oxford, 1988. Chapter 3.

BLF 3.2

Language across the Curriculum

Unit 1:

Language and learning: Language as a means of construction of reality; language and experience; concept-formation.

Unit 2 :

Language at school: Distinction between language as a school-subject and language as a means of learning and communication; the concept of register and style; different school-subjects as registers.

Unit 3 :

Basic Language competencies required at school: Oracy, listening, reading and writing. Special study of reading: cognitive basis of reading, analysis of the tasks involved in reading, motivation to read, stages of learning to read, reading ability.

Unit 4:

The child's language and the school ; school language and home language; language as an aspect of teacher-child relationship; language environment of school; language of textbooks in different subjects.

Unit 5

Constitutional Provisions and Policies of Language Education: Position of Languages in Indian Constitution; Kothari Commission (1964-66); NPE-1986; POA-1992; National Curriculum Framework-2005 (language education). Three Language Formula.

3

Practicum

	Total	10 N
•	Sessional Test	4 Marks
•	Seminar Presentation/GD	3 Marks
•	Assignment/Project	3 Marks

10 Marks

References

- Anderson, Richard. et.al. (eds.). *Learning* to *Read* in *American Schools*, Lawrence Erblaum Associates: New Jersey, 1984.
- Agnihotri, *RK. et.al. Prashika: Eklayva's Innovative Experiment* in *Primary. Education*, Ratna Sagar: Delhi, 1994. (Also available in Hindi)
- Butler, Andrea and Jan Turnbill.(eds.) *Towards a Reading Writing Classroom*, I leinemann Portsmouth: New Hampshire, 1984, Chap. I, 2 & 3.
- Badheka, Gijubhai. Divaswapna, National Book Trust: New Delhi, 1990.
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- Rotulein, Liz. *The Literatu.re Connection*, Foresman and Company: New York,1991, Chap. I, 6,7, 12 and 13.

BLO 3.1 English

Unit-1

Teaching English as a Second Language

- The differences between teaching English as a first language, as a second language and as a foreign language.
- Common language errors which are likely to be encountered by the teachers.
- Implications of teaching language through literature.
- Teaching techniques and materials such as drama, audio-visual aids, puppetry etc.

Unit-2

- Francis Baconn Of Studies
- John Milton Paradise Lost (1-26 lines)
- Charls Lamb Dream Children: A Reverie

Unit-3

- Anne Frank The Diary of a young Girl
- William Golding Lord of the Flies

Unit-4

- Walt Whitman A Passage to India
- Jane Austen Pride and Prejudice

Unit-5

- Shakespeare: King Lear
- R.K Narayan The Guide

Practicum

- Assignment/Project 5 Marks
- Seminar Presentation/GD 5 Marks
- Sessional Test 10 Marks

Total

20 Marks

References

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- Kachru, Braj B. 'Non-Native Literatures in English as a Resource for Language Teaching', in Brumfit, C.J. and Carter, R.A. (ed.) Language and Literature Teaching.Oxford University Press : Oxford, 1986.

BLO 3.2

HINDI- I

इकाई 1 भाषा साहित्य

- भाषा की परिभाषा, भाषा एवं मानव जीवन
- भाषा का मौखिक और लिखित रूप
- हिंदी साहित्य का इतिहास
- क्षेत्रीय / प्रादेशिक बोली, समाज, शैली एवं जनसंचार माध्यम के स्तर पर भाषा के विविध रूप
- मानक भाषा की संकल्पना एवं मानक भाषा हिंदी का विकास ध्वनि शब्द भंडार शब्द शक्तियां व्याकरण, अर्थ, लिपि और वर्तनी के स्तर पर
- भाषाई अशुद्धि

इकाई 2 हिंदी व्याकरण

- संधि प्रकरण
- समास प्रकरण
- निबंध और पत्र लेखन
- मुहावरे और लोकोक्ति
- अपठित गद्यांश

इकाई 3 नाटक

- अंधेर नगरी भारतेंदु हरिश्चंद्र
- ध्रुवस्वामिनी जयशंकर प्रसाद

इकाई 4 गद्य साहित्य

- उसने कहा था चंद्रधर शर्मा गुलेरी
- बड़े भाई साहब मुंशीप्रेमचंद
- तीसरी कसम फणीश्वर नाथ रेणु
- एक और जिंदगी मोहन राकेश
- ब्रह्मराक्षस का शिष्य मुक्तिबोध
- गुलेल का खेल भीष्म साहनी

इकाई 5 हिंदी निबंध एवं अन्य प्रमुख गद्य विधाएं

- सदाचार का ताबीज (व्यंग्य) हरिशंकर परसाई
- लक्ष्मी का स्वागत (एकांकी) उपेंद्र नाथ अश्क
- मेरी तिब्बत यात्रा (यात्रा वृतांत) राहुल सांकृत्यायन
- भाई जगन्नाथ (संस्मरण) श्रीराम शर्मा
- घीसा (रेखाचित्र) महादेवी वर्मा

Practicum

- Assignment/Project 5 Marks
- Seminar Presentation/GD
- Sessional Test

Total

20 Marks

5 Marks

10 Marks

BLO 3.3

संस्कृत -1

इकाई 1

- लौकिक संस्कृत साहित्य का इतिहास
- महाकाव्य और खंडकाव्य
- गद्य काव्य नाटक जंतु कथा साहित्य, चंपू काव्य

इकाई 2

- अभिज्ञान शाकुंतलम् (चतुर्थ अंक) नाट्यशास्त्रीय टिप्पणी सहित
- निम्नलिखित छंद के लक्षण एवं उदाहरण अनुष्टुप, आर्या, इंद्रवज्रा, उपजाति, भुजंगप्रयात, वंशस्थ, वसंततिलका, मंदाक्रांता, द्रुतविलंबित, मालिनी, शिखरिणी, शार्दूलविक्रीडित, स्रग्धरा

इकाई 3

- अधोलिखित सूक्त ऋग्वेद. अग्निसूक्त, विष्णुसूक्त, इंद्रसूक्त, पुरुषसूक्त, हिरण्यगर्भसूक्त
- ईशावास्योपनिषद

इकाई 4

- मेघदूतम (पूर्व)
- शिवराज विजय (प्रथम निःस्वास)
- श्रीमद्भागवद्गीता (2 एवं 9 अध्याय)
- नीतिशतकम्
- शुकनासोपदेश

इकाई 5

- संज्ञा प्रकरण (लघु सिद्धांत कौमुदी)
- अच् संधि
- समास प्रकरण (लघु सिद्धांत कौमुदी)
- शब्द रूप एवं धातु रूप

Practicum

• Assignment/Project 5 Marks • Seminar Presentation/GD 5 Marks • Sessional Test 10 Marks Total

20 Marks

संदर्भ ग्रंथ -

- 🔹 लघु सिद्धांत कौमुदी धरानंद शास्त्री
- अभिज्ञानशाकुंतलम् सुबोध चंद्र पंत
- मनुस्मृति रामचंद्र वर्मा शास्त्री
- ◆ संस्कृत साहित्य का इतिहास बलदेव उपाध्याय
- शुकनासोपदेश राजेश्वर प्रसाद मिश्र
- शिवराज विजय श्रीनिवास शर्मा
- साहित्य दर्पण कमलादुबे
- ईशावास्योपनिषद कृष्ण दत्त मिश्र
- श्रीमद्भागवद्गीता शिवानंद श्रीमद्भागवद्गीता
- नीतिशतकम् तारिणीश झा
- ◆ मेघदूतम् तारिणीश झा

Mathematics I

Unit I Symbolic Logic and Set Theory

• Statements: negation, conjunction, disjunction; implication, converse and contra positive; necessary and sufficient conditions; types of proofs, mathematical induction and deduction, truth tables, switching circuits.

• Sets, operations on sets, distributive laws, De Morgan's laws—, power set, Cartesian Product.

• Relations: equivalence relations and equivalence classes, partitions of a set; partial order relations (in particular divisibility and set inclusion), chains and lattices.

• Mappings, injective, subjective and bijective mappings; inverse of a mapping, composite of mappings.

• Denumerable and non-denumerable sets, cardinality.

• Permutations and combinations.

Unit 2 : Elementary Algebra

- Various representations of complex numbers, Algebra of complex numbers; Des Mo'ivre's theorem and its applications.
- Theory of polynomial equations: relation between the roots and coefficients.
- Definitions and operations on matrices over Rand C, special types of matrices; determinant of square matrix, properties of determinants; adjoint and inverse of a square matrix, rank of a matrix.
- •Systems of linear equations; characteristic equation, characteristic roots, Cayley Hamilton theorem.

Unit 3 Vectors and Analytic Geometry

• Vectors, scalar and vector products; triple products, position vector and applications of

vectors to geometry, gradient, divergence ;and curl.

• Straight lines in two dimensions, pair of straight lines; circles and system of circles.

• Conics, parabola, ellipse and hyperbola in standard forms, elementary properties.

• Sketching of conics.

• Planes and straight lines in three dimensions-direction ratios and direction cosines, equations of

planes, straight lines and spheres-Cartesian and vector representations. Basic properties of spheres.

• Cones, reciprocal cones; right circular cones; cylinders and right circular cylinders.

Unit 4 Real Analysis

• Topological structure of R, neighborhoods, open and closed sets, limit points, bounded sets.

equences and their convergence, monotonic sequences; the number e. Infinite series of positive

terms, comparison and ratio tests for convergence of an infinite series.

• Limits, continuity and derivability of functions; mean value theorems and Taylors expansions: power series expansions of elementary functions. Indeterminate forms and L'Hopital rule.

Unit 5 Differential Calculus

• Successive differentiation and Leibnitz rule; partial derivatives and Euler's theorem on homogeneous functions.

• Monotone functions and inequalities, convexity and concavity of functions; maxima, minima with applications to menstruation, dynamics and economics.

• Tangents and normal's, curvature, asymptotes and singular points; curve sketching.

• Functions of two variables; partial derivatives; maxima and minima of two variables; Langrange's method for constrained optimization (Langrange's method of indeterminate multiplier).

Practicum

•	Assignment/Project	5 Marks	
•	Seminar Presentation/GD	5 Marks	
•	Sessional Test	10 Marks	

Total20 Marks

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- Ballabh, Ram. A Textbook of Coordinate Geometry, Prakashan Kendra : Delhi,13th Edition.
- Narayan, Shanti. Differential Calculus, S. Chand and Co.: New Delhi,13th Edition.
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 Edition.

Physics I

Unit 1 Mechanics

• Scalars & vectors, addition of vectors. Newton's laws of motion, forces and pseudo-forces, work-energy theorem, conservative forces, conservation of energy, conservation of linear momentum, centre of mass, particle collisions (in 2 dimensions).

• Rotational motion, torque and angular momentum. Conservation of angular

momentum. Law of gravitation, inertial and gravitational masses, motion of planets and satellites. Kepler's laws.

Unit 2 Heat

•Defination of heat, nature and effect of heat, thermometer ,liquid thermometer,gas thermometer, scales of temperature, measurement, celcius, Fahrenheit, absolute zero.

Unit 3 Wave Optics

- Travelling and standing waves, superposition of waves, phase and group velocity. Coherent sources and interference, Young's double slit experiment, interference in thin films.
- Description of diffraction by a single slit, double slit and diffraction grating. Polarised and unpolarised light, linear and circular polarisation; polarisation by reflection.

Unit 4 Electricity, Magnetism and Electromagnetic theory

• Review of laws of electricity and magnetism - conservation of charge, Coulomb's/Gauss' Law, non-existence of magnetic monopoles, Ampere's law, Faraday's law.

• Displacement current, Electromagnetic waves. Nature of Light. Transmission lines

Optical fibres.

Unit 5 Thermodynamics and statistics Mechanics

• Laws of Thermodynamics. C lassical statistics: Maxwell-Boltzmann distribution.

•Quantum statistics: Fermi-Dirac and Bose - Einstein distributions and their properties.

Practical: At least two from each group

Group I: Optics

- I. Wavelength of sodium light by Newton's rings.
- 2. Use of spectrometer determination of μ of glass prism.
- 3. Diffraction grating determination of μ of sodium light.
- 4. Polarimeter specific rotation of cane sugar solution.

Group II: Electricity and Magnetism

- I. Study of LCR circuit.
- 2. Determination of resistance and its variation with temperature of Carey Foster's.bridge.
- 3. Determination of L by Anderson's bridge.
- 4. Determination of high resistance by leakage method.

Practicum:

Total	20 Marks
Sessional Test	10 Marks
Seminar Presentation/GD	5 Marks
 Assignment/Project 	5 Marks

References

• Gamow, George and John M. Cleveland. *Physics, Foundations and Frontiers*. Prentice Hall of India: New Delhi, 1978.

• Resnick, Robert and David Halliday. *Physics*. Wiley Eastern: New Delhi, 1992.

• Sears, Francis Weston and Zemansky, M. W. *College Physics,* Complete Edition

Reading,

• Addison - Wesley Publishing Co: Massachusetts, 1991.

Chemistry I

Unit I : Inorganic

- Atomic Structure: Pauli's exclusion principle, Hund's rule of maximum multiplicity, Aufbau principle and its limitations; energy level diagrams.
- Periodic table: modern periodic table, periodicity in properties of elements, atomic, ionic and covalent radii, ionization energy, electron affinity, electro negativity, metallic and non-metallic character.

• Chemical bonds and molecules: shapes of simple molecules, bond energy, bond length, types of boriding, lattice energy, Born-Haber cycle, Fajan's rule, dipole moment, metallic bond, hydrogen bond, resonance and hybridization.

Unit 2 : Organic

- Criteria of purity and purification of organic .compounds
- Melting point and boiling point.
- Crystallisation, sublimation, distillation (simple, steam, fractional, under reduced pressure).
- Chromatography paper and thin layer.
- Hybridization: Catenation, hybridization sp, sp2 and Spa,
- Nomenclature (IUPAC notation).
- Chemical bond, homolysis, heterolysis, free radicals, ionic species, carban ion, carbocation electrophile and nudeophile.
- Inductive, electromeric and mesomeric (resonance effect).
- Aromatic character Huckel's rule applied to the hydrocarbons (e.g.: benzene polynuclear and heterocyclic compounds).
- Structural Isomerism (chain, positional & functional)

- Isomerism (i) geometrical (cis and trans) (ii) optical (symmetric and asymmetric
- carbon atom), optical activity, recemic mixture and resolution.

Unit 3 Physical

• Gaseous State: characteristics of gases, ideal gases, gas laws, deviation from ideal behaviour, Vander Waal's equation (no derivation but explanation regarding a and b), critical phenomenon (**no** derivation) and liquefaction of gases.

• Liquids State: difference between gases and liquids on the basis of their molecular structure, vapour pressure of liquids, relationship between vapour pressure and boiling point, surface tension, viscosity, their experimental determination and applications.

Unit 4

• Chemical Kinetics and Chemical Equilibrium: rate of a reaction, law of mass action, effect of temperature, concentration and catalyst (qualitative treatment). What is chemical equilibrium, equilibrium law and factors influencing equilibrium states.

• Photochemistry: absorption of light, Lambert - Beer's Law, Laws of Photochemistry, phosphorescence and fluorescence.

Unit 5

• Ionic equilibria and conductance: Ostwald's Dilution Law, ionic product of water, pH value, theory of acid - base indicators, buffer solutions, buffer range and capacity, equivalent and molar conductance, Kohlrausch's law of independent migration of ions, variation of conductance with concentration for weak and strong electrolytes. Hydrolysis of salts (only qualitative treatment).

• Applications of conductance for determining solubility product of water etc.,conduct metric titrations.

Practical:

• **Project Work**: Each student shall prepare a project which is innovative and application oriented as approved by the teacher.

• Laboratory Work: Integrated experiments involving the following aspects such as laboratory techniques, qualitative and quantitative analysis; experiment involving simple compounds such as benzoic acid, copper sulphate and salicylic acid (any 2 of them).

Integrated Experiments

• **Benzoic Acid:** isolating benzoic acid by hydrolysis of sodium benzoate, purifying it by hot water, crystallization, testing its criteria of purity by melting point determination. Finally studying solubility curve and determining AH.

• Copper Sulphate:

i. preparation of cuprammonium sulphate, studying paper chromatography of both the initial and the final product.

ii. Verification of Lamgert-Beer's law using colorimetric study of various concentrations of Copper Sulphate.

• Salicyclic Acid: melting point determination; paper chromatography of both salicylic acid and aspirin respectively, complex formation with iron namely (Fe salicylate complex). Verification of Lambert - Beer's Law.

Physical Experiments

- Determination of surface tension of (i) Pure liquids (ii) Binary mixtures of liquids by Stalagmometer.
- Measurement of Viscosities of (i) Pure liquids (ii) Binary mixtures of liquids by Ostwald's viscometer.

• Measurement of pH by pH papers/ pH meter of buffer solutions (acidic & alkaline).

- Determination of velocity of constant of reaction between action and iodine catalyzed by HCl / H_2SO4

Practicum

- Assignment/Project 5 Marks
- Seminar Presentation/GD 5 Marks
- Sessional Test
 10 Marks

Total

20 Marks

References:

• Lee, J.D. A *New Concise Inorgamc Cnemistry*, English Language Book Society, Van No strand Reinhold International: London, Fifth Edition, 1996.

• Liptrot, G.F. *Modern Inorganic Chemisty*, ELBS, Bell & Harper Collins Educational: London,1983.

- Madan, R.D. and Satya Prakash. Modern Inorganic Chemistry,
- S. Chand and Co.: New Delhi, 1990.

• Mohan, Bruce H. *Inorganic Chemistry*, Narosa Publishing: New Delhi, 1990.

• Khosla, B.D., Garg, V.C. and Khosla, Adarsh Senior Practical Physcial Chemistry, R. Chand and Co. : New Delhi, 1982.

• Rastogi, R.P. and Misra R.r. and Intreoduction to Chemical Thermo dynamic, Vikas Publishing House : New Delhi, 1995.

• Samuel H. Maron and Carl F. Prutton, Principals of Physical Chemistry, Macmillan New York 1974.

Biology-I

Unit 1: Diversity of life (A)

- Five kingdoms of life: basis of classification: Monera, Protista, Fungi, Plantae, Andanimalae.
- Virus: structure ,reproduction and its relation to man
- Monera: structure, reproduction and its relation to man e.g. Bacteria And Cyanobacteria
- Protista: structure, reproduction and its relation to man, e.g. Clamydomonas, Paramecium
- Fungi: structure reproduction and its relation to man e.g.Aspergillus,Mushroom

Unit 2 : Diversity of life (B)

- Plantae: development and importance
- Structure and reproduction in Algae (e.g Sargassum),Bryophyta (e.g. Riccia & Moss) and

Pteridophyta (e.g. Pinus)

• Angiosperm : Structure and reproduction modification (stems roots and leaves)

Unit 3 : Origin of life :

- Cell, meaning, definition types and its importance
- Brief history, chemical evolution of first cell Heterotrophs and Autotrophs advent of oxygen
- Modem theory of evolution examples of natural selection e.g. colouration mimicry,

industrial melanism, insecticidal resistance, mineral tolerance, human

evolution,

species and modes of speciation.

Unit 4 : Physiology of human being

- Physiology of digestion
- Physiology of circulation
- Physiology of respiration
- Physiology of excretion
- Solution, osmetic pressure, diffusion, active and passive transport, pK and pH buffer

Unit 5 : Ecology and Forestry

- Ecology, ecosystem, with reference to grassland forest and pond energy flow
- Productivity and ecological pyramids, ecological niche
- Biological indicators, water cycle, climatic, biotic and abiotic pollution, air, water, noise, soil
- Forestry: definition, types in India, management and economic importance
- Affectation a agroforestry social forestry in India, scope and use.

Practical's

- Specimens study Paramecium, Ascaris, Pila, Sea, Urchin, Sargassum(agla)
- Study photographs (e.m) T- Phage, TMV (Tobacco Mosaic Virus) (e.m.) bacteria
- Temporary mounts
 - a. Sponge: gemmules and spicules
 - b. Cockroach: mouth parts, trachea
 - c. Earthworm: septal and pharyngeal nephridia
- Slides of bacteria from pond water and curd

• Structure and movement of Euglena from pond water and Chlamydomonas from rain water puddles.

• Mushroom: section cutting, study coloured photographs, grow Aspergillus and examine microscopically.

- Riccia and moss: study details
- Fern: section cutting (true and false indusium)
- Pinus: section cutting
- Any two families: Solanaceae, Graminae (Arecaceae)
- Study of any angiosperm, slides of T.S. anther and L.S. ovule.

Practicum

	То	20 Marks
•	Sessional Test	10 Marks
•	Seminar Presentation/GD	5 Marks
•	Assignment/Project	5 Marks

References

- Adhikari, S. and Sinha, AX *Fundamentals of Biology of Animals*, Vol.-3. New Central Book Agency Calcutta.
- Alexander, R. McNeill. *Animals,* Cambridge University Ptess: Cambridge. 1990.

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Viswanathan: II McNichols Road, Chetput, Madras, 1966.

• Cleveland, P. Hickman, *Integrated Principles of Zoology*,. The C.V. Mosby Co.: London 1970.

• Davis, B.D. Microbiology, Harper and Row: USA, 1980.

• De Roberti's (E.D.P.) and De Robertis (E.M.F.). *Cell & Molecular Biology*, Info-Med Ltd.:

Hong Kong; 1988.

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London,1977.

• Dhami and Dhami. *Invertebrates,* R. Chand & Co. : New Delhi, 1985.

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• Easton, T.A. and Rischer, C.E. *Bioscope*, Charles E. Merill Pub. Co.: Ohio,1995.

•Goodnight, c.J., Goodnight M.C. and Grey, P. *General Zoology*,Oxford: NewDelhi 1964.

• Keeton, W.T. and Gould, J.L. *Biological Science*, Norton W.W. USA,1993.

History I

Unit 1

• Understanding History: the conceptual basis question of historical objectivity and truth.

• Interpreting Sources: the nature of historical source (archaeological, numismatic, epigraphic, literary, written / oral), problems of interpretation.

Unit 2

• Hunting Gathering: paleolithic, mesolithic, neolithic.

• Domestication of Plants and Animals: pastoralism, shifting cultivation, settled agriculture.

• Feudalism: the debate of feudalism; the European case and the Indianexperience.

Unit 3

• Embrgence of States: monarchies, republics. A case study of Gariasatihas/Magadha /Pallavas/Satavahanas.

• The concept of Empire: A case study of Magadha.

• The Medieval State: the absolutist state in Europe; the Mughal State in India: regional state forms in the eighteenth century.

Unit 4

• Renaissance and the process of secularization: transformation of religion and the emergence of the ideals of rationality and reason.

• Industrialization and Imperialism: industrialization and the transformation of the economy; the specificities of imperialism in the industrial age.

Unit 5

• The Democratic Revolutions: the French case. End of the ancient regime; the nature and the legacy of the revolution.

•The Socialist Revolutions: the Russian case: the ideals of socialism and the nature of the revolution.

• Nationalism and the Nation State. European and Indian.

Practicum

Total	20 Marks
Sessional Test	10 Marks
• Seminar Presentation/GD	5 Marks
 Assignment/Project 	5 Marks

References

• Allchin, B. and Allchin, R. *Civilization in India and Pakistan*, Select Book Service Syndicate: New

Delhi, 1988.• Basham, A.L. *The Wonder That was India*, Sidgwick & Jackson: London,1954.

• Sahlins, M. Stone Age Economics, lavistock Pub.: London, 1978. Chapter

1,2, and 3,6. Sahlins, M.

Tribesman, Prentice Hall: Englewood Cliffs, 1968.

• Service, E. The Hunters, Prentice Flail: Partland, 1979.

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 Sharma, R.S. Aspects of Political Ideas and Institutions in Ancient India, Motilal Banarsidas: Delhi1968. • Thapar, Romila. History of India. Penguin: England, 1966.

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1972. (Read Introduction.)

• Habib, Irfan. *Agrarian System of Mughal India, Asia* Publishing House: Bombay.

Chapter 5.Hilton, Rodney (ed.) *The Transition from Feudalism to Capitalism*, Verso:

London, 1978

• IGNOU, *India from Mid 18th to Mid 19th Century*, EHI-05, Block-I, IGNOU: NewDelhi 1993.

• Fontana. Economic History of Europe. Vol. 1,2 and 4. The Emergence of Industrial

Societies, Collins: London, 1973.

- Hill, Cristopher. Reformation to Industrial Revolution. Penguin: UK,1980.
- Hobsbawm. Industry and Empire, Penguin: Harmondsworth, 1969.

• Mandrou, Robert. *From Humanism to Science*, *1480-1700*. (Classics in the History o Philosophy and

Science - Vol. II) Gorden & Breach Publication: Luxembourg, U.K.1992.

• Plumb, J.H. *Pelican book of the Renaissance*, Penguin: Harmondsworth,1964.

• IGNOU, *EHI-01-Modem India Series*1857-1964, *Block* 1-6, IGNOU: New Delhi,1964.

Political Science I

Unit 1 Introduction to the study of Politics

• *Perspectives on* Power relations, conflicts, conflict resolution, Socia change and social movements.

•Methods of the study of politics:

- Ethics and philosophy Aristotle and Hegel;
- Institutions and legality Mill;
- Materialist interpretation of history Marx and Mao;
- Comparative politics Almond, Frank and Wallerstein.

Unit 2 : Important theoretical concepts

- Rights, liberty, equality and justice- in the light of the following:
- Conflict between nature and law in ancient and modem thought;
- Human rights;
- The feminist critique of theories of justice and rights.

Unit 3 : Society, community and politics

- polis and the nature of the state in Greek antiquity;
- monarchy and changing notions of the state;
- civil society and the modern nation-state;
- the state in post-colonial societies.

Unit 4 : Nationalism

- In Europe:
 - emerging identities in the nineteenth century; o the rise of fascism in the 1920s and 1930s;
 - the debates of the second International on the right of nationalities self determination;
 - new trends in nationalism in the 1980s and 1990s.

2. In the colonies, emel-ging from different anti-colonial struggles:

- Peaceful transfer of power' -India, Nigeria;
- Violent revolutionary struggles Angola, Algeria;
- Political visions Gandhi, Fanon, Cabral, examples from South-East Asia.

Unit 5 Imperialism

- The industrial revolution and imperialism;
- The new world economic order in the age of Bretton Woods an Comecon; the imperialism of aid and development
- It's character after the 1950's Latin America, Vietnam and South Africa.

Practicum

	Total	20 Marks
•	Sessional Test	10 Marks
•	Seminar Presentation/GD	5 Marks
•	Assignment/Project	5 Marks

References

• Birch. Anthony *H. The Concept and Theories of Modern Democracy* Routledge and Kegan V Paul:

London, 1993.

• Birch. Anthony H. The Concepts and Theories of Modern

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• Gamble, *A. An Introduction to Modern Social and Political Thought*. MacMillan: London, 1981.

• Held. D. (ed.) *Political Theory Today*. Stanford University Press: Stanford, 1991.

• Keane, J. Democracy and Civil Society, Routledge: New York, 1988.

 Kedourie, E. (ed.). Nationalism in Asia and Africa, Weiedenfield and Nicholson: London. 197 (Read Introduction).

• Manning, D.J., Liberalism, Open University Press: Milton, Keynes, 1976.

• Raphael, D.D. *Problems of Political Philosophy*, MacMillan: London, 1970.

- Sullivan, O.N. Conservatism, Open University Press: Milton Keynes, 1986.
- Seton, Watson, H. Nations and State. An Enquiry into the Origins of Nations and the Politics of

Nationalism, Methuen: London, 1977.

Geography I

Unit 1 : Understanding basic concepts: location, area, flows/network, space and environment scope of

physical geography.

Unit 2 : Lithosphere: geological time scale; internal structure of earth; rocks and their types; folds and

faults; earth quakes and volcanoes; plate tectonics isocracy, theory of plate tectonics, movement

of major plates and their consequences; development of landforms and role of different agencies.

Unit 3 : Atmosphere: structure and composition of atmosphere; insolation factor and spatial distribution;

pressure - factors and spatial distribution; general circulation of atmosphere- world wind belts,

monsoons and cyclone classification of climate-Koppen's classification.

Unit 4 : **Hydrophere** : temperature salinity and density of ocean water - factors influencing

their spatial variation in oceans; movements in ocean waters currents and tides; major ocean currents.

Unit 5. Soils and vegetation: soil - formation, classification and general distribution of major soil

types; vegetation - factors, classification of vegetation and a general distribution of major

vegetation types; interrelationship of climate, soils and vegetation in (a) semiarid (b) temperate

and (c) equatorial region.

Practical and Project work

• Understanding Maps and Diagrams: (a) scales; (b) cardinal points; reading and

measuring; and (c) projection-properties and types; topographical maps: identification numbers and interpretation of physical features; weather maps; conventional symbols and interpretation of weather maps; instruments used to measure temperature, pressure, humidity and precipitation; identification of rocks.

• Techniques of report writing; a report on geographic study of any region mountain, desert, coastal or plain.

Practicum

 Assignment/Project 	5 Marks
Seminar Presentation/GD	5 Marks
Sessional Test	10 Marks
Total	20 Marks

References

• Barry, R.G. and R.J. Chorley, Atmosphere, Weather and Climate, Methuen London, 1976.

• Chorley, R.J. and P. Hagget (ed.) The changing Nature of Geography, Methuen, Londen, 1973.

• King, C.A.M.Introduction to Physical and Biological Geography, English Language Book

Society : London, 1975.

• Monkhouse, F.J. and H.R. Wilkinso. Maps and Diagrams : Their Compilation and

Construction, Metheun : London, 1971.

• Sharma,R.C.and M.Vatal, Oceanography for Geographers, Chaitanya:Allahabad 1980.

Economics I

Unit 1

• Economics: Meaning, Definition Nature and Scope.

• Role of price mechanism: market demand & market supply, market Equilibrium

• Law of demand,Demand curve: Marshallian utility analysis and indifference curve approach.

Elasticity of demand.

Unit 2

• Micro economics & it's difference with Macro economics. Determination of aggregate demand and aggregate supply to the resultant equilibrium income and employment. The concept of multiplier.

Unit 3

• National income and social account concept and measurement of national income.

• Production: factors of production and their combinations; -law of returns; return to scale; cost curves. Constituents of cost, wages, rent, profits, interest, concept of opportunity cost,

Unit 4

• Nature of market, revenue and lost analysis ,perfect and imperfect market . equilibrium of a firm

,price determination under perfect competition, monopoly

• Revenue curves -TR, MR, AR.

Unit 5 :

• Economic history of India (after Indendence), types and characteristics of economic system.

• Main feature of Indian Economy, Demographic features of India & population policy

• International trade: principle of comparative advantage, terms of trade.

Practicum

Total	20 Marks
Sessional Test	10 Marks
Seminar Presentation/GD	5 Marks
 Assignment/Project 	5 Marks

References

• Becherman, W. An Introduction to National Income Analysis University Book Store :Seattle, 1984.

Chapter 2.

• CSO, National Accounts Statistics, Government of India CSO : New Delhi, latest Issue.

• CSO, National Accounts Statistics, Source and Methods, Government of India CSO :New Delhi Latest

Issue.

• Lipsey, R.G. As Introduction to Positive Economics, English Language Bok Society London 1995.

• Ray, N.C. An introduction to Micro Economics, Macmillan : Delhi 1975.

• Sumuelson, Paul A. and William D. Nordhaus Economics, Mc Graw Hill : New Your, 1989. Chapters

: 4, 5, 7, 8, 12 and 38.

BLPR 3.1

Observing Children

Record Keeping

Students are required to keep detailed records of their observatio^{ns.} ^{Stude}nts mull { learn to discuss the difference between raw data and the observations and interpretations thereof. It is expected that discussions amongst peer group and with fac^{ulty supervisors} during the time allotted for this, would enable students to evolve frameworks of an^{alysing the} observational data. Supervisors will facilitate the process of analysis and in terpretation and help establish links with theory.

II : A Day in the Life of a Child

Objectives

• To examine the development of children, within varying socio-economic contexts.

• To understand the impact of dynamic social influences arising out of varied backgrounds - upon children and their education.

Task and Time Frame

Students are required to undertake observations of individual children arid their families in three diverse settings; a neighbourhood child, a child from .a 'basti' and a child from an affluent home. The neighbourhood child essentially refers to a child from a middle class socio-economic background. This category must not overlap with any of the other categories. Each of the three settings will require a distinct methodological approach. However, a common guideline which can serve both as an observational schedule and an interview schedule, can be used. Such a guideline would use the following as a framework for gathering data : Family; .Physical Space; Matel ial

Resources;c:Heal I :h ;and: Nutrition School Related Factors; Human Support Stnktures; Family Interactions.

The neighborhood child

Students will be expected to observe a child within the home once on a school day and once on, a,balidayiDbsquyaions, shouldayagiodsanazitho [thug alaNdiawalosikinctheamomieg and continue till she retires for the day. Observations may include talking to parents only to fill in gaps. Observations may be conducted unobtrusively and without any attempt to intrude into the privacy of the family. The neighborhood is chosen specifically because it may allow easy access and transparency in the research process.

The child from a basti

The method to know a basti child may require, apart from observations, semistructured interviews with parents and the community, including teachers. Interviews with basti children can be arranged through nongovernmental organisations working in slum and resettlement colonies. An advantage in working through NGOs is the necessary orientation that the students can receive in conductin— observations and interviews with sensitivity and responsibility.

The child from an affluent home

Using the guidelines mentioned above, individual children from affluent homes may be interviewed. The interviews could be arranged through schools which specifically cater to the affluent sections of society. Individual children could be interviewed within the school.

Record Keeping

Students are required to keep detailed records of the data collected through observations and interviews. Based on the discussions

with the peer group and with faculty members, students will evolve a framework of analysis, drawing upon socio-psychological principles.

III : Problem-Solving and Moral Dilemmas

Objectives

• To study the nature of children's process of conceptualization in the context of a specifi problem-solving task.

•To investigate and understand the nature and development of moral reasoning among children.

• To enhance skills of interviewing young children in order to understand their development and their world.

Problem-Solving Task: The Hanoi Tower - A Piagetian

Task

Task and Time Frame

Students will administer the task individually to at least three children in the age groups of 5-6 years, 8-9 years and I 1-12 years. Detailed guidelines explaining the procedure of conducting the task, recording responses and analysis, will be provided by the supervisor.

Record Keeping

Students will be required to record the initial instructions given to the child any additional instructions given during the execution of the task, the questions asked, and the responses of individual children. Students will then analyse the observations with respect to the level of

"cognizance" the children have attained. The framework given by Piaget can be used.

Moral Dilemmas: Piagetian and Kohlberg

Students will identify four children, two each in the age-group of 5-6 years and 8-10 years respectively, and present the moral dilemmas to the children one at a time, in an interesting story-telling manner. Students will then ask the children a number of questions in order to get a thorough insight into the child's understanding of morality and ethics. Detailed guidelines explaining the procedure of conducting the task, recording responses and analysis will be provided by the supervisors.

Record Keeping

Students will be required to maintain a record of basic information such as the child's name, accurate age, sex and socioeconomic status. The entire interview protocol would be recorded verbatim, indicating the questions asked and the responses given (verbal or through gestures) both of the interviewer and the child. Students will be expected to analysis the responses of children in terms of Piaget's theoretical framework of moral judgement and the stages of moral development as given by Kohlberg.

Supervisory Support:

The practicum should be conducted in small groups not exceeding eight in number. Each group will be facilitated by a faculty member, who will:

- introduce the assignments
- help establish a methodology for each assignment
- invite discussions on observed data
- facilitate developing a framework of analysis

• promote reflective learning in small groups and facilitate systematic report writing.

Assessment

Learning through this practicum will be internally assessed by their respective supervisors using the following basis and criteria:

I Children at Play			
		Mar	
Basis	Criteria	ks	
Observations	Required number of hoursAbility to focus on key elements		
Class	Involvement in discussions	5	
Participation			
Report	• Framework of analysis, links with theory and coherent use of observations		
II.	A Day in the Life of a Child		
Observations	• Required number of hours,		
	information gathered		
Class	Involvement in discussions	-	
Participation		5	
Donout	Framework of analysis		
Report	Childrens profiles		
	Comparative analysis		

III Problem Solving and Moral Dilemmas		
Execution of the task	 Presentation of the task Questions asked Creative inputs Clarity in presenting dilemmas 	5
Report	 Record of details Framework of analysis Links with theoretical constructs Use of observations to substantiate arguments 	5
Overall Evaluation	 Overall classroom participation Regularity Punctuality 	5
Total		25

Reference

- Berk. Laura. Child Development. Prentice Hall: New Delhi, 1996.
- Bettelheim. Bruno. *The Importance of Play,* The Atlantic Monthly, March, 1987.
- Erikson, Eric, H. *Play and Development,* W.W. Norton: New York, 1972.
- Garvey, C. Play, Harvard University Press: Cambridge 1990.
- Gilligan,Carol. In a Different Voice: Women's Conception of Self and Morality, *Harvard*

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• Piaget, *J. The Moral Judgement of the Child*. Routledge and Kegan Paul: London, 1932. Chapter 2 :

Adult Constraint and Moral Realism.

- Piaget. J. *The Grasp of Consciousness*. Routledge and Kegan Paul: London, 1977, The Hanoi Tower pp.
 - 287 299
- Vygotsky, Lev, **S.** *Mind in Society*, Ilarvard University Press: Cambridg 1980. Chap7: The Role of Play.

BLPR3.2

Self Development Workshops

Objectives

• To explore the self for greater awareness, personal growth and reflective thinking.

• To develop insight into the various dimensions of the self perceptions and assumptions about and attitude towards: people, children in particular; and social issues.

• To learn to be self-critical, questioning and reflective about our thoughts, actions and reactions.

• To develop insight into children's ways of thinking and learning and to explore ways to bridge the gap between adult and child.

• To cultivate positive attitudes and sensitivity towards each other, towards children and towards education.

• To develop skills for effective communication and the capacity to listen, empathies and relate.

• To facilitate and stir the process of attitudinal change, creativity and life-long learning in each student.

Workshops

A series of workshops should be conducted over a year, under the supervision and guidance of professionals, trained for the purpose. Broadly, these workshops should address the following:

Exploring the self

Ability to listen and observe; dreams and fantasy; personal and professional aspirations; factors influencing identity formation; views on gender issues; personal, familial and social conflict; understanding social issues; projecting and building images; exploring ethics and values, developing empathy.

Understanding our own childhood

Articulating childhood memories and experiences - fantasy, longing, hurt, joy, recognition; major influences in childhood; visualizing the limitations and potential of one's own childhood; listening to and empathizing with other childhood experiences, discovering similarity in needs and feelings, discovering differences in nature and experiences; getting in touch with childhood feelings.

Understanding the gap in perception between child and adult

Evoking insight into children's perception, attitude and imagination; observing adult thoughts, perceptions, ideas and prejudices; observing differences and similarities in child and adult approaches in everyday life; exploring sensitivity towards children; challenging adult assumptions and attitudes; recreating and understanding responsible and sensitive adult intervention.

Creativity

Understanding and facilitating self-expression; realising one's own creative potential; comprehending the child's learning processes; understanding the significance of selfexpression through humour, art, music; relating and linking the

creative potential between the adult and the child, teacher and pupil, personal and social; the benefits of creativity in education.

Fear and Trust

Observing and understanding feelings of fear and trust in the past and present; the influence of such feelings in personal and social attitude; analysis of the repercussion of fear and trust in school; observing the role of fear and trust in stifling or facilitating creativity and learning, exploring alternative interventions.

Competition and Co-operation

Understanding one's own attitude to competition and cooperation; analyzing and observing the impact of competition in personal life, in school and societal structures; observing and understanding the motivations behind cooperative learning and its impact; analyzing the drive towards excellence; exploring alternative interventions.

Communication

Observing the role of listening, attention and empathy; observing and analysing information gathering and exchange; exploring personal and social relationships; analysing the role of the media; understanding communication in friendship, in the family, in the community; exploring the role of teacher as communicator, in establishing a relationship with the child.

Time Frame

Each student will be required to attend a minimum of eight full day workshops over one academic year.

Reflective Learning

It is expected that through these workshops students will be able to understand themselves as well as learn from and about others and cultivate feelings of group cohesiveness, sensitivity and empathy.

Supervisory Support

Each workshop session will be organised and conducted under the guidance and supervision of professionals trained in conducting personal growth/Counselling workshops. In addition, the faculty member teaching the theory course, Human Relations and Communication, must function as a coordinator of this practicum.

Assessment

In order to assess any individual student's personal growth, it is imperative to be in continuous touch with the studen ts through the interactive workshops. The responsibility of assessment therefore lies entirely with the resource persons, who conduct workshops and faculty members who have participated in all the self-development workshops. As part of overall assessment, students should be asked to evaluate their own personal growth individually. Each student will give herself a grade on each criterion of personal growth: The faculty member and resource person will jointly assess the development of students over the year on the following basis and criteria:

Basic	Criteria	Marks
Regularity	 Number of workshops attended Punctuality in sessions Regularity in submitting reports 	5
Participation	Nature of participation	5
Presonal Growth	 Questioning the self Insight into oneself - limitations and strengths Integration of thought and action, feeling and intellect Self Confidence / Self Concept The ability to draw connections between different thought processes 	5
Presonal Growth- Others	 Open-mindedness Listening ability Social sensitivity Empathy Taking initiative Attitudes 	5
Self Evaluation	• Criteria would be the same, as for personal growth	5
	Total	25

BLF 4.1

Language Acquisition

Unit 1 : Language development: The earliest stages and the babbling period; stages of language' development; the role of motherese and caretaker speech; phonology; morphology; syntax and semantics; sociolinguistic aspects.

Unit 2 : Language and cognition: Cognitive prerequisites for language acquisition; biological foundations; language and thought, innatist hypothesis; cognitive, social and linguistic development; Piagetian and Vygotskian perspectives.

Unit 3 : Comprehension and production: Perceptual strategies; perception of speech and speech comprehension; notions of complexity; speech production, encoding and performance measure; the role of errors in language production.

Unit 4 : Formal means of language acquisition with special reference to reading and writing: Learning to read and understand; measures of readability; schema theory; using cloze, dictation and translation with children; mechanics of writing; representational systems; teaching writing.

Unit 5 : Language disorders: learning about language by studying language disorders; brain structure and functions; inhibitions; stuttering; aphasia; language among the mentally retarded.

Practicum

	Total	10 Marks
•	Sessional Test	4 Marks
•	Seminar Presentation/GD	3 Marks
•	Assignment/Project	3 Marks

References

- Aitchson, J. The *Articulate Mammal: An Introduction* 10 *Psycholinguistics*, Union Hyman: London,1989. Chap.1-7.
- De Villiers, P. A and J. G. De Villers. *Early Language*, Harvard University Press: Cambridge,1979. Chap.1-5 and 9.
- Elliot, *Al. Child Language*, Cambridge University Press: Cambridge.198 I. Chap. 1-5 and 7.
- Steinberg, D.O. An introduction *to* Psycholinguistics, Longman: UK,1994, Chap. 1,2 and 8.
- Warner, S. A *Teacher*, Touchstone Books:1400 Second Street Baker City,1986.

BLF 4.2

Human Relation and Communication

Unit 1 : Communication

- Meaning, nature and types of communication
- Role of sense organs in communication

Unit 2 : Channels of Communication

- Channels of communication
- The hidden and indirect curriculum

Unit 3 : Communication Skill

• Important factor influencing to communication

Unit4 : Personal Development

- Self identity and human relationship
- Psychoanalysis with the perspective of men and women (human approach)

Unit 5 : Human Relation in Education

- Behaviorist versus humanist perspective
- Peer learning construct and dimension
- Community involvement

Practicum

	Total	10 Marks
•	Sessional Test	4 Marks
•	Seminar Presentation/GD	3 Marks
•	Assignment/Project	3 Marks

- Monte, c.P. Beneath the Mask, Praegu Publishers: Westport, 1977.
- Rogers, Carl. *Freedom to Learn for the* 80s, Charles R. Merrill Pub. Co.: US, 1983. Chap. 7, I I and 17.
- Snint-Exupery, Antoine De. *Little Prince*, Piccolo Books/Pan Books inassociation with William Heinemann: U.K.,1977.
- Seminar, Identity, November, 1991, Seminar: New Delhi.
- Tetsuko, Kuroyanngi, *Tow Chun,* Sahitya Chayan: New Delhi, 1993/NBT: New Delhi, 2000.
- •Warner, Sylvia Ashton. *Teacher*, Touchstone Books: 1400 Second Street Baker City, 1986.

BLPR 4.1

Physical Education

Course Objectives

Thus, the broader objective of learning of this area should enable the student teachers to:

• develop positive attitude towards health as individual and be collectively responsible to achieve it;

• make them aware about rules of safety in hazardous situation (illness, accident and injury) and equip

them with first aid measures about common sickness and injuries;encourage them to learn and to form right habits about exercise, games and sports, sleep, rest and

relaxation;

• develop a holistic and integrated understanding of the human self and personality.

- develop the skills of personal growth.
- develop social relational sensitivity and effective communication skills.

• develop positive attitude towards health as individual and be collectively responsible to achieve it;

• help student teachers develop the capacity for sensitivity, sound communication skills and ways to establish

peace and harmony.

• develop the capacity to facilitate personal growth and social skills in their own students

Course and Activities

1. Concept- of health, importance, dimefisions and determinants of health; Health needs of children and

adolescents.

2. Physical fitness, strength, endurance and flexibility, its components, sports skills, indigenous and self -

defence activities

3. Games and sports—athletics (generalphysical fitness exercises), games (lead-up games, relays and major

games) rhythmic activities and their impact on health

- 4. Socio-moral base of yoga: the five Yamas and five Niyamas.
- 5. Physical base of Yoga: Asanas and Pranayam

BLPR 4.2

Colloquia & Enrichment

Colloquia & Academic Enrichment Activities

Objectives:

• To examine and develop a criteria of evaluating a variety of children's literature including

picture books, folk tales, activity books, fiction and non-fiction.

• To develop skills of story-telling and the creative use of children's literature.

• To develop skills of building up a resource of stories and children's literature for use in

classrooms.

• To learn to use stories as a medium to facilitate expression, imagination and creative use of

language in children.

Workshops

A series of workshops could be organized, spread over the academic year, on specific themes suggested below:

Story-telling

A series of discussions with students to identify skills of storytelling, relevant and interesting stories that children enjoy at different age levels. Subsequently, students will tell stories amongst peer groups, with the facilitation of supervisors. Groups will then critically reflect on story, presentations. Workshops must also be organized with the participation of professional story tellers in Hindi and English.

Bulletin Board

Students in groups of 5-6 will take charge of a bulletin board for a given period of time. The task will be to take up a thematic topic and put up materials rerate d to selected stories, in order to learn formal ways of attracting children's attention. Groups can then share their experiences during whole class discussions.

Story Folder

Students will classify available stories into different categories. Each story card will have key information about the story that is thus classified. This will enable students to develop a portfolio of stories that would be aftropriate for specific age levels and interests. Time Frame Story-telling and children's literature activities are expected to be organized once every week for two hours. Workshops may be organized for a longer duration, as .and when possible.

Supervisory Support

Students will work under the professional guidance of resource persons as well as the facilitation of faculty supervisors.

Assessment

Students will he internally assessed by their respective supervisors using the following bases and criteria:

Basis	Criteria	Marks
Regularity	 Participation in workshops and related sessions 	5
Bulletin Board	 Selection of the theme and presentation of stories 	5
Story Folder	 Collection References Classification and retrieval system Developing an evaluation criteria for children's literature 	5
Story Telling	 Selection of story as per theme, age etc. Animation voice pitches, clarity Involvement, eye contact, gestures, book handing 	5
Self Evaluation	 Criteria would be the same, as for personal growth 	5
	Total	25

B.EI.Ed. Fifth Semester Paper-I : (BLF 5.1) : Basic Concepts in Education

MM: 100 (Internal 20, External 80)

Aims of the Course

The Course will enable student-teachers to-

- Gain a critical understanding of issues in Foundation of' Indian Education
- Be exposed to different Problems in primary education
- Become the use of a educational provision in Indian constitution
- Engage with learners' in minds n order to further dimensions of education a
- Promote development in cognitive, social and emotional aspects.

Course Content

Unit-1 Philosophy of Education :

Nature, Need and scope; Concept of Philosophy from Indian stand point; Indian Philosophical foundations : Vedic, Buddhist and Jains.

Unit 2 Knowledge :

Meaning, nature and sources; Process of Knowledge construction in childhood; Role of curriculum, Syllabus and textbooks in construction of knowledge; Experiential knowledge.

Unit 3 Child as Learner :

Nature of learning : Essential conditions for learning and factors influencing learning; Role of Family, School, Society, Peer group and teachers in learning; Role of activities and experience in learning.

Unit 4 Teacher :

Role in child development as motivator; Teaching as a professional activity; Teacher and parent; Teacher and curriculum; Teacher and society.

Unit 5 Progressive thoughts in Education :

Progressive thoughts in western concept : Rousseau, Frobel, Montessori, Dewey and Pestalozzi; Progressive thoughts in Indian context : Gandhi, Tagore, Gijubhai and Krishnmurti.

Unit 6 Sociological Perspective :

Relationship between Education and society on their interdependence. Education as an agent of social change, social mobilization and social stratification; Need and concept of social equity and equality with special reference to elementary education.

- Dewey, Jolt. 'My Pedagogic Creed', in P.I. Hinders and S.J. Thorton (eds.) The Curriculum Studies Reader. Rutledge: New York, 1997.
- Letter to A Teacher: from the children of the school of Barbiana, Sahitya Chayan : New Delhi.
- Margaret K.T. The Open Classroom. Orient Longrnan New Delhi, 1999.
- Moore. T.W. Educational l'heory: An Introduction, Helnemarn: U.K. 1974.
- Tagore. Rabindranath. Personality : Lectures delivered in America, Mamillan and Co. London, 1921. Chapter IV & My School. pp. 111-150.
- Warner, Sylvia Ashton. Teacher, Touch Stone Books: 1400 Second Street Baker City, 1986.
- माथुर, एस.एस. : शिक्षा के सिद्धान्त
- पाण्डेय, राम शकल : शिक्षा दर्शन
- पाण्डेय, राम शकल : शिक्षा के मूल सिद्धान्त
- मिश्रा, उषा : शिक्षा का समाजशास्त्र
- ओड, एल.के. : शिक्षा की समाजशास्त्रीय एवं दार्शनिक पीठिका
- लाल, रमनबिहारी : शिक्षा के दार्शनिक एवं समाजशास्त्रीय आधार

Paper-2 (BLF 5.2): School Planning & Management

MM : 50 (External -40 Internal -10)

Aims of the Course

- To help the teacher to obtain a total gender of his role of scientific management in education.
- Understand the key concepts. such as Education Commissions and Committees, Policy on Education.
- Be exposed to different Problems in primary education
- Become the use of a educational provision in Indian constitution
- Engage with learners' in minds n order to further dimensions of education a
- Promote development in cognitive, social and emotional aspects.

Course Content

Unit 1

School Administration,Organisation and management of school education :Concept and Function, Role of Centre, State and local bodies; sources of funding.

Unit 2

The school as a system I : Induction training and teacher support programmes; planning the school curriculum -academic, co-curricular and sports; community involvement.

Unit 3

The school as a system II types of schools : The managerial committee and its functions; school administration: staffing pattern; school budget; annual planning; documentation and information systems; physical infrastructure requirements; selection of materials and equipment for the school and selection of suppliers

Unit 4

Maintaining standards : physical and psychological needs of children teaching and non-teaching staff in a school; developing a collaborative perspective. Staff supervision — models and application : evaluation and feedback; establishing accountability.

Unit 5

School Leadership and Management -

- Administrative Leadership
- Team Leadership -
- Pedagogical Leadership
- leadership for change

- 1. Abbott Lesley and Rosemary Rodger. (eds.) Quality Education in the Early Years, Open University Press: Bucklngham. USA, 1994.
- 2. Aitken, Robert and Charles Handy. Understanding Schools as Organisations, Penguin Books: England, 1990.
- 3. AustIn, Lucille N. Basic Principles of Supervision, Social Casework 33, December, 1952, pp.411419.
- 4. Batra, Sunil, 'From School Inspection to School Support : a case for transformation of attitudes, skills, knowledge, experience and training, Paper Presented at Conference on Management of School Education In india, NIEPA, Delhi, 1998.
- 5. Craige, Ian. (ed.) Managing the Primary Classroom, Longman : London, 1987.
- 6. Cross, Rod. The Role of the Mentor in Utilising the Support System for the Newly Qualified Teacher, School Organisation, March, 1955 : 15(i).
- 7. Davles, B. and Linda Elusion. Decentralising Curriculum Rpfotxn, School Organisation, March, 1996: 16(1).
- 8. DelhI School Education Act and Rules, 1973, Latest Edition.
- 9. Filth, Donald. (ed.) School Management in Practice, Longman Group Ltd.:
- 10. London, 1985. Chapter 3,4,5,7 and 9.
- 11. 10.McHugh, Marie and MtMullan. head teacher or Manager? Implications for Training a:
- 12. 11. National Policy on Education 1986, Programme of Action 1992. MHRD, Government c
- 13. Sixth All India Education Survey. NCERT: New Delhi, 2000.
- 14. 13. Towards an Enlightened and Humane Society. Report of the Committee for Review of
- 15. 14. Varghese N.y. (ed.) Antriep Newsletter, Vol.2, No. 2, July-December 1997, NIEPA: Np

BLO 5.1 English- II

MM:100 (Internal 20, External 80)

Course Content

Approaches to Texts

This paper follows an approach-based structure. While introducing students to various ways of looking at a text, an emphasis is also laid on incorporating some significant writing in English, into the syllabus.

Components

Approaches to texts with which students should be familiar are : Historical Psychological Marxist Feminism New Criticism: Structuralism, Deconstruction, Formalism

TEXTS

Drama : Any Two		
Arthur Miller	:	All My Sons
Girish Karnad	:	Tughlaq
Henrik Ibs	:	A Doll's House
Bertolt Brecht	:	The Good Person of Szechwan (Translated by Joh Willett)

Novels : Any Two

V.S.Naipaul	:	A House for Mr.Biswas
Margaret Atwood	:	The Handmaid's Tale
Raja Rao	:	Kanthapura
Charles Dickens	:	Great Expectation

Poetry

:	Sonnet No. 130 : My mistress's eyes nothing like the sun.
:	An Elementary School Classroom in a Slum
:	The Jaguar
:	On Killing a Tree
:	Of Mothers among other things (in Selected Poems)
:	The Sonne Rising
:	London
:	Song to the Men of England
:	I Too Sing America
:	Incident : Baltimore
:	The Jaguar

BLO 5.2

Liberal Course Hindi- II

MM : 100 (Internal 20, External 80)

Aims of the Course

- हिन्दी साहित्य के इतिहास की जानकारी।
- हिन्दी के आधुनिक कविताओं का ज्ञान।
- भारतीय काव्यशास्त्र एवं उसकी परम्पराओं का ज्ञान
- प्रयोजन मूलक हिन्दी का ज्ञान।
- हिन्दी व्याकरण का ज्ञान।

इकाई –1 हिन्दी साहित्य का इतिहास

- हिन्दी साहित्य के इतिहास के लेखन की परम्परा।
- काल विभाजन और नामकरण।
- आदि काल से आधुनिक काल तक की प्रमुख धाराओं का संक्षिप्त परिचय एवं प्रवृत्तियाँ ।

इकाई –2 **हिन्दी साहित्य की विद्या**

- मैथिलीशरण गुप्त –साकेत (अष्टम सर्ग)
- कबीर –साखी (1–50 पद)
- सूर्यकान्त त्रिपाठी निराला सान्ध्य सुन्दरी , बादल राग
- सुमित्रानंदनपंत– नौका विहार
- अज्ञेय—नदी के द्वीप
- मोहन राकेश–मलवे का मालिक
- नागार्जुन –अकाल के बाद
- प्रेमचन्द्र-ईदगाह
- महादेवी वर्मा– मै नीर भरी दुख की बदली

इकाई –3 **भारतीय काव्यशास्त्र**

- काव्यशास्त्र की परिभाषा और स्वरूप
- काव्यशास्त्रीय सम्प्रदायों का संक्षिप्त परिचय (रस संप्रदाय अलंकार संप्रदाय) काव्य गुण और काव्य दोष
- छंद की परिभाषा और प्रमुख भेद

इकाई –4 **हिन्दी व्याकरण**

- संज्ञा
- सर्वनाम
- विशेषण
- क्रिया क्रियाविशेषण
- अव्यय
- वाक्य विचार

इकाई –5 **प्रयोजन मूलक हिन्दी**

- प्रयोजन मूलक हिन्दी की अवधारणा और उसकी प्रवृत्तियां
- जनसंचार के माध्यम
- समाचार लेखन एवं हिन्दी
- रेडियो लेखन एवं हिन्दी
- विज्ञापन लेखन

सन्दर्भ ग्रंथ सूची—

- आचार्य रामचन्द्र शुक्ल–हिन्दी साहित्य का इतिहास
- बच्चन सिंह– हिन्दी साहित्य का इतिहास
- रामकिशोर शर्मा एवं डॉ० शिवमूर्ति शर्मा– प्रयोजन मूलक हिन्दी
- राजेन्द्र यादव –हिन्दी कहॉनिया
- डॉ0 वासुदेव सिंह–कबीर साखी सुधा
- अर्जुन तिवारी –जनसंचार और हिन्दी पत्रकारिता
- प्रेमचन्द्र–मंजूषा
- सुमित्रानंदनपंत– नौका विहार
- महादकवी वर्मा– मै नीर भरी दुख की बदली
- सूर्यकान्त त्रिपाठी निराला सान्ध्य सुन्दरी , बादल राग
- मोहन राकेश—मलवे का मालिक
- डॉ० नगेन्द्र– भारतीय काव्यशास्त्र की भूमिका

Liberal Course (Optional)*

(BLO 5.3) Liberal Course Mathematics- II

MM : 100 (Internal 20, External 80)

Aims of the Course

The Course will enable student-teachers to-

- Gain a critical understanding about mathematics Education.
- Enjoy mathematics and develop patience and persistence when solving problems.
- Become confident in using mathematics to analyze and solve problems both in school and in real-life situations.
- Develop the knowledge, skills and attitudes necessary to pursue further studies in mathematics.
- Develop a critical appreciation of the use of information and communication technology in mathematics.

Course Content

Unit 1 Complex Analysis

- Complex Number, Analytic Function, Couchy-riemann Equation, hormonic function.
- Complex Integral, Couchy's theorem, Taylor's theorem.
- Laplace transform and Inverse.
- Fundamental theorem.

Unit 2 Integral Calculus and Differential Equations

- Define Integrah and their properties. Integral on the limit of a sum and Riemann's approach under acurve.
- Simple Differential equation, Differential equation of first order and first degree., Equation of first order but not first degree.
- Singulor solution and orthogonal trajectories.
- Linear differential equation with constant coefficients.

Unit 3 Algebraic Structures

- Group,Subgroup,Normal Subgroup,Quotient group ,Cyclic group,.The fundamental theorem of homomorphism and isomorphismis.
- Rings, Sub rings, ideals and quotient rings, Integral domaine and field, ring homomorphism.
- Vrctor space, sub space, Quatient space, Linear combination of the vector.

Unit 4 Statistical Methods

- Measures of Central Tendency, Variability and the Normal Probability curve.
- Corelation, Rank-difference Method and Product moment method.

Unit 5 Probability and Probability Distributions

- Definition of Probability, events ,Operation of events, type of events , Laws of probability, Baye's theorem , Binomial distribution and Mathematical Expectation.
- EMV Criterionin business.
- Continuous random variables and normal distribution.

- 1. Gupta. S.C. and V.K. Kapoor. Elements of Mathematical Statistics, Sultan Chand & Co.: New Delhi, 1999.
- 2. Kapur, J.N. and S.C. Gupta. A First Course in Abstract Algebra, R. Chand and Co.: New Delhi, 1976, Fourth Edition.

BLO 5.4 Liberal Course

Physics - II

MM:100 (Internal 20, External 80)

Course Content

Unit I introduction of quantum physics : review of classical physics a^{nd its} inadequacies. Particle behavior of light-photoelectric effect, X-rays, Compton effect; wave behaviour of matter; de Broglie's hypothesis, wave function; wave and group velocity, uncertainty principle and applications. Energy levels; Franck-Hertz experiment; correspondence principle.

Unit 2 Quantum mechanics : Schrodinger's equation in one dimension; timeindependent Schrodinger equations transmission through a barrier, particle in a box. Qualitative discussion of hydrogen - like atom, spin exhision principle.

Unit 3 Solid state physics: free electron theory of metals, band theory of solids -Block's theorem, Kronig-Penney model (without derivations); metals, insulators, semi-conductors; Fermi energy; instrinsic and extrinsic semiconductors; solid state devices - p-n junction diodes, solar cell, bipolar junction transistor, uni-polar junction transistor.

Unit 4 Special theory of relativity : Michelson Morley experiment, Einstein's postulates, Lorentz transformations, time dilation and length contraction; relativistic addition of velocities, Relativistic mass, mass-energy relation.

Unit S Nuclear Physics : nuclear masses and sizes; constituents of the nucleus, binding energy. Radioactive decay, half-life, radioactive series; application-carbon dating; qualitative description of alpha, beta and gamma decay. Nuclear fission, chain reaction; nuclear fusion; source of energy in starts, elementary particles and fundamental interactions

Unit 6 The Universe : our galaxy, expansion of the universe-Hubble's Law; Newtonian cosmology; microwave back ground radiation (description).

PRACTICAL : MM: 20 INTERNAL

(In experiments 1-3, the theory should be done in conjunction with the lab). in addition to the usual laboratory examination, the final examination should have a written component which tests the student's understanding in theory.

A.

- 1. Study of power supply
- 2. Study of transistor and its use as amplifier.
- 3. Study of OP. amp. and its simple applications.,

B.

- 4 Project : (About 10-15 laboratory hours duration) Readigns :
- 1. Periya, Pedro, Fundamental of quantum Physics, Springer.
- 2. Nouredine Zettili, Quantum Mechanics, Wiley.
- 3. Charlis Hittel, Introduction to Solid State Physics, Wiley.
- 4. W. Pauli, thory of Relativity, Dover Pub. Inc.
- 5. Albert Einstein, Relativity, mannu Graphics. (Indian Publication)
- 6. S.P. Puri, General Theory of Relativity, Pearson.
- 7. Samuel S.M. Wong, Introduction to nuclear Physics, PHP.
- 8. John Lilley, Nuclear Physics, Wiley.
- 9. John Gribbin, Glaxy formation, Springer.
- 10. Stephen Hawking, the universe in a nutshell, Bantam Press.
- 11. Simon Singh, Big Bang, Harper Perennial Publication.

BLO 5.5 Liberal Course: Chemistry - II

MM:100 (Internal 20, External 80)

Course Content(I)

PART I :INORGANIC

Unit 1 Elementary idea of Bronsted-Lowry and Lewis concept of acids and bases : difference between strong and weak acids and bases in terms of equilibrium constants, applications of Arrhenius theory of ionization to weak, mono and polybasic acids; effect of solvent on the strengths of acids and bases-levelling effect of solvent.

Unit 2 Comparative study of elements of zero, s and p block ; an elementary idea of general group trends, electronic configuration, atomic iadii, inert pair effect, ionization potential, electron-affinity and eletronegativity; a brief knowledge of transition and inner transition elements.

Unit 3Study of some common useful inorganic compounds.

a. Sodium chloride	b. Sodium hydroxide
c. Sodium carbonate	d. Sodium bicarbonate
e. Basic lead carbonate	f. Sodium thiosulphate
g. Copper sulphate	h. Hydrogen peroxide
i. Silver nitrate Red lead	
k. Zinc oxide	1. Bleaching power
m. Potassium Permanganate	n. Potash alum
o. Gypsum salt	p. Plaster of Paris

PART II: ORGANIC

Unit 1 Functional Group : difference between a functional group and a substituent Preparation, physical and chemical properties of compounds containing :

- a) Hao-alkanes and halo-arenes.
- b) alcohols and phenols.
- c) aliphatic carbonyl compounds.

Unit 2

(a) **Synthetic and natural polymers** : classification opolymers natural and synthetic polymers, [general preparation of polymers such as Teflon, PVC (poly vinyl chloraide) polystyrene, Nylon 6, 6, terylene, resins).

(b) (i) soaps and brief knowledge of the difference between detergents (ii) insecticides and pesticides.

(c) Chemistry in Action : chemicals in medicines analgesics, antipyretics, antibiotics and disinfectants.

Unit 3 Environment and pollution : definition, causes, impact, TLV (Threshold limit value], **unit (ppm)**, synergism and antagonism, various types of pollution (elementary knowledge), environmental segments as atmosphere, lithosphere, biosphere, hydrosphere etc. special stress on depletion of ozone layer and its effects, photochemical smog, green house effect, Acid rain **and** black rain.

PART III :PHYSICAL

Unit 1 Solutions : Types of solution

(a) Solution of solid in liquid - solubility, **effect of** temperature on solubility.

(h) Solution of gas in liquid - Henry's law.

(c) Solution of liquid in liquid - (i) miscible liquids, Raoult's law, ideal solution and non-ideal solution, fractional distillation (ii) partially miscible liquids,

Unit 2 Distribution law : partition coefficient definition, limitations, factors affecting the partition coefficient and applications such as **solvent** extraction.

Unit 3 Thermodynamics : exothermic, endotherniic reactions, systems, surroundings, types of systems, states of a sys slate functions, process,

types of process, reversible and irreversible, extensive and intensive properties, energy, work, heat capacity, first law of thermodynamics, heat of a reaction at constant pressure and constant volume, Hess's law, Born-Haber Cycle, bond energy and bond dissociation energy. Heat of neutralization and heat of solution.

PRACTICAL (II)MM:20

INTERNAL INORGANIC

- 1. Determination of percentage of Na2CO₃ in a sample of washing soda.
- 2. Analysis of a given sample of water for pH, conductance etc. and determination of its hardness complexonietrically.

ORGANIC

- 1. Detection of extra elements (N, S, CI, Br, I) in organic compounds, not more than two such elements may be present in a compound.
- 2. Detection of functional groups in mono functional organic compounds (only qualitative treatment).
- 3. Abnormal constituents of urine (sugar, ketobodies, proteins etc.) PHYSICAL
- 1. Determination of CST for phenol water system.
- 2. Determination of heat of neutralization of HO/NaOH.
- 3. To study any simple distribution system and determine the value of partition coefficient.

- 1. Bruce, H. Mohan, (University Chem.) Inorganic Chemistry. Narosa Publishing House : New Delhi, 1990.
- 2. Cotton and Wilkison. Advance Organic Chemistry, John Wilvy and Sons Sussex, 1988, Fifth Edition.
- 3. Day, M.C. and J. Selbin. Theoretical Inorganic Chemistry, East West Press : Delhi, 1962.

- 4. Hulsey, James. Inorganic Chemistry, Addison-Wesley/Harper : London, 1988.
- 5. Kapoor, Ramesh, S.K. Vasisht and R.S. Chopra. Inorganic Chemistry. R. Chand and Co. : New Delhi, 1984.
- Jerry, March. Advanced Organic Chemistry : Reactions, Mechnaisms and Structures, New Age International/Eastern : New Delhi, 1992.
- Morrison, R.N. and R.N. Boyd. Organic Chemistry, Prentice Hall of India New Delhi, Sixth Edition, 1996.
- Norman, R.O.C. and D.J. Waddington. Modern Organic Chemistry, Bell Hyman : London, 1994.
- 9. Sykes, Peter. A Guide book to Mechanism in Organic Chemistry. Orient Longman : London, 1965. (Bombay, 1971).

(BLO 5.6) Liberal Course Biology- II

MM : 100 (Internal 20, External 80)

Course Content

Unit 1 Cell Biology And Genetics

- Introduction of cell, its type (Prokaryotic and Eukaryotic),
- Difference between Prokaryotic and Eukaryotic Cell,
- Structure of Mitochondria, cell division, cell cycle.
- Sex defermination in human being.
- Mendels Law.Genetic Disorders.

Unit 2 Ecology And Ecosystem

- Ecology; Definition aims and Scope .
- Ecological factors.
- Definition of Ecosystem and types.
- Ecological Pyramid.
- Biodiversity and Conservation.

Unit 3 Economie Zoology

- Protozoa and Human diseases
- Sericultur
- Apiculture
- Human diseases caused and Prevention.

Unit 4 Plant Maephology

- Classification of Plants.
- Respiration in plant.
- Modes of Nutrition in Plant. Role of Different Elements in Plant Nutrition.
- Photosynthesis
- Plant diseases .

Unit 5 Animal Kingdom

- Annelida -ascaris
- Arthropoda- Cockroch
- Molsca -Pilla

- 1. Berl, A.K. Textbook of Animal Physiology. EMK Pub. : North Suite, 3 Pnte, 1981.
- 2. Burns S. Science of Genetics : An Introduction of ilerecliy, McMillan : NewYork, 1980, 4th Edition.
- 3. De Robertis, EDP and EMFD c Robertis. Cell and Molecular Biology, Saunders and Co.: USA, 1975.
- 4. Devlin, R.M. and Witham, F.H. Plant Physiology, DBS Publishers and Distributors : Sbahadara, 1986.

Liberal Course (Optional)*

(BLO 5.7) Liberal Course History-II

MM : 100 (Internal 20, External 80)

Course Content

Unit 1

Political History Of Ancient India :

- Origin and early History of Gupts, Chandra Gupt First, Samundra Gupt, Kumar Gupt, Skand Gupt.
- History of Pushyabhuti Dynasity with special References to Harsh.

Unit 2

Art And Archaeology of Ancient India:

- Basic art froms Stupa ,rock cut art as Raths and Kailash Temple etc.
- Architecture icons and short account of their development.
- Art and Architecture 2500 BC-600 BC, Harapan, Buddhist art , Mauryan, Gandhar, Mathura, Gupts .

Unit 3

Early medieval period Chandel and Chalukya Dynesty:

- Origine of Rajputas
- Political and Cultural achievements of Chandel and Chalukya.
- Foreign Invasion as Mahmood Ghajnavi ,mahmood Gori and their Successor.

Unit 4

Delhi Sultnat and Mughals :

- Delhi Sultanate, its Political and Cultural (From 1206-1526)
- Mughal empire political, social and cultural .
- Maratha Empire with special References to Shivaji .
- Commence of Europeans .

Unit 5

Movement and Diverse Ideology:

- Freedom Movement ,Ideas and Ethes ,
- Indian Nationalism
- The Ideology of Ahinsa ,its Practical application special reference of M.K. Gandhi.
- Idealogy of Socialism, Secularism ,Humanism.

- Satish Chandra; Historiography, Religion and State in Medieval India.
- Jha and srimali; ancient indian history.
- B.D.Mahajan ;Middle history of india.
- N.C.E.R.T Books .

M M:100 (Internal 20, External 80)

Course Content

Introduction : A Reappraisal of the Concerns of Politics.

1. From institutional and state-centered conception of politics to politics as a study of relations of power in society.

2. The entry of hitherto marginal groups and issues into the political mainstream.

3. The transformation of the global balance of power in the late twentieth century.

Unit 1 Political Thought

Main features of Ancient Indian Political thought Manu and Kautilya Indian Renaissance & political ideas of Raja Ram Mohan Rai, Dayanand Sarswati & Vivekanand, BalGangadhar Tilak, Jay Prakash Narayan, Mahatma Gandhi, Pt Jawahar Lal Nehru

Unit 2 Environment and Development

1. The challenge to the dominant development paradigms corm the perspective of the environment : critique of Post-Enlightenment rationality.

2. The debates on appropriate technology, sustainable development, traditional systems/practices of medicine, indigenous systems of management of water, soil, forests.

3. The ecology movement - history and context of emergence ofwestern movements (e.g. Greenpeace, Friends of the Earth, CND) and non-western movements (Chipko, Silent Valley,

4. The contradictions of the dominant international economic order and the agenda of the environment - the use of environment concerns by the industrialized North as a weapon against the south.

Unit3 The changing character of socialism

1. The main features of socialist thought upto the 1980s,

2. Characteristics of socialist countries upto the 1980s.

3.Challenges after the 1980s.

- a. the collapse of the Soviet Union and Eastern Europe.
- b. features of the crisis response from within socialism
- c. impact on post-colonial societies/third world.

Unit4 The changing character of capitalism

1.From laissez-faire to welfare state.

2.Capitalism in the 1980s : Thatcherism and Reaganomics.

3. Transnational companies and their role in post colonial countries.

Unit5 Theory of International Relations

The study of International Relation : meaning & scope NAM : Origin ,role,re-oriantation UNO ,ASEAN & SAARC

READINGS

1. Held, D. (ed.). Political Theory, Today, Stanford University Press California, 1981.

2. Leftwitch, A. (ed.). What is Politics, Blackwell Publisher : London, 1984.

3.Wignaraja, P. (ed.). new Social Movements in the Souths : Empoweringthe People, Zed : London, 1992.

4.Barrett, M. Women's Oppression Today, Problems in Marxist Feminist Analysis, NLB : London, 1980.

5,Catharine, A. Mackinnon. Feminism Unmodified, Harvard UniversityPress : Cambridge, 1987.

6. Kishwar, M. and R. Vanita. (ed.). In Search of Answers IndianWornen's Voice from Manushi, Horizon India Books : New Delhi, 1991, 2nd Edition.

7. Kumar, R. The History of Doing, Kali For Women : New Delhi, 1993.

8. Rowbotham. S. Woman's Consciousness, Man's World, Viking Penguin New York, 1973.

:

9. Guha, R. The Uniquet Woods : Ecological Change and Peasant Resistance in the Himalaya, Oxford University Press : Delhi, 1991.

10. Mies, M. and V. Shiva, Ecofeminism, Kali for Women : New Delhi, 1993.

11.Nandy, A. Intimate Enemy : The Loss and Recovery of Self Under

Colonialism, Oxford University Press : Delhi, 1984.

12.Roy Burman, B.K. Tribal Population, Interface of Historical Ecology and Political Economy, in M. Miri. (ed.) Continuity and Change in Tribal Society, Indian Institute of Advance Studies : Simla, 1993.

BLO 5.9 Liberal Course:

Geography - II

MM:100 (Internal 20, External 80)

Course Content

Unit 1 Resource Geography : definition and classification of resources; land resource and land use classification; water resources - ground water and surface water; energy resources - conventional (fuelwood, coal, petroleum and hydro) and non conventional (solar, wind and geothermal); biotic

Unit 2 Agricultural Geography : types of farming; study of the following agricultural types - (a) shifting agriculture, (b) subsistance, (c) commercial,
(d) plantation and (e) dairy farming; study of the following crops - (a) wheat,
(b) rice, (d) cotton and (d) sugarcane; world agricultural problems.

Unit 3 Population Geography: demographic variables-fertility, mortality and migration; population growth and demographic transition model; causes and consequences in international migrations; population resource relationship-over, under and optimum population.

Unit 4 Transport Geography : world pattern of rail, r oad, air and water ways.

Unit 5 UnderstaridCng Maps and Diagrams (Practical) : use of thematic maps (dot, croropleth and isopleths method); located statistical diagrams (bar diagram, pie chart and line graphs).

READINGS

1. Alexander. K.W. and T.A. Hartshorne, Economic Geography, Prentice Hall :New jersey, 1988.

2. Berry, **B.J.L.** et. al. Economic Geography, Resource use, occasional choices and regional specialization in the Global Economy, Prentice Hall : New jersey, 1987.

3. Chandna, R.C. An Introduction to Population Geographyu, Kalyani Publishers: Delhi, 1987. (Hindi version available)

4. Grigg, D.B. An Introduction to Agricultural Geography, Hutchinson :London, 1984.

5. Hagget; P. Geography : A Modern Syunthesis, Harper and Row : New York, 1979.

6. Hudson, F.S. Settlement Geography. Macdonald and Evans : Plymouth, 1976.

7. Jarrett, H.R. Geography of Manufacturing, Macdonald and Evans : Plymouth, 1977.

8. Jasbir, S. and S.S. Dhillon Agricultural Geography, Tata McGraw Hill : NewDelhi, 1984.

9. Johnes, Hue. Population Geography, Harper and Harper : London, 1989.

10. Mitchell, B. Geogrphy and Resource Analysis, Longman • London, 1988.11.Zimmerman, E,W, Introduciton to World Resources, Harper and Row NewYork, 1964.

BLO 5.10 Liberal Course: Economics - II

MM:100 (Internal 20, External 80)

Course Content

Unit 1 Problems of economic development :

Development: meaning measurement and indicators of development, causes of under development, role of capital and technology; nature and causes of economic backwardness;

Unit 2 Objectives of planning; Planning in India, objectives of planning in India, strategy of growth in a mixed economy: role of public sector. Assessment of performance under Five Year Plan

Unit 3 Resource allocation across sectors;
Agriculture: Nature, importance, land returns,green revolution,agriculture price
Industry: Industrial development during the Plan
Services: Tax ,Balance at Payment, foreign Exchange, Multinational corporation

Unit 4 HDI, Population, health & economic development

Unit 5 Univariate frequency distributions : measures of location and of dispersion. frequency distributions, Correlation, regression. Index numbers of agricultural and industrial production, Statistical Analysis: Central Tendency

READINGS

1. Bhanduri, Amit and Deepak Nayyar. The Intelligent Persons Guide to

Liberalisation Penguin Books : New Delhi, 1996.

2.Chaudhary, P. India: Objectives, Achievements and Constraints', in P. Chaudhary,(ed.) Aspects of Indian Economic Development: A Book of Readings, Allen & Unwin : London, 1971.

3. Gupta, S.P. Statistical Methods, Sultan Chant! and Sons : New Delhi, 1989.

4. Jalan, Bimal. (ed.). The Indian Economy : Problems and Prospects, Penguin Books : New Delhi, 1992.

5. Kapila, Uma. Indian Economy : Issues in Development Planning and Sectorial Aspects, Academic Foundations : New Delhi, 2000.

6. Kapila, Uma. (ed.). Indian Economy since Independence, Academic Foundation : New Delhi, annual updated edition.

7.Mishra, S.K. and Puri. V.K. Indian Economy, Himalaya Publishing House :Bombay, annual edition.

8. Nurkese, R. Problems of Capital Formation in Underdeveloped Countries, Oxford University Press : Bombay, 1974.

9.Patel, I.G. 'Strategy of Indian Planning', in P. Chaudhary,(ed.) Aspects of Indian Economic Development: A Book of Readings. Allen and Unwin London, 1971.

10.Todaro, M.P. Economic Development in the Third World, Longman : New York, 1989, Chapter 1 and 2.

BLPR 5.1: Classroom Teaching

Unit 1:

Teaching as a Complex Activity:

Concept of Teaching: meaning, definition, characteristics, farms, Phases of Teaching: pre active, inter active, post active, Levels of Teaching: memory, understanding, reflective Basic teaching skills and competencies, Strategies and techniques of teaching.

Unit II:

Aims and objectives

Aims and objectives of teaching at primary, upper primary and secondary level school. General objectives. specific objectives, behavioural changes, educational objectives and teaching or learning objectives, classification of learning objective: cognitive, affective and psychomotor.

Unit III:

Pre- Planning for Classroom Teaching

Micro Teaching -Meaning, nature and significance of Micro Teaching. Need And Importance of Micro Teaching , Model of Micro Teaching as-Stenford University Pattern,NCERT Pattern .Advantages and Limitation of Micro Teacching, Different Skill of teaching- as Introduction, Explanation, Stimulus Variation, Questioning , Reinforcemrnt , Blackbord..

Unit IV:

Planning for Classroom Teaching

Meaning, Definition and need of lesson plan, Utility and Importance, Characteristics of good lesson plan, Steps of Lesson Plan, Classification of lesson Plan, Approaches of lesson plan : Herbart, Morrison, Dewy & Kilpatric. Design of lesson plan as Science, Social Science, Language, Computer, Art, Physical Education.

Unit V

Teaching as a Profession:

Nature and characteristics of a profession, Teaching as a profession concept and controversies, Expectations and responsibilities of a teacher, Role of teacher in teaching learning situations as- (a)transmitter of knowledge (b) facilitator (c) negotiator (d) Co learner, Professional ethics and code of conduct for teacher.

Practical Activities

- A: To develop of Teaching Skills (through teaching of 10 Micro lessons)
- **B**: 4 week internship in primary and elementary schools
 - Observation of School Activities and Preparation of Report
 - Observation of 10 Teaching classes and Preparation of Report
 - Preparation of lesson plans and teaching of 20 lesson plans in primary and elementary schools (10 in each)
- C: Documents and text analysis
 - Study of documents related to educational policy and planning and preparation of report
 - analysis of text books of primary and elementary education

D: Preparation and use of teaching aids and learning material

B.EI.Ed. Sixth Semester BLF 6.1 : Logico Mathematics Education

MM : 50 (External -40 Internal -10)

Aims of the Course

The Course will enable student-teachers to-

- Gain a critical understanding about logico mathematics Education.
- Enjoy mathematics and develop patience and persistence when solving problems.
- Become confident in using mathematics to analyse and solve problems both in school and in real-life situations.
- Develop the knowledge, skills and attitudes necessary to pursue further studies in mathematics.
- Develop a critical appreciation of the use of information and communication technology in mathematics.

Course Content

Unit 1

Reasoning

Meaning and Definition of Reasoning, Steps and its Kinds, Training and Logical Thinking, Fundamentals of Logic, Definition of Math, Need and Importance of Math, Objective of Mathematics Teaching.

Unit 2

logico-mathematics thinking : Meaning, Definition and Classification of Thinking, Influencing factor of Thinking. Learning Theories of Mathematics as Piaget, Bruner, Dienes and Vygotsky. General Theories of Mathematics Learning. Use and Importance of Laboratory, Museum, ICT lab and Class-room in Mathematics Learning.

Unit 3

Language and mathematics: Language and its importance, Nature of Language, Meaning and Definition of Math, Language of mathematic, Role of Mathematic Language in Mathematic Teaching, Meaning and Definition of Mathematic Curriculum ,Defects of the Present Curriculum of Mathematic , Principal of the Mathematics Curriculum Construction, Mathematics for Different Stages, Need And Importance of Teaching Aids for Mathematics teaching ,kinds of Teaching aids.

Unit 4

Mathematics in the context of schools :

Meaning and importance of School. Mathematics as a compulsory subject- its merit and demerit.Use and Importance of Mathematics kit at School Level. Need And Importance of Mathematics Text Book , Characteristics of a good Mathematics book. Behaviour of Mathematics Class at School Level. Aims of Mathematics Teaching

Unit 5

Content specific pedagogy :

Meaning of Pedagogy and Pedagogical Analysis, Steps of Pedagogy, Content Analysis as- Number, place-value, fractions, decimals, Puzzles and Seating Arrangements ,Syllogism, Coding-decoding, , Logical Reasoning. Set and its classification.

- 1. Clements, D.H.. and MT. Battista, Geometry and Spatial Reasoning, in 'A. Grouws (ed), Handbook of Research on Mathematics Teaching and Learning, Reston : V.A. 1992.
- 2. IGNOU, Learning Mathematics, LMT-01, IGNOU: New Delhi 2001.
- 3. National Council of Teachers of Mathematics (NCTM). Curriculum and Evaluation Standards for School Mathematics, NCTM, Reston: V.A. 1989.
- 4. National Council of Teachers of Mathematics (NCTM), Professional Standards for Teaching Mathematics, NCTM, Reston : V.A. 1989.
- 5. National Council ol Teachers of Mathematics (NCTM), Assessment Standards for School Mathematics, NCTM, Reston : V.A. 1989.
- 6. NCTM Yearbook, Communications in Math9tatics, K.-12 and Beyond, NCTM, Reston: 1986.

BLF 6.2 : Pedagogy of Environment Studies

MM : 50 (*External* -40

Internal -10)

Aims of the Course

The Course will enable -

- 1. To help pupil teachers acquire an awareness of and sensitivity to the total environment and its allied problems.
- 2. To help pupil teachers acquire a set of values and feelings of concern for the environment and the motivation for actively participating in environmental improvement and protection.
- 3. To help pupil teachers acquire the skills for identifying and solving environmental problems.

4. To provide pupil teachers with an opportunity to the actively involved at all

levels in working towards resolution of environmental problems

Course Content

Unit- I Concept of Environmental Studies

- Introduction ,Meaning , And Natur of Environmental Studies.
- Its scope integration realeted to the Physical ,Social, Histrocial And Cultural Component.
- Importance & objectives of Environmental Studies.
- Environmental Studies And Environmental Education.

Unit- II Basic Considerations In Developing Curriculum

- Class 1st, Class 2nd and Class 3rd 5th Level.
- A Review of Different Sets of Curricular Materials Including Text Books.
- Integration of Environmental education with the general school curriculum.
- Use the Role of mass media: Newspapers, Radio, Television & others A.V. Aids to Develop the curriculum.

Unit- III Correlation Between Envieonmental Education And other Subject

- Envieonmental Education and Science(Botony, Zoology, Chemistry, Physics, Helth Education and Other.).
- Envieonmental Education and Social Sciene (History, Economics, Civics, Sociology, Geography.

Unit- IV Methods and Approaches

• Methods and approaches: Environmental Education and Approach, Meaning and

Kinds of Environmental Approach And Skill, Inquiry approach, observation, self

study, discussion, assignments.

Unit- V Extension of Environmental Education.

- Role of teachers in creating awareness of the consequences of Environmental Education, inculcating new values and attitudes leading to modification of students behavior.
- Role Of Local Bodies, State Government, Central Government And different types of International Institution And NGO to Extension of Environmental Education.
- Working with community to build awareness about Environmental Education

PRACTICAL WORK TO BE UNDERTAKEN :

(MM:10 INTERNAL)

(i) Organising and planning an excursion; learning how to make observations and recording conducting surveys.

(ii) Using equipment and materials films, reports, documents, newspapers.

local maps, atlas, wall charts:; map drawing and reading weather charts: making charts, diagrams and models.

(iii) Collection and presentation of specimens: leaves, rocks, stamps, flags, news items etc.

(iv).Undertaking a project e.g. planting and nurturing of useful trees plants.

- 1. Centre for Cultural Resource and Training, Environmental Education and Art Activities, CCRT New Delhi, 1983.
- 2. Centre for Environmental Education. The Green Teacher Ideas, Experiences and Learnings in Educating br the Environment, CEE: Ahmedabad, 1997.
- 3. CEE. Joy of Learning, Handbook for Environmental Educational' Activities, CEE: Ahmedabad,
- 4. Collette, AT. and EL. Chiapetta. Sdence Instruction in Middle and Secondary Schools, Times Mirror/Mosky College Publishing St. Iouis, 1984.
- 5. Driver, R., E. Guesene and Tiberghien. Children's Ideas in Science, Open University Press: Milton Keynes, 1985.
- 6. Hardeovik, SW. and Hottgreive, D.E. Geography for Educators Students, Themes and Concepts, Prentice Hall: UK, 1996.

BLPR 6.1

Classroom Management, Material Development and Evaluation (MM -50)

This program begins with systematized observations and analysis of pedagogic practices in conventional and innovative settings. The student-teacher is facilitated to evolve pedagogic practices that address crucial concerns of classroom management, design and choice of activities, material development and evaluation.

BLPR 6.2 Colloquia , Enrichment & Health Education

(MM -50)

- **Group presentations in Colloquia assessment** based on identification of key elements, clarity and organization of ideas, open mindedness to critique, ability to substantiate arguments, critical and reflective questioning, Cooperation and coordination among group member
- Colloquia, Enrichment
- Health Education
- Presonality Development

BLF 7.1

Gender And Schooling

Unit 1 -Gender and gender difference

• Meaning definition and types characteristics of gender, difference between sex and gender characteristic of male gender and female gender

Unit 2 - Perspective of gender

- Psychological and sociological perspective of gender
- Feminist and socialist, psycho-analytical perspectives

UNIT 3 -Social construction of gender

- Socialization, family and gender identity, role of media, Gender and stereotypes
- Caste, class, relation between community and gender

Unit 4 - Gender inequality in schooling

- organisation of schooling, gender bias in textbook curriculum,
- Choices and hidden curriculum, teacher attitude (classroominteract and peer culture)

Unit 5 – Gender and schooling

- Meaning , definition and importance of school
- Function of school(formal and informal)
- Suggestion for effective schooling in Indian context

- Bhasin, Kamla and Nighat Said Khan. Feminism and its Relevance in South Asia, Kali for Women: New Delhi, 1986,
- Chanana, Karuna. (ed.) Socialisaiton, Education and Women, OrientLongman: New Delhi, 1988.
- Chapman, Karen. The Sociology of Schools, Tavistock : London, 1986, pp. 61-80.
- Gilligan, Carol. 'Do Women Speak in a Different Moral Voice', in M.R. Walsh, The Psychology of Women, Harvard University Press, Cambridge, 1987, pp. 274-277.
- 5. Lipsitz Sandra, Bern, 'Gender Schema Theory and its Implications for Child Development : raising gender asthmatic children in a gender schematic society', in M.R. Walsh, (ed.). The Psychology of Women, Harvard University Press Cambridge, 1987, pp. 206-266.
- Mandell, Nancy (ed.), Feminist Issues: Race, Class and Sexuality, Prentice Hall: Ontario, 1995.
- 7.Nambissan, Geetha B. Gender and Education : The Social Context of Schooling Girl Children in India. Perspectives in Education, 1995, 2,3 and 4 : 197-209.
- Statham, June. Daughters and Sons, Basil Blackwell: London, 1986.
- 9.Tong, Rosemarie. Feminist Thought: A Con iprehensive Introduciton, Westview Press: San Francisco, 1989.

BLPR 7.1 Innovative Teaching Aids

(MM 50)

- Preparation of innovative teaching aids
- Improvisation of apparatus:

BLPR 7.2 School Internship

Practical Activities: : School Internship: (MM 250)

Each intern is expected to spend 16 weeks in the internship programme. Of these, one week is expected to be spent on classroom observations at the beginning of the internship. The subsequent 15 weeks are to be divided into two blocks for regular teaching. The first block of 7-8 weeks is to be spent in teaching a primary class (I-V). In the second block of 6-7 weeks, the interns will teach middle level (VI-VIII) classes. The intern is expected to watt a minimum of four days per week in this duration he/she will teach 30 lesson in primary class (1-V) and 30 lesson in middle level (VI-VIII) classes. The inter is expected to teach a minimum of four days per week, adding up to a total of

64 days. It is expected that the internship programme will be considered complete only after an intern has satisfied the requirement of one week of observations and a minimum of 55 days of teaching.

The main activities of internship programme are as follows:

I. Reflection on Classroom Observations: Observe classroom to understand children's needs and levels of learning, classroom practices and the classroom culture. Interns are expected to observe the classroom they will teach in during internship.

II. Rapport Building with Teachers: Establish rapport with the regular staff of the school: in order to sustain a positive and professional work culture during internship.

III. Classroom observations: Interact with B.E1.Ed. faculty to reflect upon experiences in the school during observations and rapport building. This is to facilitate the interns to make sense of existing work and learning conditions. This in turn will help the process of translating ideas of teaching learning into practice.

IV. Developing Units Plans VI Class Room Teaching:

BLF 8.1

Curriculum Studies

Unit-1 Curriculum :

• Meaning, Definition and Area, Determinates of curriculum, Aim of curriculum , Difference between curriculum and content. Theories of curriculum development .

Unit - 2 Curriculum in NCF :

• National aspiration and needs in curriculum, Historical background of national curriculum framework, Aims of NCF, Major Theories of national curriculum framework.

Unit-3 Foundation Of Curriculum :

• Philosophical, psychological and sociological foundation of curriculum, National Education policy (1986) and curriculum. National curriculum of primary Education.

Unit-4 Curriculum Organization :

• Organization of curriculum, Models of curriculum organization. Types of curriculum, integrated curriculum, Discipline cantered curriculum.

Unit-5 Curriculum Design & Evaluation :

 Basic considerations in curriculum design(with reference to John Dewey), Philosophical thought and philosophical theory. Curriculum according John Dewey. Evaluation of curriculum and evaluation process.

- 1. Avalos, Beatrice. Teaching Children of the Poor, IDRC: Ottawa
- 2. Badheka, Gijubhai. Divaswapna, National Book Trust: New Delhi, 1990.
- 3. Deviprasad. Art: The Basis of Education, National Book Trust: New Delhi, 1998.
- 4. Dewey, John. Democracy and Education, National Book Trust; New Delhi, 1998.
- 5. Gandhi, M.K. Hind Swaraj or Indian Home Rule, Navjivan Trust: Ahmedabad, 1938.
- 6. Kumar, Krishna. What is Worth Teaching, Orient Longman: New Delhi, 1994.
- 7. Kumar, Krishna. Learning From Conflict, Orient Longman: New Delhi, 1996.
- 8- Montessori, Maria. The Discovery of the Child, Kalashetra Madras, 1948.
- 9.Sarangapani, Padma M. 'Children's Construction of Knowledge' in T.S. Saraswati (ed) Culture, Socialisation and Human Development: Theory, Research and Applications in India, Sage : New Delhi, 1999.
- 10.Stenhouse, Lawrence. An Introduction to Curriculum Research and Development, Heinemann: London, 1975.
- 11. Sykes, Marjorie. The Story of Nai Talim, Nai Talirn Sarniti: Wardha, 1988.
- 12.Seminar. 400, December 1992: Ideology and Education; 493, September 2000:Redesigning Curriculum, Seminar: New Delhi.
- Taba, Hilda. Curriculum Development: Theory and Practice, Harcourt, Brace and Wald: New York, 1962.

BLOA 8.1

Language

Unit 1 - The learner :

- Social and individual aspects, family background, schooling, the role of mass media,
- Learner's attitude and motivation .

Unit 2- Learning contexts :

- Language typology and learning situations, monolingual, bilingual and multilingual society
- First language and second language acquisition.

Unit 3 - Methods and models :

• Language learning methods – as grammar -translation method, audio-lingual method, direct method, communicative language learning method, monitor model, total physical response.

Unit4 - Language acquisition in multilingual settings :

• Theory of interference, contrastive analysis, error analysis.

Unit 5 – Materials and teaching aids :

• Selection of materials , gradation , levels of readability , teaching aids , language lab and CALT (Computer Assistated Language Teaching).

Unit 6- Evaluation :

• Types of tests, types of question items.

- 1. Anderson, Richard C. et. al. (eds). Learning to Read in American Schools, Lawrence Erlbaum Associates: New Jersy, 1984.
- **2**. Butler, A. and J. Turbill. (eds.). Towards a Reading Writing Classroom, Heinemann: Portsmouth, NH, 1984.
- **3**. Donal, j. Len and Charles K. Kinzer. Effrective Reading Instruction, Prentice Hall : UK, 1995, Chapters 10 and 11.
- **4**. Rhodes, Lynnk. and Nancy L. Shankin. Windows into Literacy: Assessing Learners K-8, Heinemann: Portsmouth, NH, 1993.
- **5**. Rosenblatt, Louise M. What Faxt Does This Poem Teach: Language Arts, Vol. 57 No.4, 1980.
- 6. Teale, W. and E. Sulzby. (eds.) Emergent Literacy: Writing and Readings, Nerwood: New Jersey, 1986.
- 7. Tompkims, Gail E. Teaching Writing: Balancing Process and Product; McMillan; California, 1994.

BLOA 8.2 Mathematics

Unit 1 : Mathematics

 Meaning, definition, pattern, reasoning, generalisation, nature of mathematics, axioms and postulates, explanation and proofs,, necessary and sufficient, nature of mathematics in the curriculum, contribution of Indian mathematicians, history of mathematics, aesthetic scenes in mathematics, scope of mathematics

Unit 2 :Methods of teaching mathematics

• Inductive-deductive, analytic, synthetic, heuristic, laboratory, demonstration, project and lecture

Unit 3 : Parts of mathematics

• Pedagogical consideration in geometry arithmetic, algebra number, statistics, ratio and proportional reasoning

Unit 4 : Aim and objectives of teaching mathematics

• Meaning and definition of aims, taxonomy of teaching objectives, need for writing objectives in behavioural terms, unit and lesson planning in mathematics

Unit 5 : Teaching aids in mathematics

- Definition, needs and importance of A.V aids, classification
- Textbooks : characteristics of a good textbook, development of children's logical thinking
- Feedback, testing ,evaluation and action research in teaching of mathematics

- Brooks, J.G. and M.G. Brooks. Honoring the Learning Process: In search of Understanding the Case for Constructionist Classrooms. Alexandria: V.A.1993.
- 2, Currant, R. and H. Robbins. What is Mathematics? An Elementary Approach of Ideas and Methods, Oxford University Press: New York, 1996.
- 3. Dickson, Linda, Margaret Bram and Olwen Gibson. Children Learning Mathematics: A Teachers Guide to Recent Research. Hold, Rinehart and Winston: London, 1984.
- 4. Dickson, L., et. al. Children Learning Mathematics A teacher's guide to recent research, Rinehart and Winston : London, 1984.
- 5. Grouws, P.A. Handbook of Research on Mathematics Teaching and Learning, Rest: V.A, 1992.
- 6. Prevost, F.J. Rethinking How We teach: Learning Mathematical Pedgagogy, The Mathematics Teacher, Volume 86, (1).
- 7. Skemp, Richard R. Mathematics in the Primary School, Routledge; London, 1989.

BLOA 8.3

Natural Science

Unit 1

- Nature and structure of natural science
- Aim and importance of natural science in the curriculum of upper primary level

Unit 2

- Approaches and strategic of learning natural science
- Teaching methods : observation methods , project method, questioning methods, laboratory methods ,experimental methods, problem solving methods

Unit 3

- Taxonomies of educational objectives
- Micro teaching
- Preparation of micro lesson plan
- preparation of unit plan
- Action research

Unit 4

- Developing and designing of curriculum
- Textbook : importance ,types and characteristics
- Teacher : importance and characteristics
- Evaluation of science
- Diagnostic and remedial evaluation
- ICT and teaching aids

Unit 5

- Co-curricular activities
- Aim and objective of teaching science at secondary school stage
- Formulation of specific in behavioural terms

- 1. Collette, Alfred T. and Eugene L. Chiappetta, Science Instruction in theMiddle and Secondary Schools, MacMillan: New York, 1994.
- 2. Eklavya, Hal Viganik Class 6, 7, 8. Madhya Pradesh Pathya Pustak Nigam:Bhopal, 1978.
- 3. Esler, W.K. Teaching Elementary Science, Wadsworth: Caliturnia, 1973.
- 4. Gega, P.C. and J.M. Peters. Science in Elementary Education, Merrill: New Jersey, 1998.
- 5. Jevons, F.R. The Teaching of Science Education, Science and Society, George Allen and Unwin : London, 1969.
- 6. NCERT. Integrated Science Curriculum for Middle School, NCERT : New Delhi, 1982.
- 7. Sundarajan, S. Teaching Science in Middle School: A Resource Book, Orient Longman: Hyderabad, 1995.
- 8, UNESCO. Integrated Science Teaching in the Asian Region, A Report of a Regional Workshop, organized by UNESCO. Regional Office for Education in Asia, Bangkok, 1971.
- 9. UNESCO, Source Book for Science Teaching, UNESCO : Paris, 1966.

BLOA 8.4

Social Science

Unit 1 : Social science teaching

- It's meaning, significance and objectives
- Relationship of social science teaching at primary level

Unit 2 : To development of concept

• Development of concept, skills, tempers with the help of social science teaching, changes and continuity, work and reason, period perspective and time scale, understanding of compassion

Unit 3 : Method and material

- Enquiry and evidence based teaching
- Identification of questions problem (topics and subjects)
- Evaluation of illustration

Unit 4 : Major method of social science teaching

- Connectional method : textbook method lecture method
- Modern method : observation method, experimental method, problem solving method, unit plan, survey method, inductiondeduction method, comparative method, question answer method, Dalton method, story method

Unit 5 : Different approaches of lesson plan

- Preparing a lesson plan
- Bloom taxonomy
- Herbart's taxonomy

Readings:

- 1. Kochhar, S.K.: Teaching of Social Science, Sterling Publication, New Delhi.
- 2. Bunning, A.C.: Teaching of Social Studies in Secondary Schools, Mc Graw Hill Book Company, Inc., New York.
- 3. High, J.: Teaching Secondary School Social Studies, The Macmillan Company, New York.
- 4. Tripathi, S.: Teaching Methods, Radha Publications, New Delhi.
- 5. Chauhan, Innovations in Teaching Learning Process, Vikash Publication House, New Delhi.
- 6. Siddiqui, M.H.; Excellence of Teaching, Ashish Publication House, New Delhi,

BLOB 8.1

Computer Education and understanding ICT

Unit 1: Introduction to computers

- Meaning characteristics history of computers objectives
- Component of computer system CPU keyboard mouse input devices output devices Computer memory
- Concept of hardware and software

Unit 2 : Basic knowledge of MS Office

- MS Word
- Excel
- PowerPoint Presentation

UNIT 3 : Internet

- Introduction of internet, www, web browsers
- Communication and collaboration (basic knowledge of email)

Unit 4 : E-learning and Web based learning

- E-learning : concept and nature, web based learning, virtual classroom, EDUSAT
- Educational applications and social media(WhatsApp Facebook Twitter Instagram and others)

Unit 5 : ICT in education

- Concept, meaning, nature and importance of ICT in education, need of ICT in education
- Scope, advantage and limitation of ICT in education
- Challenges in integrity ICT in school education

- 1. Aggarwal J.C. (1995). Essentials of Educational lechnology Learning Innovations, Vikas Publications, New Delhi.
- 2. Grant Wiggins, Jay McTighe (2005). Understanding by Design, 2nd Edition, Association for Supervision and Curriculum Development
- 3. Intel® Teach to the future Pre—Service Curriculum Manual,Edition 2.0 (with Companion CD),
- 4. Kumar, K.L.,2000, Educational Technology, New Age International (P) Ltd. Publishers, New Delhi.
- 5. Sampath, K, et al, 1998, Introduction to Educational Technology, (4th Edition) Sterling Publishers, New Delhi.
- 6. Underwood, Jean D.M., and Geoffrely Underwood, 1990, Computers and Learning-Helping Children Acquire Thinking Skills, Basil Blackwell, Oxford.

BLOB 8.2

Special Education

Unit 1- Special education

• Meaning definition aims and scope of special education, needs of special education

Unit 2-History of special education

- History of special education in India post independence development of special education in India
- Recommendation given in national policy of education 1986 regarding special education

Unit 3-Exceptional children

- Kinds of exceptional children, characteristic of normal children and exceptional children
- Mentally retired children
- Learning disability
- Delinquent child

Unit 4-Universalization of education and special education

- Meaning of universalisation of education
- Integrated education for handicraft types
- Aims of integrated education
- National and international institution for handicraft welfare

Unit 5-Guidance for exceptional children

- Exceptional children and educational guidance
- Role of guidance services in exceptional childrenpersonality development
- Role of counselling services in exceptional children personality development

1. Alur, Mithu (2010). Journey for inclusive education in the Inc sub continent. Routledge

2.Burrello N.C., Lashley C, and Beatty E. E. (2001) Educating all students together.

How school leaders create Unified System, Corwin Press, Inc., Sage Publication Company.

3. Dash, Neena (2012). Inclusive education for children with special needs. Atlantic Pub.

4. Gearheart,B.R, Weishahn, M. W; Gearheart C.J.(1992). The Exceptional Student in the Regular classroom (5th Ed.) Macmikar Publishing company.

5. Hallahan, D.P., Kauffma, J.M., Pullen, P.C. (2009). Exceptional Learners — An

Introduction to Education (11th Ed) Allyn& Bacon, Pearson Education, Inc.USA.

6. Hegarty S and blur M (2002) Education and Children with special needs — from Segregation to Inclusion (Ed) Sage Publication

7. Internet Source, MHRD (2005b). 'Action Plan for Inclusive Education of Students and Youth with Disabilities'.

8. Internet Source, SSA (2007). 'Basic features of SSA', Inclusive education in SSA, Retrieved from www.ssa.nic.in inclusive education / ssa_plan_manual.

9. Jangira, N. K. (2002). Special educational needs of students and young adults: an unfinished agenda, in: M. Alur& S. Hegarty (Eds) Education and students with special needs: from segregation to inclusion New Delhi, Sage,

10. Jhulka, A. (2006) "Including students and youth with disabilities in education a guide for practioners" NCERT, New Delhi

BLPR 8.1

Project Work

Project: (MM- 50)

• Every student is required to take up project work in specific areas of interest. Project work is designed to initiate students into a process of scientific enquiry, through classroom-based research. Small projects on specific themes such as miscue analysis gender stereotypes, error analysis, children's understanding of specific concepts and so on can be taken up.

• Each student is expect to undertake two or three small projects. these could be related to pedagogic studies specific to language, maths and environmental sciences, or be based on any of the foundation or specialized courses of fourth year.

• Students interns may use their experiences of teaching identifying project themes and undertake the task of data-collection during internship. Each individual project will be conducted under the guidance of a faculty member.

• It is expected that the research undertaken will enable students to cultivate skill systematic observation, documentation, critical analysis and interpretation. This will create a teacher oriented towards probing into children's learning processes, with the objective of improving classroom practices. Students will be expected to submit a short report on each project.

BLPR 8.2

Physical Education & Its Lesson Plan

(MM 50)

- Physical Education & Its Lesson Plan
- Academic Enrichment Activities