

# Curriculum Framework Master of Education (2- Year) Academic Year 2023-25

**Based on NEP 2020**



॥ न हि ज्ञानेन सदृशं पवित्रमिह विद्यते ॥

**भारतीय शिक्षक प्रशिक्षण संस्थान, गांधीनगर**  
**Indian Institute of Teacher Education, Gandhinagar**  
**(A State Public University Established by Government of Gujarat)**

## Curriculum Framework Master of Education (2-Year) 2023

Published by

**Dr. Himanshu C. Patel**

**Registrar**

Indian Institute of Teacher Education

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### From the Desk of Vice-Chancellor....

Dear All,

National Education Policy-2020 (NEP-2020) has been a policy to place Indian Education System on the global platform. It has been guiding us to reframe educational ethos in global context intervening Indian Knowledge System. India has been regarded as one of the ancient educational system and world was attracted towards the system our forefathers invaded for centuries. It has been our hard luck that the Centres of Knowledge, and Teaching and Learning like; Takshshila, Nalanda, Vallabhi, etc. were attacked and vanished the places where the Knowledge was practiced. But the spirit and zeal, which we have inherited still exists in hearts of Indians from ages. It is the right time to explore our culture, traditions, ethos, values, rituals to the world and it will bring solace to millions and millions of individuals all over the Globe; because we believe in “वसुधैव कुटुम्बकम्” and it can be proved with how Indus Valley Culture has possessed the real essence of these words. Indian Subcontinent has been found under tremendous disturbance and so is the world. If we wish, as Global Citizen, peace and harmony among all, we need to have paradigm shift in Educational System. This shift will place India as “विश्वगुरु” and that is the mission envisaged in NEP-2020.

Indian Institute of Teacher Education, Gandhinagar is an institute with difference because it has been instituted for the noble cause of uplifting the standards of School Education through Teacher Education, because the Teacher can reestablish the Indian Ethos in global context. The teacher is pivot in bringing out dynamism into young learners and there may be different society in future. This global community has power to establish peace and harmony into the world.

So, looking at need of futuristic societies and recommendations of NEP-2020, IITE has revised its curriculum on guiding principles of NCFTE-2009 and NEP-2020. The revised curricula is within recommendation of NEP-2020 of Integrated Teacher Education Programme (ITEP) and all guiding principles and recommendations of NCTE's Curriculum Committee have been incorporated. It is certain that these curricula will help prospective teachers and prospective teacher educators to develop holistically.

On publishing the curriculum framework for all courses offered by IITE, I thank faculties and Members of BoS and Academic Council for wholehearted efforts in bringing out these curricula in very short notice. It is also a request to all stakeholders to review and let us know what the best can be added to these curricula for making it more comprehensive and updated.

Wishing all of you all the best.

5<sup>th</sup> September, 2023

Gandhinagar

**Dr. Harshad A. Patel**

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**Curriculum Framework  
M.Ed. (2-Year)  
in force from  
Academic Year 2023-25**

**Curriculum Framework Master of Education (2-Year) 2023**

Sr. No	Area	Sr. No	Courses	Credit Per Sem					Total per Area
				S-1	S-2	S-3	S-4	Total Credit	
1	Learner Studies	1	Psychological Foundations in Education	4				4	26
		2	Guidance & Counselling Services(O3)			4		4	
	Contemporary Studie	3	Teacher Education				4	4	
	Educational Studies	4	Philosophical and Sociological Foundations in Education	4				4	
		5	Foundational and Prepratory Stage in Education (O1)	4				4	
		6	Middle and Secondary Stage in Education(O1)						
		7	Higher Education(O1)						
		8	Policy, Politics and Economics of Education	2				2	
		9	Indian Knowledge System				4	4	
<b>Total</b>				<b>14</b>	<b>0</b>	<b>4</b>	<b>8</b>	<b>26</b>	
2	Curriculum Stuiess	1	Inclusion: Concept & Policy Framework			4		4	28
		2	Curriculum Planning, Evaluation and Research				4	4	
		3	Technology in Education			4		4	
	Assessment and Evaluation	4	Measurement and Evaluation			4		4	
	Enhancing Professional Capabilities	5	Management & Administration		4			4	
		6	Academic Writing		4			4	
		7	Environment Education (O4)				4	4	
		8	Value Education (O4)					4	
<b>Total</b>				<b>0</b>	<b>8</b>	<b>12</b>	<b>8</b>	<b>28</b>	
3	Internship	1	Internship MEd-I		2			2	
		2	Internship MEd-II			2		2	
4	Research	1	Methods of Research in Education:I	4				4	26
		2	Methods of Research in Education:II		4			4	
		3	Educational Statistics-I (O2)		4			4	
		4	Educational Statistics-II (O3)			4*		4*	
		5	Psychological Testing(O2)		4*			4*	
		6	Preparation and Presentation of Theme Paper	2				2	
		7	Dissertation I - Research Proposal		2			2	
		8	Dissertation II - Tool Development			2		2	
		9	Dissertation III - Report Submission				4	4	
<b>Total</b>				<b>6</b>	<b>12</b>	<b>4</b>	<b>4</b>	<b>26</b>	
<b>Total</b>				<b>20</b>	<b>20</b>	<b>20</b>	<b>20</b>	<b>80</b>	<b>80</b>

# SEMESTER I

**Semester - I**

	<b>Total papers</b>	<b>Hours</b>	<b>Credit</b>	<b>Internal</b>	<b>External</b>	<b>Total</b>
<b>Theory</b>	5	270	18	135	315	450
<b>Research</b>	1	60	2	50	0	50
	<b>Total</b>	<b>330</b>	<b>20</b>	<b>185</b>	<b>315</b>	<b>500</b>

<b>Sr. No</b>	<b>Title</b>	<b>Type</b>	<b>Nature of Paper</b>	<b>Hours</b>	<b>Credit</b>	<b>Internal</b>	<b>External</b>	<b>Total</b>
1	Psychological Foundations of Education	Theory	Compulsory	60	4	30	70	100
2	Methods of Research in Education I	Theory	Compulsory	60	4	30	70	100
3	Philosophical and Sociological Foundations in Education	Theory	Compulsory	60	4	30	70	100
4	Foundational and Preparatory Stage in Education/ Middle and Secondary Stage in Education/ Higher Education	Theory	Optional	60	4	30	70	100
5	Policy, Politics and Economics of Education	Theory	Compulsory	30	2	15	35	50
6	Preparation and Presentation of Theme Paper	Practical	Compulsory	60	2	50	0	50



## Psychological Foundations of Education

### Learning Outcomes:

Prospective teacher educator...

- Understands the nature of human growth and development.
- Understands learning as a process and the factors affecting it.
- Understands the concept and process of learning acceleration.
- Develops their abilities to apply different learning theories according to the demand of the situation.
- Develops the ways of enhancing some mental abilities of the learners.
- Develops a proper perception regarding theories of personality.
- Develops skill of guidance and counselling

### Unit 1: Schools of Psychology and Theories of Learning

- 1.1 Introduction to various Schools of Psychology: Structuralism, Functionalism, Behaviourism, Gestalt School, Psychoanalytic School, Humanistic School, and Cognitive School
- 1.2 Learning Curve, Gagne's Theory of Hierarchy of Learning, Bandura's Theory of Social Learning
- 1.3 Hull's Theory of Learning, Bruner's Learning Theory
- 1.4 Insightful Learning, Tolman's Learning Theory

### Unit 2: Intelligence and Personality

- 2.1 Intelligence: Stenberg's Theory of Intelligence, Social Intelligence  
Multiple Intelligence: Concept, Gardner Theory of Multiple Intelligence
- 2.2 Emotional Intelligence: Concept And Daniel Goleman's Theory
- 2.3 Personality: Freud's Structure of The Human Mind, Freudian Psychoanalytic Theory of Personality, Carl Rogers's Humanistic Theory of Personality,
- 2.4 Erikson's Theory Of Personality, Jung's Theory Of Personality and Gordon's Allport's Trait Theory Of Personality

### Unit 3: Aptitude, Interest, Thinking, Reasoning

- 3.1 Aptitude: Concept, Nature, Types, Uses, Advantages, Limitations, Measurement  
Difference: Aptitude and Intelligence, Aptitude and Achievement , Aptitude and Interest
- 3.2 Interest : Concept, Development and Identification of Interest
- 3.3 Attention: Concept, Characteristics, Factors affecting Attention, Types
- 3.4 Reasoning: Concept, Characteristics, Steps, Types

### Unit 4: Guidance and Counselling

- 4.1 Guidance: Concept, Nature, Principles and Need of guidance  
Types: Individual guidance, Educational guidance, and Vocational guidance
- 4.2 Counselling: Concept, Nature, Principles and Need of counselling  
Types: Directive Counselling: Steps, Limitations

Non-Directive Counselling: Steps, Limitations

Eclectic Counselling: Steps, Limitations

4.3 Approaches: CBT, REBT

4.4 Carl Roger's Client centred Theory

**Mode of Transaction:** Group discussion, Lecture-cum –discussion, Panel discussion, Symposium, Reports, Research Journals, School visits and sharing of experiences

**Suggested Activities:**

- To organize a seminar on the current topic of educational psychology.
- Visit of Psychological lab and get acquainted with psychological equipment.
- Preparation of any tool on intelligence and its administration on five students
- Conduct a case study on one student who has difficulties in learning in primary years.
- Preparation of learners' profiles based on cognitive and non-cognitive characteristics in order to depict individual differences at the primary or secondary stage.

## Methods of Research in Education I

### Learning Outcomes:

Prospective teacher educator...

- Understands the basics of educational research.
- Develops the skill of reviewing related literature and previous research.
- Comprehends the meaning of variables, objectives and hypotheses of research.
- Develops understanding of population, sample and sampling technique.

### Unit 1: Basics of Educational Research

- 1.1 Research: Definitions, Meaning and Characteristics
- 1.2 Types of Research:  
Fundamental Research, Applied Research, Action Research;  
Quantitative Research, Qualitative Research
- 1.3 Educational Research: Definitions, Meaning and Characteristics
- 1.4 Areas of Educational Research, Steps of Educational Research Process

### Unit 2: Review of Related Literature

- 2.1 Review of Related Literature: Meaning and Need  
Sources: Primary, Secondary and Tertiary
- 2.2 Types of Review: Traditional or Narrative, Systematic, Meta-analysis, Meta-synthesis
- 2.3 Conceptual and Theoretical Framework; Operationalisation of terms used
- 2.4 Criteria for Selecting Research Problem:

### Unit 3: Objectives , Variables, and Hypotheses of Research

- 3.1 Research Problem and Research Questions: Characteristics, Points to be kept in mind
- 3.2 Objectives of Research: Points to be kept in mind and Importance
- 3.3 Variable: Meaning and Types- Independent, Dependent, Moderator, Controlled and Intervening & Confounding Variable
- 3.4 Hypothesis: Concept and Characteristics,  
Types: Declarative, Directional, Non-directional, Question Form, Null and Research Hypothesis

### Unit 4: Population, Sample and Sampling Technique

- 4.1 Universe and Population: Concept and Characteristics
- 4.2 Sampling: Meaning, Need and Characteristics
- 4.3 Types of Sampling  
Probability: Random, Stratified, Systematic and Cluster  
Non-Probability: Incidental, Purposive, Convenient, Quota and snowball,  
Multiphase, Multistage, Double and Match Pair Sampling

- 4.4 Sample: Concept, Characteristics and Importance  
Choice of Sampling Method and determination of sample size

**Mode of Transaction:** Lecture cum Discussion, Field trip, Assignment, Project

**Suggested Activities:**

- Classroom discussions on various topics related to research in education
- Panel discussion/debate/seminar presentation on various topics related to research in education

# Philosophical and Sociological Foundations in Education

## Learning Outcomes:

Prospective teacher educator...

- Comprehends the concepts of philosophy, philosophy of education and its branches.
- Critically analyses and appreciates the schools of philosophy and educational thought of thinkers.
- Examines and reflects on the sociological and sociocultural context of education.
- Critically evaluates and reflects on relation between society and education

## Unit 1: Introduction to Philosophy of Education

- 1.1 Definitions, Concept and Nature of Philosophy from Bhartiya and Western Perspectives
- 1.2 Branches of Philosophy; Metaphysics, Epistemology and Axiology; their Educational Implications, Inter-Relation between Philosophy and Education
- 1.3 Concept, Nature Scope and Functions of Philosophy of Education
- 1.4 Axiological Perspectives of Indian Constitution- Socialism, Secularism, justice, liberty, democracy, equality, freedom

## Unit-2: Schools of Philosophy and Educational Thinkers

- 2.1 Indian Schools of Philosophy - Darshan, Vedanta, Samkhya, and Buddhism with special reference to concept of knowledge, reality, values and educational implications.
- 2.2 Western Schools of Philosophy - Existentialism, Post-modernism, and their educational implications
- 2.3 Contribution of Indian Philosophers: Rabindranath Tagore, J. Krishnamurthy, Shri. Aurobindo
- 2.4 Contribution of Western Philosophers: Rousseau, Plato and John Dewey

## Unit-3: Sociological and Socio-cultural Context of Education

- 3.1 Meaning of sociology, education and sociology of education, Nature and Branches of Sociology, Inter-Relationship between Education & Sociology
- 3.2 Culture: Meaning, Nature, Cultural change and Cultural Lag - relation with education
- 3.3 Social Change: Meaning, Nature, Pattern and Factors; Interrelationship with Education
- 3.4 Politics, Education and Society: Political influence on education, educational influence on politics, relation between politics education and society.

## Unit 4: Society and Education

- 4.1 Concept and types of social Institutions and their functions: family, school and society
- 4.2 Concept of Social Movements and social stratification, Role of Savitribai Phule, M. S. Ghurye and Dayanand Saraswati in Social movements
- 4.3 Theories of Social Movements: Relative Deprivation, Resource Mobilization, Political Process Theory and New Social Movement Theory
- 4.4 Approaches to Sociology of Education: Symbolic Interaction and Conflict Theory

**Mode of Transaction:** Lecture cum Discussion, Field trip, Assignment, Project

**Suggested Activities:**

- Debate and discussions on philosophical or sociological issue in education.
- Case study analysis using philosophical and sociological theories.
- Field visit to educational institution that embraces a particular philosophy .
- Documentary and Film analysis to study and discuss implications for education.
- Research to investigate the impact of a particular philosophical or sociological foundation in education using interviews, surveys, or literature reviews.

## Foundational and Preparatory Stage in Education

### Learning Outcomes:

Prospective teacher educator...

- Understands the concept, context and historical development of foundational and preparatory stage in education.
- Recognises and analyses the structure of foundational and preparatory stage in education.
- Appraises the national curriculum frameworks and pedagogy for foundational and preparatory stage in education.
- Reviews and reflects on the critical areas of addressing development needs, support systems and teacher empowerment.

### Unit 1: Concept and Historical Development

- 1.1 Concept of Education and foundational and preparatory stage in education, Overview of structure of school education in India
- 1.2 The Development of Early Childhood Care and Education in India and World , Pre-primary Education in India: Aims, characteristics, guiding principles
- 1.3 Historical overview of Foundational and preparatory stage education in pre and post independent era in India
- 1.4 Policy Perspective of Foundational and Preparatory Stage Education: National Policy of Education, 1986 (NPE-1986), Program of Action -1992 (POA, 1992), National Early Childhood Care and Education (ECCE) Policy (2013) and NEP (2020). w.r.t pre-primary and elementary stage recommendations

### Unit 2: Structure of Foundational and Preparatory Stage

- 2.1 Schemes and Institutions involved in foundational and preparatory stage in education -Characteristics and impact of Operation Blackboard, District Primary Education Programme (DPEP), Integrated Child Development Services (ICDS) scheme, National Programme for Nutritional Support (Mid-day Meal), National Programme for Education of Girls at Elementary Level (NPEGEL)
- 2.2 Functions of Early Childhood Care and Education (ECCE) Centres  
Aims, and Role of Samagra Shiksha Abhiyan in strengthening and universalisation
- 2.3 Regulatory Bodies for management and administration in foundational and preparatory stage in education - Role of Ministry of Education, NCERT, GCERT and DIET in Foundational and Preparatory Stage
- 2.4 Institutions for foundational and preparatory stage- Balwadis, Aganwadis and pre-primary schools etc.

### Unit 3 National Curriculum Frameworks and Pedagogy

- 3.1 National Curriculum Framework (NCERT, 2009): Overview of major recommendations for foundation and preparatory stage education  
Pre-school curriculum (NCERT, 2019) – Vision, concerns related to early learning, curriculum and learning environment

- 3.2 National Curriculum Framework for Foundational Stage (2022) – Aims, principles of and approach to language education and literacy.
- 3.3 Principle of Pedagogy and Pedagogical approaches- Theme-based approach, Play-based approach, Activity-based approach, Project-based approach, Integrating approach, strategies for literacy and numeracy
- 3.4 Assessment: Guiding principles, methods and tools, documentation and communication of assessment result at foundational and preparatory stage in education.

**Unit 4: Addressing critical areas and developing support system**

- 4.1 Developmental Aspects: Physical, Health, Motor, Sensory and perceptual Development Language & Cognitive Development during early ages
- 4.2 Addressing development delays and disability; ensuring safety and security in the school environment
- 4.3 Teachers at foundational and preparatory stage w.r.t teacher preparations, recruitment, competencies and professional development
- 4.4 Critical Reflection on the missions at Foundational Stage; Foundational Literacy and Numeracy (FLN), Pravrutti Dwara Gnan (PRAGNA)

**Mode of Transaction:** Lecture method, Discussion, Assignment work, Group Project

**Suggested Activities:**Field Visits, Projects & Research, Case Studies and comparative studies



## Middle and Secondary Stage in Education

### Learning Outcomes:

Prospective teacher educator...

- Understands the concept, context and historical development of middle and secondary stage Education.
- Recognises and analyses the structures of middle and secondary stage education.
- Appraises the national curriculum frameworks and pedagogy for middle and secondary stage education.
- Reviews and appraises role of teacher in ensuring quality at middle and secondary stage education.

### Unit 1: Concept and Historical Development

- 1.1 - Concept of Education and secondary education  
-Historical Overview of General Structure of school education
- 1.2 - General Aims and Objectives, Nature and Characteristics, Scope and Functions of Middle and Secondary Education
- 1.3 Historical Perspectives of Middle and Secondary Stage in Education  
-Ancient, Medieval and Colonial India w.r.t nomenclature, curriculum and teaching methods  
-Post Independence – Recommendations of Mudaliar Commission, Kothari Commission and Knowledge Commission w.r.t middle and secondary education
- 1.4 Policy Perspective on Middle and Secondary Stage in Education  
National Policy on Education (1986) & National Education Policy (2020) with reference to recommendation on curriculum, pedagogy, governance and universalisation.

### Unit 2: Structure of Middle and Secondary Stage

- 2.1 Institutional Structure at secondary and middle stage: central, state and local level
- 2.2 Regulatory Bodies and Institutions and their functions:  
-National Council of Educational Research and Training, State Council of Educational Research and Training,  
-National Institute of Open Schooling, Kendriya Vidyalaya Sangathan, Navodaya Vidyalaya Samiti
- 2.3 Secondary School Boards: Central Board of Secondary Education, Council for the Indian School Certificate Examination, State Boards of Education, Cambridge International Examination and International Baccalaureate
- 2.4 Types of Management of schools and role of various bodies involved in school management

### Unit 3: National Curriculum Frameworks and Pedagogy

- 3.1 Relevance and concerns of National Curriculum Framework Secondary Education (2005)
- 3.2 National Curriculum Framework for School Education (2023) : Major recommendations for school subjects, cross cutting themes, school culture and assessment
- 3.3 Ecosystem for Secondary Education- Developing school culture and learning environment
- 3.4 Teaching Methods, Pedagogies and assessment for middle and secondary stage

**Unit 4: Teacher, Teacher Development and Quality**

- 4.1 Teachers at secondary and middle stage w.r.t teacher preparations, recruitment, competencies and professional development
- 4.2 Educational Initiatives for quality and universalisation: Samagra Shiksha Abhiyan (SSA), Rashtriya Madhyamik Shiksha Abhiyan (RMSA)
- 4.3 Quality Assurance in secondary schools: Quality Indicators, management of resources and strategies for quality improvement
- 4.4 Addressing issues of enrolment, access, stagnation, quality, professional development at Middle and Secondary Stage

**Mode of Transaction:** Lecture Method, Discussion, Group Project

**Suggested Activities:** Field Visits, Projects & Research, Case Studies and comparative studies

**Learning Outcomes:**

Prospective teacher educator...

- Understands the concept, context and historical development of Higher Education.
- Recognises and analyses the structures of Higher Education in India
- Appraises the Higher Education Qualification Framework, Curriculum and credit framework for undergraduate programmes and related policies in Higher Education
- Reviews and reflects on challenges, trends and Innovation in Higher Education.

**Unit 1: Concept and Historical Development**

- 1.1 Concept of Higher Education: General Aims and Objectives, Characteristics, Scope and Functions
- 1.2 - Overview of Institutions of Higher Learning in Ancient India till Independence
- 1.3 Policy Perspective on Higher Education in Independent India: University Education Commission (1948-49), Education Commission (1964-66), National Policy on Education (1968 & 1986) and National Education Policy 2020
- 1.4 Higher Education in Global and social Context: Global Vs Local, Universal Vs Individual, Tradition Vs Modernity, Spiritual Vs Material, Competition and concerns for Equality of opportunity

**Unit 2: Structure of Higher Education**

- 2.1 Structure and Status of Higher Education in India  
Status and Types of Universities,  
Concept and role of Act, Statutes, Regulations, Policy and Guidelines in management of universities.
- 2.2 Apex Bodies in Higher Education: University Grants Commission (UGC), NITI Ayog, Association of Indian Universities (AIU), National Assessment and Accreditation Council (NAAC)  
Professional Councils in Teacher Education: National Council for Teacher Education (NCTE), Rehabilitation Council of India (RCI)
- 2.3 Management of Higher Education  
-Systemic Level: Role and responsibility of Central and State Government  
- Constitutional Provisions for Higher Education, Ministry of Education, Department of Higher and Technical Education, Commissionerate of Higher Education
- 2.4 - Institutional Level : Organisational Framework,  
Governance of Universities: Constitution, Executive Council, Academic Council, Faculty/School, Senate/Governing Council, Finance Committee, Board of Studies  
Administrative Human Resource: The Visitor/Chancellor, Vice Chancellor, Pro-Vice Chancellor, Dean, Registrar, Finance Officer, Faculty Members Academic Human Resource Senior Professor, Professors, Associate Professors and Assistant Professors

**Unit 3: Frameworks and related Policies in Higher Education**

- 3.1 NEP 2020 and Higher Education: Major Recommendations for higher education- Institutional Restructuring, Transforming regulatory system of higher education, Governance and Leadership

- 3.2 National Higher Education Qualification Framework: Characteristics, purpose, Nomenclature and Levels  
National Vocational Education Qualifications Framework (NVEQF)  
National Skills Qualification Framework (NSQF)
- 3.3 Curriculum and Credit Framework for Undergraduate Programme: Features, Credit Structure, Curriculum Components (Disciplinary/interdisciplinary major; Disciplinary/ interdisciplinary minor, Ability Enhancement Course, Skill Enhancement Courses, Value Added Courses, Internship, Research Project/Dissertation and Other activities)
- 3.4 Policy Provisions: Academic Bank of Credit, Multiple Entry and Multiple Exit  
Holistic and Multidisciplinary education,

#### **Unit 4: Teacher, Teacher Development and Quality**

- 4.1 Issues Related to Expansion, Inclusiveness, Quality and Finance
- 4.2 Internationalisation of Higher Education, Public Private Partnerships
- 4.3 Rashtriya Utchar Shiksha Abhiyan (RUSA) - Objectives and Functioning.  
PM Uchchar Shiksha Abhiyan (PMUSA)-Objectives and Functioning.
- 4.4 National Research Foundation Bill 2023, UGC Guidelines for transforming Higher Education Institutions into multidisciplinary institutions w.r.t research in HEI Clusters.

**Mode of Transaction:** Lecture Method, Discussion, Group Project

#### **Suggested Activities:**

- Case studies and Group discussions.
- Visits to institutions of Higher Education and policy making institutions.
- Reading sessions and debates on recent policies and guidelines
- Surveys and empirical studies to review the policies
- Action research projects to identify concern or challenge in higher education

## Policy, Politics and Economics of Education

### Learning Outcomes:

Prospective teacher educator...

- Comprehends the basic concepts of Policies, its formation and impact.
- Critically reflects and reviews the relation and impact of politics on education.
- Acquaints with the basic concept related to Economics of Education
- Critically reviews finances and cost effectiveness of education policies and budget allocations.

### Unit 1: Introduction to Policy and Politics

- 1.1 Meaning of Policy, politics and Economics and their linkage with education  
Determinants of Educational Policy  
Economic Provisions for education in budgets
- 1.2 Process of Policy formulation: Analysis of the existing situation, generation of policy options, evaluation of policy, making the policy decision, planning of policy implementation, policy impact assessment and subsequent policy cycles.  
Techniques of Policy formulation: Cost Benefit Analysis, Economic Forecasting, Operations Research, Planning-Programming-Budgeting System
- 1.3 Impact of politics and pressure group on policies, Linkage between Educational Policy and National Development, Agencies involved in development of educational policies and their role in development of education
- 1.4 Criteria for Policy Evaluation  
Methods of Policy Evaluation: Benefit-Cost Analysis, Cost-Effectiveness Analysis, and Research based Analysis,

### Unit-2: Economics and Education

- 2.1 Concept of Educational Finance; Educational finance at Micro and Macro Levels  
Economic returns to Higher Education: Signalling Theory Vs Human Capital Theory
- 2.2 Rate of Returns to Education: Benefits or returns of education, indirect or external benefits, educational expenditure as investment  
Determinants of educational costs and its estimation
- 2.3 Concept of Budgeting and allocation of budget for education  
Cost and Cost-effectiveness: Current and capital cost, direct and indirect cost, private cost, social cost and unit cost of education;  
Internal and external efficiency of education;
- 2.4 Overview of Policy Driven Reforms in Higher Education and its impact on Economy

**Mode of Transaction:** Lecture cum Discussion, Field trip, Assignment, Project

### Suggested Activities:

- Policy analysis and their implications on the education system and society.

- Stakeholder interviews with key stakeholders to gather insights on their perspectives, challenges, and aspirations related to education policy, politics, and economics.
- Budget analysis with sample education to identify areas of funding and potential impacts on educational institutions and programs.
- Policy proposal for specific educational issue or problem create comprehensive policy document with recommendations and justifications.
- Data analysis of education-related data, such as enrolment rates, literacy rates, or budget allocations and its relation with policy.

## Preparation and Presentation of Theme Paper

### Learning Outcomes:

Prospective teacher educator...

- Reviews, appraises and selects the theme for writing Theme Paper.
- Develops and constructs theme in conceptual framework.
- Develops technical and scientific writing skills to frame the theme paper
- Develops presentation, debate and assertive negotiations skills for theme paper presentation.

### Course Content: Suggested Framework

The framework suggested here is indicative and suggestive only. The students and facilitator can prepare their own formats and select themes.

- Theme for the Theme Paper is to be selected from any area related to education and its perspective/ impact on philosophy, sociology, psychology, stakeholder, policy, society, economy, etc.
- The format for the theme paper is to be finalized based on the need of the topic.
- Visits to library, online resources and data bases, institutions can be undertaken as per the requirement of the topic for the referencing and conceptualization of theme paper.
- The student has to ensure compliance of the standards of plagiarism and research ethics.
- Submission will be in the form of theme paper duly approved by the facilitator.

Theme Paper presentation will be in the form of seminar/presentations/discussion forums etc. The researcher will be given the 20-25 minutes for the presentation and 20-25 minutes will be given for discussion and feedback.

**Mode of Transaction:** Face to Face, field visits to institutions, libraries etc.

### Suggested Activities:

- Classroom discussions on various themes related to education.
- Discussions and reflections on Methods and techniques for developing and selecting themes.
- Theme paper presentation on various themes related to education.

# SEMESTER II



**Semester - II**

	Total papers	Hours	Credit	Internal	External	Total
<b>Theory</b>	4	240	16	120	280	400
<b>Internship</b>	1	60	2	100	0	100
<b>Research</b>	1	60	2	50	0	50
<b>Total</b>	<b>5</b>	<b>360</b>	<b>20</b>	<b>270</b>	<b>280</b>	<b>550</b>

Sr. No.	Title	Type	Nature of Paper	Hours	Credit	Internal	External	Total
1	Management and Administration	Theory	Compulsory	60	4	30	70	100
2	Methods of Research in Education-II	Theory	Compulsory	60	4	30	70	100
3	Academic Writing	Theory	Compulsory	60	4	30	70	100
4	Educational Statistics- I / Psychological Testing	Theory	Optional	60	4	30	70	100
5	Internship MEd-I	Practical	Compulsory	60	2	100	0	100
6	Dissertation I - Research Proposal	Practical	Compulsory	60	2	50	0	50

## Management and Administration

### Learning Outcomes:

Prospective teacher educator...

- Understands the basic concepts of educational management.
- Reviews and applies theories of educational management in school management.
- Identifies appropriate leadership model as per educational institute requirement.
- Gains understanding regarding various quality monitoring agencies in India.

### Unit 1: Introduction of Educational Management

- 1.1 Educational Management: Meaning, Nature and Characteristics
- 1.2 Importance and Scope of Educational Management
- 1.3 Functions of Educational Management
- 1.4 Structure of Educational Management in India (with reference to Higher Education, Teacher Education, School Education)

### Unit-2: Theories and Approach of Educational Management

- 2.1 Scientific Management Theory
- 2.2 Fayol's Theory of Management
- 2.3 Human Relation Approach
- 2.4 Behaviour Science Approach

### Unit-3: Models of Leadership

- 3.1 Leadership: Meaning and nature, quality of good leader
- 3.2 Blake and Mouton's Managerial Grid Mode
- 3.3 Fiedler's Contingency Model
- 3.4 Tri-dimensional Model, Hersey and Blanchard's Model

### Unit 4: Quality in Education

- 4.1 Total Quality Management and Six Sigma
- 4.2 Cost of Quality: Appraisal Costs, Cost Benefit Analysis
- 4.3 National Assessment and Accreditation Council (NAAC)
- 4.4 Quality Council of India (with reference to Education)

**Mode of Transaction:** Lecture cum Discussion, Field trip, Assignment, Project

### Suggested Activities:

- Visit and study of any one DEO, GCERT, etc. to understand its function
- Study of any educational institute with reference to leadership and its administrative functioning
- Designing strategy for effective management of educational institution by applying TQM or Six Sigma
- Prepare report on application of scientific theory and human relation theory in educational institution

## Methods of Research in Education-II

### Learning Outcomes:

Prospective teacher educator...

- Understands characteristics of tools of research and their types.
- Understands methods of research in education.
- Develops abilities of data handling.
- Develops skill for writing a research report.

### Unit 1: Tools And Techniques Of Research

- 1.1 Tools of Research: Concept and Overview of Types of tools of research  
Construction and Standardization of Tool: Steps, Reliability, Validity and Norms
- 1.2 Interview: Meaning, Advantages, Limitation and Types  
Rating Scale: Concept and Types – Likert, Thurston & Q-Sort  
Check-List: Points to be kept in Mind while Constructing Check-list
- 1.3 Questionnaire, Schedule and Inventory: Meaning and Steps of Construction
- 1.4 Observation: Meaning, Types, Advantages and limitations

### Unit 2: Methods Of Research

- 2.1 Historical Research: Meaning, Purposes, Sources and Steps
- 2.2 Descriptive Research: Meaning and characteristics  
-Survey: Meaning and Types  
-Interrelationship studies: Co-relational Research and Casual Comparative Research, Case Study  
Developmental studies: Longitudinal: Cross sectional studies.
- 2.3 Experimental Research: Meaning; Characteristics -control, manipulation, observation, replication  
Experimental Designs: Pre, true and quasi experimental designs  
Validity of experimentation: Internal and External Validity, Factors affecting validity
- 2.4 Qualitative Research: Meaning and Purpose  
Ethnographical, Phenomenological and Grounded Theory Research: Concept

### Unit 3: Data Handling

- 3.1 Scales of Measurement: Meaning; Types –nominal, ordinal, interval, ratio,
- 3.2 Meaning of treatment of data, editing coding classification tabulation
- 3.3 Descriptive Statistics: Concept and types- Measures of central tendency, Variability and graphical presentations
- 3.4 Inferential Statistics: Parametric and Non-Parametric Test: Introduction and Conditions (No Computations),  
Level of Significance: Concept, Type – 1 Error, Type – 2 Error, One-tailed and two-tailed test, Computation of t-test (independent sample), chi-square & Pearson Correlation-r

**Unit 4: Writing Research Report**

- 4.1 Research Report: meaning and types (thesis, dissertation, journal article, paper)  
Parts of Research: Preliminary, content and supplementary
- 4.2 Format, style, typing, quotations, footnotes, Referencing (APA Latest Edition), pagination, tables, figures, graphs, plates
- 4.3 Criteria for evaluating research report
- 4.4 Ethics and Plagiarism in research

**Mode of Transaction:** Lecture cum Discussion, Field trip, Assignment, Project

**Suggested Activities:**

- Classroom discussions on various topics related to research in education
- Panel discussion/debate/seminar presentation on various topics related to research in education

**Learning Outcomes:**

Prospective teacher educator...

- Understands the concept of different types of writing and writing style
- Critically comments on the reports- project report, institutional report, minutes of staff meeting
- Comprehends the academics in the form of books, films and talks by academicians
- Appraises, reviews and debate on the academic readings and presentations.

**Unit 1: Curriculum Planning**

- 1.1 Concept and importance of Academic Writing
- 1.2 Differences between academic and non-academic writing.
- 1.3 Characteristics of Academic Writing
- 1.4 Overview of academic genres: essays, research papers, literature reviews, etc.

**Unit 2: Curriculum Evaluation and Transaction**

- 2.1 Meaning and Concept of Expository, Narrative, Descriptive, Argumentative and Persuasive Writings
- 2.2 Development of writing of Expository, Narrative, Descriptive, Argumentative and Persuasive paragraphs
- 2.3 Concept of Research paper and review paper and the difference between two
- 2.4 Writings of project reports, field visit, minutes of staff meetings, abstracts, paraphrasing and summarizing

**Unit 3: Research in Curriculum**

- 3.1 Review of select TED Talks
- 3.2 Review of select speeches of Swami Vivekananda, Rabindranath Tagore, A.P.J. Abdul Kalam, Dr. C. N. R. Rao
- 3.3 Review of two select contemporary award winning feature films and implications for education system and society.
- 3.4 Writing of review of related literature from various primary and secondary sources.

**Unit 4: Trends in Curriculum**

- 4.1 NEP 2020 critique on recommendations related to higher education and research.
- 4.2 National Curriculum Frameworks for Foundational Stage (2022) and National Curriculum Frameworks for School Education (2023) w.r.t changes in structure and curriculum.
- 4.3 Critique on Integrated Teacher Education Programme (ITEP) w.r.t. pre- service teacher education programs
- 4.4 Critical Analysis of UGC guidelines on Post Graduate and Research Degrees

**Mode of Transaction:** Face to Face, Seminar, Lecture cum Discussion, Assignment, Project

**Suggested Activities:**

- Short writing tasks to practice specific skills and concepts covered in each Units.
- Classroom discussion on various task, watching films and TED Talks
- Films viewing and reviews
- Debates/Panel Discussions/seminars for critical analysis

**Learning Outcomes:**

Prospective teacher educator...

- Learns the various statistical method used in analysis of data.
- Understands the basic concepts of educational statistics.
- Develops the ability to select proper statistics with various data.
- Develops the ability to evaluate critically the result of analysis of data.

**Unit 1: Meaning of Educational Statistics**

- 1.1 Meaning of statistics and statistics in Education
- 1.2 Scales of Measurement
- 1.3 Tabulation of data
- 1.4 Graphical forms of presentation and their uses in educational research

**Unit 2: Descriptive statistics**

- 2.1 Frequency distribution, measures of central tendency and variability, their calculation and use
- 2.2 Normal distribution- normal probability curve, properties and applications
- 2.3 Scaling of test items
- 2.4 Scaling of judgments

**Unit 3: Correlation and Regression**

- 3.1 Coefficient of correlation-Linear Biserial, Point Biserial, tetra choric, phi, contingency, product-moment
- 3.2 Rank Difference, Partial and Multiple Correlation
- 3.3 Regression and Prediction; Linear regression, regression line in prediction
- 3.4 Regression equations and accuracy of prediction

**Unit 4: Reliability and Validity of Test**

- 4.1 Item analysis
- 4.2 Reliability: Meaning, Methods, Calculations of split half, length of test and reliability methods of rational equivalent.
- 4.3 Validity: Meaning, Methods, Calculations, length of test of validity.
- 4.4 Process of Standardization of Test

**Mode of Transaction:** Face to Face, Lecture cum Discussion, Assignment, Project

**Suggested Activities:**

- Classroom discussions on various topics related to educational statistics.
- Projects and data analysis for any given data.

**Learning Outcomes:**

Prospective teacher educator...

- Develops an understanding of nature of psychological measurement and its underlying principles.
- Acquaints with techniques of psychological measurement.
- Develops skills in testing select psychological constructs.
- Develops ability to administer, score, interpret and report psychological tests.

**Unit 1: Psychological Measurement and Testing**

- 1.1 Psychological Measurement: Meaning, Nature and Scope, Psychological and physical measurement: Difference
- 1.2 Need of psychological measurement in Educational Practices
- 1.3 Psychological testing: Meaning, nature and Characteristics of Psychological testing
- 1.4 Scope and Use of psychological test in educational practices

**Unit 2: Techniques of Psychological Measurement: Meaning, Steps, importance, merits and limitations**

- 2.1 Testing Techniques: Teacher-made tests
- 2.2 Testing Techniques: Standardized Psychological Tests
- 2.3 Non Testing Techniques : Rating Scale, Questionnaires, Interview, Inventories
- 2.4 Non Testing Techniques: Personal Records, Sociometric and Projective techniques

**Unit 3: Testing of Psychological Constructs: Concept, need and available Standardized Tools**

- 3.1
  - Intelligence Test
  - Aptitude Test
  - Achievement Test
- 3.2 Attitude Scale: Thurston and Likert
- 3.3
  - Interest Inventory
  - Personality Inventory
- 3.4 Criteria for Ideal Tool selection

**Unit 4: Administration, Scoring, Interpretation and Reporting of Psychological Tests**

- 4.1 Administration: Steps and precautions to be taken during administration of psychological tests
- 4.2 Scoring: Scoring of psychological test with reference to available standardized tests and analysis of test results
- 4.3 Interpretation: Interpreting test result for stakeholders (students, parents and authorities)
- 4.4 Reporting of test: Preparing Psychological Test Report and Reporting the test results to students, teachers and parents.

**Mode of Transaction:** Group discussion, Lecture-cum –discussion, Panel discussion, Symposium, Reports, Research Journals, School visits and sharing of experiences



**Suggested Activities:**

- Reviewing of any Psychological Test
- Reviewing the test items for Thurston and Likert Scale

**Learning Outcomes:**

Prospective teacher educator...

- develops skills of doing research on psychological attribute, social research and status surveys.
- develops skills of guiding and supervising microteaching lessons/ simulation lessons/practice teaching lessons of B.Ed. trainees.
- develops an understanding of role, functions and process various agencies related with teacher education.
- develops and understanding of the role of technology in content development and research.
- develops an understanding of social roles of teachers as volunteers.
- develops skills of effectively presenting the work done.

**Activities:**

- Implementation of a Psychological Test/Status Survey/Social Research
- Guidance, checking and supervision of Microteaching Lessons/ Simulation lessons/ practice teaching lessons of student teachers
- Visit to an agency of curriculum development/text book bureau/DIET/ GCERT/ Teacher Education Institution
- Visit to Secondary Teacher Training Institute, GCERT /INFLIBNET/ GIET / an institute of special education/NGO and contribute as a teacher/volunteer
- Presentation of submissions

**Internal Assessment:**

- Report of a Psychological Test/Status Survey/Social Research – 20 Marks
- Report of checking and supervision of Microteaching Lessons/ Simulation lessons/ practice teaching lessons of student teachers- 20 Marks
- Report of visit to an agency of curriculum development/text book bureau/DIET/ GCERT/ Teacher Education Institution- 20 Marks
- Report of visit to Secondary Teacher Training Institute, GCERT /INFLIBNET/ GIET / an institute of special education/NGO and contribute as a teacher/volunteer- 20 Marks
- Presentation of submissions- 20 marks

## Dissertation I - Research Proposal

### Learning Outcomes:

Prospective teacher educator...

- Develops skills of literature review and conceptual framework.
- Comprehends and reviews the literature to frame a research problem.
- Analyses and synthesizes the information to write a research proposal.
- Presents and defends the research proposal.
- Critically reflects, analyses, evaluates, argues and negotiates during presentation of the proposal.

### Details and Submissions

- Research Reviews (at least 10) and review of related literature.
- Preparation of Research Proposal and submission.
- Presentation of Research Proposal and approval.

### Suggested Framework for developing Research Proposal

- Introduction
- Title of research and statement of the problem
- Review of related literature, conceptual framework
- Rationale and need for the study
- Objectives of Research
- Hypothesis and or Research questions
- Variables of Research
- Operational and conceptual definitions and or explanation of terms
- Scope, limitations and delimitations of Research
- Area of Research
- Type of Research
- Method of Research
- Population, sample and sampling technique
- Tool of Research
- Intervention Program (in case of experimental research)
- Data Collection
- Technique of data analysis
- Chapterization
- Time frame and Budget
- References

(The framework can be changed or modified depending upon the type and need of research problem)

Research proposal presentation will be in the form of seminar/presentations/discussion forums etc.

The researcher will be given the 20-25 minutes for the presentation and 20-25 minutes will be given for discussion and feedback.

**Mode of Transaction:** Face to face, seminar, discussion, field visit to library, institutes etc.

**Suggested Activities:**

- Classroom discussions on various topics related to research in education.
- Readings for reviews and conceptual framework and visits to libraries and institutes for the same.

# SEMESTER III

**Semester - III**

	Total papers	Hours	Credit	Internal	External	Total
<b>Theory</b>	4	240	16	120	280	400
<b>Internship</b>	1	60	2	100	0	100
<b>Research</b>	1	60	2	50	0	50
<b>Total</b>	<b>6</b>	<b>360</b>	<b>20</b>	<b>270</b>	<b>280</b>	<b>550</b>

Sr. No.	Title	Type	Nature of Paper	Hours	Credit	Internal	External	Total
1	Inclusion: Concept and Policy Framework	Theory	Compulsory	60	4	30	70	100
2	Technology in Education	Theory	Compulsory	60	4	30	70	100
3	Measurement and Evaluation	Theory	Compulsory	60	4	30	70	100
4	Guidance & Counselling Services/ Educational Statistics-II	Theory	Optional	60	4	30	70	100
5	Internship MEd-II	Practical	Compulsory	60	2	100	0	100
6	Dissertation II - Tool Development	Practical	Compulsory	60	2	50	0	50

## Inclusion: Concept and Policy Framework

### Learning Outcomes:

Prospective teacher educator...

- Understands the concept and diversities in inclusive education.
- Analyses the classification and differentiates among various types of disabilities
- Develops barrier free environment for persons with disabilities in inclusive classroom
- Reviews and reflects on constitutional provisions and legal frameworks for facilitating inclusive education.

### Unit 1: Understanding the diversities in inclusion

- 1.1 Understanding the Diversities in Inclusive Classroom
- 1.2 Understanding the journey from Exclusion to Inclusive : Meaning, concept, definitions
- 1.3 Principles of Inclusive Education: Access, Equity, Relevance, Participation & Empowerment
- 1.4 Models of Inclusive Education (Resource room, Pull & Push Model, Circle of Inclusion, Eternity Teacher Model)

### Unit 2: Introduction to Classification and Types of Disabilities

- 2.1 Classification of disability: International Classification of Impairments, Disabilities and Handicaps (ICIDH) and International Classification of Functioning, Disability and Health (ICF)
- 2.2 Introduction to Neuro-Developmental Disabilities: Specific Learning Disabilities (SLD), Intellectual Disabilities (ID), Autism Spectrum Disorder (ASD)
- 2.3 Introduction to Sensory Disabilities: Hearing Impairment (HI), Visual Impairment (VI), Deafblind
- 2.4 Introduction to Disabilities according to RPWD-2016

### Unit 3: Building Inclusive Classroom

- 3.1 Barriers to inclusive education and their solutions.
- 3.2 Adaptation, accommodation and Modification for creating learning environment.
- 3.3 ICT base Instructional Approaches: Assistive and Adaptive Technologies.
- 3.4 Instructional Approaches for diverse learners: Peer tutoring, Cooperative learning, Team teaching and Universal Design for Learning (UDL).

### Unit 4: Policies, Provisions and Acts for Inclusive Education

- 4.1 Constitutional provisions in India:  
Acts: Right to Education Act (2009), Right to Persons with Disability Act (2016), National Trust Act (1999)  
Policy: National Policy on Education of Students with Disabilities (2006) and National Education Policy (2020),
- 4.2 International Perspective: Salamanca Statement (Framework for Action) 1994, United Nations Convention on the Rights of Persons with Disabilities (UNCRPD)- 2006
- 4.3 Concessions and Provisions for Persons with Disabilities (PwDs)

- 4.4 Role different stakeholders in rehabilitation of PwDs including National Institutes (NIs) and Non-Government Organisations (NGOs)

**Mode of Transaction:** Lecture cum Discussion, Field trip, Project, Case studies, Assignment, Practical work, Debates, and Self-study

**Suggested Activities:**

- Group discussions following videos and visits.
- Debate for Inclusion vs. Segregation & Self-study for legislations and frameworks
- Visit to different setups like special school, integration, inclusion and mainstream school.
- Dramas including role plays etc.



## Technology in Education

### Learning Outcomes:

Prospective teacher educator...

- Comprehends the basic concepts of educational technology.
- Develops a new perspective on technology use in education
- Critically assesses the pedagogical perspective of educational technology.
- Reflects on implications of educational pedagogy and need for professional development of teachers.

### Unit 1: Introduction to Technology in Education

- 1.1 Concept of educational technology and its Historical evolution
- 1.2 Concept and difference: Technology of Education and Technology in Education
- 1.3 Current Trends of Technology Use: Learning Analytics. Virtual and augmented reality, Gamification, Artificial intelligence. Internet of Things (IoT), Cloud Computing, Digital and open Badge
- 1.4 Digital literacy: Concept, Need and types,  
Debate on Teaching with technology and teaching for effective use of technology

### Unit 2: Perspectives of Technology Use in Education

- 2.1 Social Perspective: Citizenship for digital society, technology skills for 21st century, impact of technology on society
- 2.2 Ethical Perspective: Code of ethics, judicious and safe use, Health Perspective: Impact on physiology (eyes, hands, wrist, neck etc.) and psychology (stress, anxiety, depression etc.)
- 2.3 Legal Perspective: Intellectual property and copyright in digital world, plagiarism, open source and open content
- 2.4 Policy Perspective: Educational technology in National Policy on Education 1986 & National Education Policy 2020 and relevant guidelines

### Unit 3: Pedagogical Perspective and Applications of Technology

- 3.1 Strategies for integration of educational technology: Substitution, augmentation, modification, redefinition (SAMR Model)  
Pedagogical Approaches for effective use of technology: Online, Blended & Flipped Learning
- 3.2 -Strategies for Assessment and feedback mechanism in digital environments  
-Agencies : National Testing Agency (NTA), Performance, Assessment, Review, and Analysis of Knowledge for Holistic Development (PARAKH)
- 3.3 Infrastructure for digital content creation, digital repository and dissemination: Role and outreach  
Digital Repository: NROER, DIKSHA, SWAYAM and SWAYAMPRAKHA
- 3.4 Challenges and barriers to technology adoption: Equity, equality and access  
Miniaturization of educational technology and its impact

**Unit 4: Implications and Professional Development**

- 4.1 Implications of behaviourism, cognitivism and constructivism for technology mediated learning
- 4.2 Implications of socio-cultural theories (Collaborative and situated learning) for technology mediated learning.
- 4.3 Professional Development of Teachers : Skills for Teacher in digital age and managing the classrooms, Training of teachers for use of technology in Education
- 4.4 Significance of Research for Technology in Education: Monitoring & Evaluation, Impact and Effectiveness studies in areas related to technology in Education

**Mode of Transaction:** Face to Face, Seminar, Lecture cum Discussion, Assignment, Project

**Suggested Activities:** Classroom discussions on various topics related to technology in education

## Measurement and Evaluation

### Learning Outcomes:

Prospective teacher educator...

- Comprehends and reviews the process and theories of measurement and evaluation.
- Develops proficiency in construction of taxonomy based Norms Referenced and Criterion referenced Tests
- Identifies, compares and contrasts tools of measurement.
- Understands standardized tests and comprehends the process of standardization of tests.

### Unit 1: Process & Theories of Measurement and Evaluation

- 1.1 Concept and need of evaluation, Inter relationship between measurement and evaluation
- 1.2 Functions of evaluation & basic principles of evaluation
- 1.3 Classical Test Theory(CTT) : Concept, Characteristics and Importance  
Item Response Theory (IRT): Concept, Characteristics and Importance
- 1.4 True scores and Errors of Measurement, Marks and Grades

### Unit 2: Taxonomy of Objectives and Construction of Tests

- 2.1 Taxonomy of educational objectives: Cognitive Domain Affective domain, Psychomotor domain
- 2.2 Concepts of Norms Referenced and Criterion referenced Test Difference between NRT and CRT
- 2.3 Steps for constructions of Criterion-Referenced Test: Instructional intent specifying the domain, item development, item review and test development.
- 2.4 Types of tests: Achievement Test, Diagnostic Test, Domain-Referenced Test

### Unit 3: Tools of Measurement and Evaluation

- 3.1 Subjective tools of Evaluation
- 3.2 Objective tools of Evaluation
- 3.3 Supply type questions: Simple question, completion question, short answer question, long answer question/essay questions (Characteristics, merits, limitations and improvement of each type).
- 3.4 Selection type question: constant alternative, multiple choice, matching, Re-arrangement. (Characteristics, merits, limitations and improvement of selection type item).

### Unit 4: Process of Standardizing a Test

- 4.1 Standardized Test: Nature and use of standardized test Criteria for selecting a good standardized test: planning, reliability, validity, objectivity, Discriminating power, Adequacy, Usability and Comparability
- 4.2 Reliability: Concepts and types of reliability.
- 4.3 Validity: Concept and types of validity.
- 4.4 Standard Scores and Norms: Z-score, t-score, stanine, Letter Grade, Percentile Rank.

**Mode of Transaction:** Lecture cum Discussion, Field trip, Assignment, Project

**Suggested Activities:**

- Classroom discussions on various topics related to educational statistics.
- Projects and data analysis for any given data.

**Learning Outcomes:**

Prospective teacher educator...

- Understands the counselling process & Group guidance programme.
- Understands the organization of a Guidance programme.
- Understands the Testing in Guidance Service.
- Understands the Human adjustments and mental health & hygiene.

**Unit 1: Guidance and Counselling : Concept, Approaches, Steps, Types**

- 1.1 Guidance and Counselling: Concept, Characteristics and principles
- 1.2 Counselling approaches-directive, non-directive, Group counselling vs. Individual counselling, Counselling for adjustments
- 1.3 Concept, Importance & Steps of group guidance
- 1.4 Steps and techniques of Group guidance

**Unit 2: Intelligence and Personality**

- 2.1 Principles of Organization
- 2.2 Characteristics of well-organized guidance
- 2.3 Counselling service and Individual inventory service- Testing services
- 2.4 Information service, Orientation service, Remedial service, Placement service and follow up service

**Unit 3: Aptitude, Interest, Thinking, Reasoning**

- 3.1 Principles of use of test in guidance and counselling
- 3.2 Selection of Test, Type of Test, Ethics for Test,
- 3.3 Test of intelligence, aptitude, creativity, interest and personality
- 3.4 Administering, scoring and interpretation of test scores
- 3.5 Use of Test results in counselling process and Limitation of Test

**Unit 4: Guidance and Counselling**

- 4.1 Definition and meaning of adjustment, Characteristics of adjustment, Characteristics of well-Adjusted person, Characteristics of mal-adjusted person, Motivation and Adjustment, Perception and Adjustment
- 4.2 Definition and Meaning of Mental Hygiene. Objectives of Mental Hygiene
- 4.3 Approaches of counselling: cognitive-behavioural (Albert Ellis, REBT) and humanistic, person-centred counselling
- 4.4 Person-centred counselling (Carl Rogers), Theory of counselling- behaviouristic Theory, Reality Theory, and Rational emotive Theory

**Mode of Transaction:** Group discussion, Lecture-cum –discussion, Panel discussion, Symposium, Reports, Research Journals, School visits and sharing of experiences

**Suggested Activities:**

- To arrange seminar, career conference & career days.
- To provide Guidance and counselling of Students.
- To visit work places and related institutes.
- To visit institutes of who providing Guidance and Counselling.
- To collect information or paper cutting about career development of students.
- To administrate any five psychological tools and its analysis for guidance and counseling.
- To provide Guidance and counseling of Students.

**Learning Outcomes:**

Prospective teacher educator...

- Comprehends, measures and tests hypothesis and related measures of variability.
- Develops skills for analyzing and computing non-parametric tests.
- Develops skills for analyzing and computing analysis of variance and related measures.
- Develops skills for analyzing and computing different types of multivariate analysis.

**Unit 1: Testing Hypothesis**

- 1.1 Hypothesis of chance: null hypothesis
- 1.2 Meaning of statistical inference, significance of mean, median, measures of variability, of percentages, of coefficient of correlation
- 1.3 Significance of the difference between means and other statistics
- 1.4 Principles of sampling and the use of standard error formulas

**Unit 2: Non Parametric Tests**

- 2.1 Chi square Test, Sign Test, Median Test
- 2.2 Mann-Whitney U-Test
- 2.3 Kolmogorov- Smirnov Test
- 2.4 Kruskal Walis Testing, Candall Tests

**Unit 3: Analysis of Variance**

- 3.1 Analysis of Variance: Concept and Assumptions
- 3.2 Homogeneity test of Variance
- 3.3 Computation One way, Two way and factorial design
- 3.4 Analysis of covariance

**Unit 4: Multivariate Analysis**

- 4.1 Factor Analysis
- 4.2 Discriminant Analysis
- 4.3 Cluster Analysis
- 4.4 Meta-Analysis

**Mode of Transaction:** Face to Face, Lecture cum Discussion, Assignment, Project

**Suggested Activities:**

- Classroom discussions on various topics related to educational statistics.
- Projects and data analysis for any given data.

**Learning Outcomes:**

Prospective teacher educator...

- develops skills of imparting lessons to Student Teacher.
- develops skills of observing peer lessons.
- develops an understanding of planning various curricular, co-curricular activities.
- develops and understanding of the role of institutional head and functioning of institution.
- develops skills of reflection and writing reflective diary.
- develops skills of effectively presenting the work done.

**Activities:**

- Six Lessons in Teacher Education Institution
- Six Observation of Lessons
- Planning of curricular and co-curricular activities, Time Table/unit planning guidance
- Interview of Head/ Institutional Analysis
- Reflective Diary
- Presentation of submissions

**Internal Assessment:**

- Six Lesson execution in Teacher Education Institution- 20 marks
- Observation of six Lessons of faculty members - 10 marks
- Planning of curricular and co-curricular activities, Time Table/unit planning guidance- 10 marks
- Interview of Head/ Institutional Analysis-20 Marks
- Reflective Diary- 20 Marks
- Presentation of submissions- 20 Mark



## Dissertation II - Tool Development

### Learning Outcomes:

Prospective teacher educator...

- Develops skills of writing the introductory and conceptual framework for research report.
- Reviews, reflects and synthesizes the facts and data for constructing the tool for research.
- Develops and validates the research tool.
- Presents and defends the progress in research work.

### Details and Submissions

- Development and validation of tool
- Submission of Chapter 1, 2 and 3
- Presentation of work done

### Suggested Framework for developing Research Proposal

- Introduction
- Title of research and statement of the problem
- Review of related literature, conceptual framework
- Rationale and need for the study
- Objectives of Research
- Hypothesis and or Research questions
- Variables of Research
- Operational and conceptual definitions and or explanation of terms
- Scope, limitations and delimitations of Research
- Area of Research
- Type of Research
- Method of Research
- Population, sample and sampling technique
- Tool of Research
- Intervention Program (in case of experimental research)
- Data Collection
- Technique of data analysis
- Chapterization
- Time frame and Budget
- References

(The framework can be changed or modified depending upon the type and need of research problem)

Research proposal presentation will be in the form of seminar/presentations/discussion forums etc.

The researcher will be given the 20-25 minutes for the presentation and 20-25 minutes will be given for discussion and feedback.

**Mode of Transaction: Face to face, seminar, discussion, field visit to library, institutes etc.**

**Suggested Activities:**

- Classroom discussions on various topics related to research in education and tool development.
- Discussions on process of tool developments and standardized tools available.
- Meeting and field visits with various experts/institutions/libraries etc.
- Presentation and critique of the standardized tools and developed tools for research.

# SEMESTER IV

**Semester - IV**

	Total papers	Hours	Credit	Internal	External	Total
<b>Theory</b>	4	240	16	120	280	400
<b>Research</b>	1	120	4	30	70	100
<b>Total</b>	<b>5</b>	<b>360</b>	<b>20</b>	<b>150</b>	<b>350</b>	<b>500</b>

Sr. No.	Title	Type	Nature of Paper	Hours	Credit	Internal	External	Total
1	Curriculum Planning, Evaluation and Research	Theory	Compulsory	60	4	30	70	100
2	Indian Knowledge System	Theory	Compulsory	60	4	30	70	100
3	Teacher Education	Theory	Compulsory	60	4	30	70	100
4	Environment Education/ Value Education	Theory	Optional	60	4	30	70	100
5	Dissertation III- Report Submission	Practical	Compulsory	120	4	30	70	100

## Curriculum Planning, Evaluation and Research

### Learning Outcomes:

Prospective teacher educator...

- Understands concepts and levels of curriculum planning
- Comprehends various models of curriculum design and evaluation.
- Promotes critical inquiry in curriculum studies.
- Critically comments on various issues of curriculum development

### Unit 1: Introduction to Academic Writing

- 1.1 Curriculum Planning: Meaning and Principles
- 1.2 Levels of Curriculum Planning
- 1.3 Curriculum Planning Framework
- 1.4 Stakeholders involvement in Curriculum Planning

### Unit 2: Types of Writing and writing Styles

- 2.1 Curriculum Evaluation: Meaning, Purpose and stakeholders
- 2.2 Approaches to curriculum evaluation: Scientific & Humanistic, Formative & Summative,
- 2.3 Models of Curriculum Evaluation: Ralph Tyler: Curriculum Evaluation Model, Robert Stake: Congruence Contingency Model, Stufflebeam: CIPP Model
- 2.4 Concept of Curriculum Transaction and its role in instructional designing

### Unit 3: Critique and Review

- 3.1 Scope and Areas of Research in Curriculum development, planning and evaluation
- 3.2 Critical Studies in Curriculum and Pedagogy w.r.t Cross-Cultural and Comparative Perspectives in teacher development, Social Justice, Cultural Linguistic difference
- 3.3 Relevance, Flexibility, Quality, Contextually and Plurality in curriculum
- 3.4 Influence of Education Policies, National curriculum frameworks etc. in research for school education, higher education and programme evaluation

### Unit 4: Title : Critical Analysis of Policies and Programs

- 4.1 Role of NCERT, NCTE and UGC in curriculum development and policy documents after NEP 2020.
- 4.2 Major recommendations of NEP 2020 for curriculum and pedagogy of teacher education and school education and challenges in implementing the recommendations
- 4.3 Major recommendations of National Curriculum Framework for School Education- 2023 and National Curriculum for Foundation Stage 2022 for curriculum and pedagogy and challenges in implementing the recommendations
- 4.4 Concept of Academic Bank of Credit, Choice Based Credit system, Curricular components at undergraduate level( Disciplinary/interdisciplinary major and minor, ability enhancement courses, skills enhancement courses, summer internships, research projects)

**Mode of Transaction: Lecture cum Discussion, Field trip, Assignment, Project**

**Suggested Activities:**

- Analysing school curriculum with reference to NEP 2020
- Design draft curriculum by adopting any model or approach of curriculum
- Visit to NCERT, GCERT to understand process of curriculum development
- Critical study of teacher education curriculum with reference to NCFTE 2009

## Indian Knowledge System

### Learning Outcomes:

Prospective teacher educator...

- Identifies Indian concept and purpose of education.
- Reviews and Reflects on Process of knowledge acquisition and construction in Indian perspectives.
- Appreciates the methodology of Indian Knowledge system.
- Recognises and adopts traditional practices and applications in contextual perspective.

### Unit 1: Indian Education and its Purpose

- 1.1 Concept of culture, tradition and dharma, role of education in preservation of culture
- 1.2 Sources of Knowledge; family and vansha as carriers of knowledge, tradition and Dharma
- 1.3 Types and Purpose of Knowledge
- 1.4 Concept of Para & Aparā Vidya, Gyan & Agyan, Rita & Dharma

### Unit-2: Indian perspectives on Process of Knowledge

- 2.1 Component of Knowledge Process and Approaches to acquiring Knowledge
- 2.2 Process of Knowing & Process of Construction of Knowledge
- 2.3 The role of Guru, Knower and Known in Construction and Transmission of Knowledge
- 2.4 Factors involved in construction of Knowledge

### Unit-3: Methodology of Indian Knowledge System

- 3.1 Systematization of knowledge fields as Sastra
- 3.2 Means of Valid Knowledge (Pramana), Perception ( Pratyaksha), Inference (Anumana) and Textual Tradition (Agama)
- 3.3 Importance of Pratyaksha and Agama in relation to Anumana
- 3.4 Knowing and Knowledge: The Indian Way

### Unit 4: Traditional Practices, Applications and Relevance

- 4.1 Overview of 14 Vidya and 64 Kalas in Indian Perspectives
- 4.2. Concept of myths, rituals, taboos, belief systems, folk tales & songs, proverbs and traditional narratives with examples and relevance
- 4.3 Concept of Tangible and Intangible cultural heritage and relevance of their preservation, Examples of UNESCO Tangible and Intangible cultural heritage in Gujarat
- 4.4 Indigenous practices for land, water and soil conservation and management with examples.

**Mode of Transaction:** Lecture cum Discussion, Field trip, Assignment, Project

**Suggested Activities:**

- Visit to local library or museum with collections of Indian art, literature, philosophy.
- Heritage walks and studies on tangible and intangible UNESCO sites.
- Sensitization, awareness camps and documentations for IKS.
- Translations from ancient texts and researches based on the knowledge in ancient texts.
- Documentation/infographics of traditional arts and practices with chronology of transfer of knowledge through family and vansha.



**Learning Outcomes:**

Prospective teacher educator...

- Comprehends basic concepts of Teacher Education.
- Identifies and appraises the policies and organisations guiding Teacher Education.
- Critically analyses and reflects on Teacher Education Program and their significance.
- Reviews and examines research areas, innovations and issues in Teacher Education

**Unit-1: Introduction to Teacher Education**

- 1.1 Meaning Purpose and Objectives of Teacher Education w.r.t Pre-service Teacher Education Programs for various stages.
- 1.2 Types of Teacher Education and its need: Pre-Service and In Service
- 1.3 Organization of Components of Pre-service Teacher Education: Transactional Approaches, Expository, Collaborative and Experiential learning
- 1.4 Knowledge base of Teacher Education from the view point of Schulman, Deng and Luke & Habermas

**Unit-2: Policies & Organisations guiding Teacher Education**

- 2.1 Policy Perspectives of Teacher Education and recommendation: NEP 1986 , NEP 2020
- 2.2 National Curriculum Framework for Teacher Education ( 2009) and subsequent guidelines after NEP 2020
- 2.3 Objectives, function and Impact of:  
Statutory Bodies in Teacher Education: NCTE, RCI  
Agencies of Teacher Education: NCERT, SCERT, DIETs
- 2.4 Objectives, function and Impact of:  
Institutes for Teacher Education: IUCTE, IASE, CASE, IITE, RIEs

**Unit-3: Critique on Teacher Education Programs**

- 3.1 Overview of In-service Teacher Education Programs offered by NCTE at Various Stages and reforms in Teacher Education in light of NEP 2020
- 3.2 Need and Importance of stage specific Teacher Education at Foundational, Preparatory, Middle and Secondary Stage
- 3.3 Integrated Teacher Education Programme ITEP: Critical review of the curriculum framework, impact and challenges for Teacher Education Institutes and other organisations
- 3.4 Personal and Professional Development of Teachers w.r.t Teaching as a Profession, Professional Ethics and Continuous Professional Development,  
Challenges for framing and implementing policy guidelines on National Professional Standards for Teachers and National Mentoring Mission

**Unit-4: Research, Innovations, and Issues in Teacher Education**

- 4.1 Research Trends and Innovations in Teacher Education

- 4.2 Best Practices in Teacher Education along with Futuristic Trends in Teacher Education
- 4.3 Issues and Challenges in Teacher Education
- 4.4 Maintaining Standards in Teacher Education: Admission Policies for Teacher Education Programs and Recruitment Policies for Teachers at school level and Teacher Educators at Tertiary Level.

**Mode of Transaction:** Lecture cum Discussion, Field trip, Assignment, Project

**Suggested Activities:**

- Observing and simulating classroom lesson: for developing skills and receiving feedback from peers.
- Documentary Study: Historical Overview of critical Policy reforms in Teacher Education and its impact on society.
- Research on comparative study for various teacher education programs at National and International Level.
- Status surveys for the implementation of recommendations of NEP 2020 and changes it has brought.
- Surveys and empirical research using primary or secondary data on issues and challenges/ innovative trends/curriculum/service conditions/professional development etc.

**Learning Outcomes:**

Prospective teacher educator...

- Sensitizes self towards the basic concepts associated with environment education.
- Recognises the need for management and conservation of natural resources.
- Reviews and appraises policies and practices for safe lifestyle and sustainability.
- Appreciates the role of environmental management systems and adopts mission life.

**Unit 1: Environmental Education and Environment Awareness**

- 1.1 Environmental Education: Concept, Components, Types  
Importance and multidisciplinary nature of environmental studies
- 1.2 Human Environment Relationship, Significance of Environment for life & sustainability, Anthropogenic activities and their impacts on environment
- 1.3 Ecosystem: Concept, Components and Major Ecosystems; Ecosystem and Human Intervention; Ecological Succession and its types
- 1.4 Biodiversity: Concept, Importance and Hotspots  
Values in Biodiversity: Aesthetic, Cultural, religious and ethical values  
Threats and conservation of biodiversity

**Unit-2: Education for Management and Conservation of resources**

- 2.1 Schemes and Institutions involved in foundational and preparatory stage in education 2.1  
Natural Resources: Types (Renewable and non-renewable) and their management
- 2.2 Consequences of Mismanagement  
Water : Degradation of Water Resources and overexploitation of ground water, Floods & Droughts;  
Land: Land Degradation and Overgrazing;  
Air: Health Degradation, Climate Change, Eutrophication
- 2.3 Consequences of Mismanagement:  
Forest: Deforestation and effect on Tribal Population, Impact of mining and Dam building on environment, forest and biodiversity  
Energy: Energy Demand Vs. Population growth; Energy demands for industrialisation and impact in environment;
- 2.4 Initiatives for Conserving Natural Resources: Land, water, forest and energy, Concept of Waste Management and waste minimisation

**Unit-3: Environment Policies, Practices and Development**

- 3.1 Millennium development and Sustainable development goals.  
Indicators for Environmental sustainable assessment: Environmental sustainability Index and Environmental Performance Index

- 3.2 Indian Constitution and Environmental Protection: Environmental Protection Act (1986), National Action Plan on Climate Change, The Biological Diversity Act, 2002
- 3.3 International Efforts : Montreal Protocol, Rio Summit, Convention on Biodiversity, Kyoto Protocol, Paris Agreement, International Solar Alliance
- 3.4 Concept and scope of environmental economics  
Approach towards Developing Environmental Policy: command-and-control approach, market-based approach, environmental information disclosures, and voluntary measures.  
Relation between Economic Growth and Environment

#### **Unit 4 : Environmental Management Systems and Mission Life**

- 4.1 Concept of Global Commons and methods to protect global commons  
Concept of Environment Labels and its types
- 4.2 Concept of Environment Audit and its process, agencies involved in audit
- 4.3 Concept of Environment Management Systems and their role  
EMS Standards and Certification: ISO 14000 by International Standards Organization (ISO) and British Standards (BS) 7750, European Union's Eco Management and Audit Scheme (EMAS)
- 4.4 Mission Life: Vision and approach towards sustainability  
Methods for Sustainable solutions and Types of green technologies  
Strategies for Improvising classroom teaching towards sustainability

**Mode of Transaction:** Lecture Method, Discussion , Project Work, visits

#### **Suggested Activities:**

- Case studies on conservation of natural resources with visits and action research to identify and develop new case studies.
- Visits to ecosystems and biodiversity parks to study means of conserving ecosystems and documentation of biodiversity.
- Awareness campaigns and drives for conservation
- Audits on environment and energy and initiate student drives for environment audits of nearby places.
- Discussion and debates on Policies, practices that effect economics of environment.

**Learning Outcomes:**

Prospective teacher educator...

- Develops the theoretical understanding of values.
- Familiarizes with the theories and models of value development.
- Reflects on approaches and methods for of value education.
- Appreciates and adopts values for national development.

**Unit 1: Concept of Value and Value Education**

- 1.1 Meaning, definition, nature and characteristics of Values
- 1.2 Classification of values: Personal, , moral, social, family, ethical, spiritual, cultural, constitutional, universal values; Extrinsic and intrinsic values; Hierarchy of values
- 1.3 Value Education: Meaning, objectives and need; Philosophical and Sociological Basis of Value Education
- 1.4 Ethics and Values in Indian context

**Unit-2: Theories, Models of Value Development**

- 2.1 Theories of Value Development: Social learning theory, Psychoanalytic theory and Cognitive Development Theory.
- 2.2 Process of Value Development: Knowledge, Perception and Actualization
- 2.3 Models of Value Development: Value Analysis model, Value discussion model, Value clarification model, rational building model, Role playing model.
- 2.4 Value Crisis and Value Conflict; Role of Family, Peer Group, Mass Media and Technology

**Unit-3: Approaches and Methods of Value Education**

- 3.1 Curricular Approaches to Value Education: Direct approach of teaching of values as a subject, Indirect and Integrated approach of teaching values through curricular subjects
- 3.2 Co-curricular Approaches to Value Education: Morning Assembly, Extramural Talks, Celebrations, Game and sports, Dance, Drama and songs, NCC and NSS.
- 3.3 Evaluation of values: Need for evaluating values, Methods of Evaluation of values- Value Tests, Value Perception Scale, Observation and anecdotes.
- 3.4 Teachers as a Role model for Value Development.

**Unit 4: Value Education and National Development**

- 4.1 Constitutional values reflected in the Preamble of the Constitution of India: Liberty, Integrity, Unity, Equality, Fraternity, Sovereignty, Socialism and Democracy
- 4.2 Constitutional values reflected in the Fundamental rights and duties: Patriotism, Nationalism, Humanism, Environmentalism, Harmonious living, Gender equality, National Integration and International Understanding, Scientific temper and inquiry, Individual and collective excellence.

- 4.3 Strategies to foster constitutional values among youth.
- 4.4 Value orientation of Teacher Education Curriculum, National Curriculum Framework for Foundation Stage 2022 and National Curriculum Framework for School Education 2023.

**Mode of Transaction:** Lecture cum Discussion, Field trip, Assignment, Project

**Suggested Activities:**

- Debates, Elocution panel discussions related to values for 'One world one family'
- Case studies and historical studies on institutions/organisations promoting values/ philosophy / culture/ etc. for fostering peace and harmony.
- Action research in classrooms for teaching learning practices/value development among children.
- Documentation and dissemination of ancient practices promoting values and means of fostering values.
- Reviews/reflections/researches on relevance of values/policy/practices as mentioned in constitution/legal and societal frameworks/family norms etc.

## Dissertation III- Report Submission

### Learning Outcomes:

Prospective teacher educator...

- Collects the data for the research work.
- Analyses the data and compute the results.
- Develops skills of writing the data analysis and results for research report.
- Presents, discusses and defends their research work and its findings.

### Details and Submissions

- Data Collection
- Data Analysis & Results
- Submission of Chapter 4,5,/ 6
- Submission of Research Report
- Presentation of Summary of Research work

**Mode of Transaction:** Face to Face, field visit, library visit, institutes etc. for data collection

### Suggested Activities:

- Classroom discussions on various topics related to research in education.
- Discussions and reflections on writing of research dissertation as per APA Manual and other defined guidelines.
- Pre-submission Seminars for approval of dissertation work.

# Evaluation Patterns



Type of Paper	Credit	Internal			External			Total Marks
		Particulars	Marks	Total Marks	Particulars	Marks	Total Marks	
Theory	4	Assignment/ Seminar/ Project/ Workshop	5	30	Semester end Written Examination	70	70	100
		Attendance	5					
		CCE	5					
		From Prelim Exam	15					
Theory	2	Assignment/ Seminar/ Project/ Workshop	5	15	Semester end Written Examination	35	35	50
		From Prelim Exam	10					
Practical	2	Submission	20	50	--	--	--	50
		Presentation	20					
		Viva	10					

<b>DISSERTATION ASSESSMENT</b>						
<b>Dissertation- I research proposal</b>						
Sem	Credit	Hrs.	Activity	Marks		
				Internal	External	Total
2	2	60	Research Review at least 10	10	-	10
			Preparation of Research Proposal	20	-	20
			Presentation of Research Proposal and approval	20	-	20
				50	-	50
<b>Dissertation- II Tool Development</b>						
Sem	Credit	Hrs.	Activity	Marks		
				Internal	External	Total
3	2	60	Development and validation of tool	20	-	20
			Submission of chapter-1,2 and 3	20	-	20
			Presentation of work done	10	-	10
				50	-	50
<b>Dissertation- III Report Submission</b>						
Sem	Credit	Hrs.	Activity	Marks		
				Internal	External	Total
4	4	120	Data Collection	10	-	10
			Data Analysis and Results	10	-	10
			Submission of Chapter 4,5 and 6	10	-	10
			Submission of Research Report	-	20	20
			Presentation of work done	-	50	50
				30	70	100

<b>Internship M.Ed. I</b>						
<b>Sem</b>	<b>Credit</b>	<b>Hrs.</b>	<b>Activity</b>	<b>Marks</b>		
				<b>Internal</b>	<b>External</b>	<b>Total</b>
2	2	60	Implementation of a Psychological Test/Status Survey/ Social Research	20	-	20
			Guidance, checking and supervision of Micro-teaching/ Simulation Lessons of B.Ed. Students	20	-	20
			Visit to an agency of curriculum development/ textbook board/DIET/GCERT/Teacher Education Institution	20	-	20
			Visit to Secondary Teacher Training Institute, GCERT/INFLIBNET/GIET/an institute of special education/NGO and contribute as a teacher/Volunteer	20	-	20
			Presentation of submissions	20	-	20
			<b>Total</b>	<b>100</b>	<b>-</b>	<b>100</b>
<b>Internship M.Ed. II</b>						
<b>Sem</b>	<b>Credit</b>	<b>Hrs.</b>	<b>Activity</b>	<b>Marks</b>		
				<b>Internal</b>	<b>External</b>	<b>Total</b>
3	2	60	Lessons in Teacher Education Institute	20	-	20
			Observation of Lessons	10	-	10
			Planning of curricular/ co-curricular activity/ Time Table/ unit planning	10	-	10
			Interview of Head/ Institutional Analysis	20	-	20
			Reflective Diary	20	-	20
			Presentation of Submissions	20	-	20
			<b>Total</b>	<b>100</b>	<b>-</b>	<b>100</b>

# Format of Question Paper

## General Instructions:

1. All questions are compulsory, options are internal.
2. Digits marked at the end of questions shows total marks of that questions.
3. Answer briefly and to the point.

### For 70 Marks: (Time 3 Hours)

Question 1 Answer following questions as directed: (From Unit 1)	
(A): Answer any two out of three In 400 words	08 Marks
(B): Answer any two out of three In 250 words	06 Marks
Question 2 Answer following questions as directed: (From Unit 2)	
(A): Answer any two out of three In 400 words	08 Marks
(B): Answer any two out of three In 250 words	06 Marks
Question 3 Answer following questions as directed: (From Unit 3)	
(A): Answer any two out of three In 400 words	08 Marks
(B): Answer any two out of three In 250 words	06 Marks
Question 4 Answer following questions as directed: (From Unit 4)	
(A): Answer any two out of three In 400 words	08 Marks
(B): Answer any two out of three In 250 words	06 Marks
Question 5: Answer any 7 out of 10 questions: (From All four Units)	14 Marks

### For 35 Marks:(Time 2 Hours)

Question 1 Answer following questions as directed: (From Unit 1 & 2)	
(A): Answer any two out of three In 400 words	08 Marks
(B): Answer any two out of three In 250 words	06 Marks
Question 2 Answer following questions as directed: (From Unit 3 & 4)	
(A): Answer any two out of three In 400 words	08 Marks
(B): Answer any two out of three In 250 words	06 Marks
Question 3: Answer any 7 out of 10 questions (From All four Units)	07 Marks

# Instructions about Examination

## 1. ASSESEMNT

1.1 There shall be two components for assesment of learners

1. Continuous and Comprehensive Evaluation (Internal Assessment)
2. Semester End Examination (External Examination)

1.2 The assessment carries any of the following modes, as per the requirement of the Papers as notified by the University.

- |                            |                                  |
|----------------------------|----------------------------------|
| (a) Written                | (b) Practical                    |
| (c) Oral/Viva-voce         | (d) ICT based Tests              |
| (e) Open Book Examinations | (f) Submission of Project/Report |

1.3 The semester end examination shall be mandatory for every student to appear in every examination conducted by the University. The examination shall be held according to the scheduled notified by the University from time to time. Any of the students who fail to present himself/herself at the examination as per schedule at the place notified and those who appear at the examination and leave the examination hall voluntarily or boycott the examination for any of the reasons or whatsoever deemed as forfeiting his/her rights to appear at the said examination. The University shall not hold fresh examination for any or all subjects for such students under any circumstances.

1.4 Practical, Oral (Viva-voce) Examination

1. The practical examination shall be organised by the respective Institute as per the instructions of the University. Principal / HoD of the Institute concerned shall submit the time table including the names of the paper setters/ examiners to the Controller of Examination, IITE 15 days in advance.
2. The practical examination shall be conducted in presence of Examiners appointed by the University and to assist external examiner there shall be one internal examiner duly appointed by the University.
3. In event of assessment is to be carried out by reviewing the submissions of candidate, the examination shall be carried out jointly by internal as well as external evaluators by the University.

1.5 The Principal / HoD of the respective Institute shall send a list of students eligible and not eligible for the End-Term Examinations. Only those students will be allowed to appear in the End-Term Theory and Practical Examinations, whose names appear in the list of eligible students. It is the sole responsibility of the Institute/Institute to check the eligibility of the students before sending the list and Examination Form to the University.

Since the B.Ed. Course is governed by the rules and regulations stipulated by the NCTE, the 80% of the presence is required in theory classes and 90% of the presence is required in Practice Teaching/field based practicum/School Internship for qualifying in semester end examination.

- 1.6 Only those candidates who have passed the internal assessment of the particular course shall be permitted to appear in the examination. In case, the result of internal assessment is submitted during the examination, the external examination appeared shall be void for the further process.
- 1.7 Hall tickets shall be issued to each student by the Examination Department prior to the commencement of the examinations. No student shall be permitted to enter the Examination Hall without the Hall Ticket. The Students will be permitted to appear only in those examinations indicated in her / his Hall ticket. It is further clarified that the issuance of a Hall ticket is not an acknowledgement by the University that the student has fulfilled all the requirements which would entitle him/her to appear for the examination, such as, minimum attendance in any such case University may restrict the student to appear for the examination.
- 1.8 The result of the last semester shall not be declared (kept withheld) unless and until the candidate clears all the courses/papers of a program.

## 2. MARK SHEET

The Mark sheet would contain the performance of the student in terms of grades and it should contain photographs of the student, hologram of the IITE, QR Code, Name of the Institute where student studied in student Certificates and mode of Study.

## 3. ASSESSMENT AND EVALUATION:

CCE (Continuous and Comprehensive Evaluation):

There will be continuous and comprehensive evaluation for the Course. The learners will be evaluated internally as well as externally. As the university has adopted CCE module for the evaluation, the pattern scheme for evaluation will be as under:

### 3.1 SCHEME OF EVALUATION

*INTERNAL EVALUATION (30 % of Marks)*

Internal evaluation will include assignment/project/seminar/practical/MCQ test/Quiz/VIVA/ written test. It is up to the department/ Institute to select any of these. The ratio of marks will be 1:1:1:3 for each. The detailed Marks statement shall be submitted to Examination Section on or before the last day of the respective semester. Plagiarism of any kind in assignment/project work/ seminar/ any submission etc. will be punishable by the concerned departments.

*EXTERNAL EVALUATION (70 % of Marks)*

External evaluation will be semester end examination, theoretically and/or practically as case may be, conducted by the university at the end of each semester.

### 3.2 ASSESSMENT

There are two categories for evaluation: The student is eligible for Total for that subject, if there are more than 40 % of marks in Internal and External Evaluation.

### 3.3 GRADING SYSTEM AS PER UGC 10 POINT SCALE SYSTEM.

Cumulative Grade Point Average (CGPA): It is a measure of overall cumulative performance of a student over all semesters. The CGPA is the ratio of total credit points secured by a student in various courses in all semesters and the sum of the total credits of all courses in all the semesters. It is expressed up to two decimal places.

$$\text{i.e. CGPA} = \frac{\sum(C_i \times S_i)}{\sum C_i}$$

where  $S_i$  is the SGPA of the  $i$ th semester and  $C_i$  is the total number of credits in that semester.

Semester Grade Point Average (SGPA): It is a measure of performance of work done in a semester. It is ratio of total credit points secured by a student in various courses registered in a semester and the total course credits taken during that semester. It shall be expressed up to two decimal places.

$$\text{i.e SGPA } (S_i) = \frac{\sum(C_i \times G_i)}{\sum C_i}$$

where  $C_i$  is the number of credits of the  $i$ th course and  $G_i$  is the grade point scored by the Students.

Grade Point: It is a numerical weight allotted to each letter grade on a 10-point scale.

Letter Grade: It is an index of the performance of students in a said course. Grades are denoted by letters O+, O, A+, A, B+, B and F.

### 3.4 PROCEDURE OF AWARDING THE GRADES

*Marks and Award of Grades:*

The following TABLE gives the marks, numerically grades, letter grades and classification to indicate the performance of the candidate.

- **Grading Pattern Table**

Conversion of Marks to Numerical Grade, Letter Grade & Course Performance

## 4. CONFERNMENT OF DEGREES

A student shall be awarded degree if he/she has registered himself/herself, undergone the course of studies, completed the project reports / dissertation specified in the curriculum of his/her programme and earned the minimum Credits required within the maximum period of Course Duration + 2 years

## 5. MERITORIOUS AWARDS

5.1 The Prizes and Medals, the award of which are instituted by the University shall be presented at the Convocation to the awardees, if they choose to remain present, immediately after the conferment of the degrees. In other cases the same will be delivered to them through the Principal / HoD of the concerned Institute.

5.2 Gold Medal(s) shall be awarded on the basis of Total Marks obtained by the student in all the semesters. Medal will only be awarded for the Courses in which minimum 5 Students are enrolled in last semester.

- 5.3 If two or more students have secured the same Marks, then the marks secured by the students in the external examination only shall be taken into consideration in awarding the Gold Medals.
- 5.4 If both students also secure the same external marks, then both the students should be awarded the Gold Medal
- 5.5 The Rank Holders on the basis of Marks shall be awarded the University Gold medal for being First. The Second and third Rank holders shall be given rank certificates by the university. The University shall also issue Certificates indicating the name of the Medal awarded to the students.
- 5.6 The University may also consider issuing other Certificates of Merit or overall conduct at any convocation organized by the University.
- 5.7 A student who has been fined or has been expelled from the Hostel / Institute/University for any act of indiscipline shall not be eligible for the award of gold medal(s). A student who has failed in any course and has cleared the course in a Repeat Examination shall not be eligible for award of Gold Medals.



# REFERENCES

## SEMESTER-I

## EDUCATION

### Psychological Foundations of Education

- Ahlawat, Neeta (2010). Development of Psychology. Jaipur: RBSA Publishers.
- Chauhan, S. S. (1978) Advanced Educational Psychology. New Delhi: Vikas Publishing
- Hergenhahn, B. R. and Matthew H. Olson (2008) An Introduction to Theories of Learning. New Delhi: Prantice Hall of India
- Coon, Rennis and Mittere J. O. (2007) Introduction to Psychology. UK: Thomas press.
- Mistry Milan T., (2015) Psychology in Education, LAP LAMBERT Academic Publishing GmbH & Co., Saarbrucken, Germany.
- Mangal, S. K. (2015) Educational Psychology. New Delhi: PHI Learning Private Ltd.
- Mathur, S. S. (2012) Education Psychology. Agra: Agrawal Publications.
- Shrivastav, S. S. (ed.) (2007) Bhartiya Shiksha Manovignan (In Hindi). Lakhnow: Bhartiya ShikshaShodh Sansthan
- Shukla, S. S., (2014). Educational Psychology (Gujarati) (2nd Edition). Agra: Agrawal Publications

### Methods of Research in Education I

- Agrawal, Y.P. (1988). Better Sampling: Concepts, Techniques and Evaluation. New Delhi: Sterling Publishers Private Ltd.
- Anastasi, A. (1988). Psychological Testing. New York: the Macmillan company.
- Backstrom, C.H. & Gerald, H. (1981) Survey Research. New York: John Wilev & Sons.
- Best J. W. (1993). Research in Education. New Delhi: Prentice-Hall of India Pvt. Ltd.
- Bogdan, R and Taylor, S.J. (1975) Introduction to Qualitative Research Methods. New York John Wilev & Sons.
- Bogdan R.C. & Biklen, S.K. (1998). Introduction to Qualitative Research of Education: An Introduction to Theory and Methods. Boston: Allyn and Bacon.
- Buch, M.B. (Ed). (1974). A Survey of Research in Education. CASE: MSU Baroda.
- Buch, M. B. (Ed) (1979). Second survey of Research in Education. Baroda: SERD.
- Buch, M.B. (Ed) (1986). Third survey of Research in Education. New Delhi: NCERT.
- Buch, M.B. (Ed). (1991). Fourth Survey of Research in Education. New Delhi: NCERT.
- Campbell W.G. (1969). Form and Style in Thesis Writing. Boston: Houghton Mifflin Company
- Champion, C.M. (1981). The Design of Educational Experiments. New York: McMillan Publishing Co. Inc.
- Champion, D.J. (1981). Basic Statistics for Social Research. New York: McMillan Publishing Co. Inc
- Cohen, L. & Manion L. (1994). Research Methods in Education. Ionlon: Rouletege.
- Cronback, L.J. (1970). Essentials of Psychological Testing. New York: Harper & Row Publishers.
- Dayton, C.M. (1974). The Design of Educational Experiments. New York: McGraw Hill Book, Co.
- Denzin, N. K.& Lincoln, Y.S. (EDS) (2000). Handbook of Qualitative Research. London: Sage.
- Desai, H.G. (1979) Style Manual for Dissertations/Theses. Rajkot: Saurashtra University.

- Edwards, A.L. (1957). Techniques of Attitude Scale Construction. New York: Appleton Century Crofts, Inc.
- Gall, M.D., Gall, J.P. and Borg, W.R. (2007) Educational Research: An Introduction. Boston: Allyn and Bacon.
- Rathod, R.R. (2012). Variables and Hypothesis in Research. Surat.
- Shukla, S. (2018). Research Methodology and Statistics. Ahmedabad: Rishit Publications.
- ઉચાટ, ડી. એ. અને અન્યો (સ). (૨૦૦૬). શૈક્ષણિક સંશોધનનો સારાંશ (૧૯૭૮-૨૦૦૬). રાજકોટ : શિક્ષણાસ્ત્ર ભવન, સૌરાષ્ટ્ર શનવરસંસ્થા.
- શત્રવેદી, એમ. ડી. અને પારેખ, બી. (૧૯૮૮). ઇશક્ષિમાં આંકડાશાસ્ત્ર. અમદાવાદ: શનવરસંસ્થા ગ્રંથ શનમાસિણ બયોડસિ.

## Philosophical and Sociological Foundations in Education

- Bailey, R. & et. al. (2010). Philosophy of Education. U.S.A.: Sage Publication Ltd.
- Bhatia, K. K. & Narang, Philosophical and Sociological Basis of Education. Ludhiana: Prakash Brothers.
- Chaube, S. P. & Chaube, A. Philosophical and Sociological Education. Agra-2: Vinod Pustak Mandir
- Kumar, A. (2015). Philosophical Perspective of Education. New Delhi: A.P.H. Publishing Corporation. Macmillan Company.
- Bhatia, K. K. & Narang, C. I. Philosophical and Sociological Basis of Education. Ludhiana: Prakash Brothers.
- Bokil, V.P. (1903). Foundations of Education. Poona: Pub, By the author Sadashivpeth Poona.
- Dewey, J. (1963). Democracy and Education. New York: Mac Millan and Co.
- Dwivedi, K. (2014). Education Thoughts and Thinkers. New Delhi: Shree Publishers and Distributors.
- Kabir, H. (1961). Indian Philosophy of Education. Bombay: Asia Publishing House.
- Krishnamurti, B.H. 1998. Language, Education and Society. New Delhi: Sage Publications.
- Kumar, A. (2015). Philosophical Perspective of Education. New Delhi: A.P.H. Publishing Corporation. Macmillan Company.
- Ozmun, H. A. (2012). Philosophical Foundations of Education. New Jersey: Pearson Publication.
- Pathak, R.P. (2007). Philosophical and Sociological Perspective of Education. New Delhi: Atlantic Publishers and Distributors (P) LTD.
- Radhakrishnan, S. (1953). History of Philosophy: Eastern and Western Vol. I and II. London: George Allen and Unwin Limited.
- Bhatt, S. R. Knowledge, Value and Education (An Axiomatic Analysis). Gian Publication House – 110009.
- Sharma, R.N. (2000). Textbook of Educational Philosophy. New Delhi: Kanishka Publishers.
- Siddiqui, M.H. (2014). Philosophical and Sociological Foundations of Education. New Delhi: A.P.H. Publishing Corporation.
- Vallikkat, S. (2015). Philosophy of Education. New Delhi: A.P.H. Publishing House

## Foundational and Preparatory Stage in Education

- Aggarwal, J.C. (2010). Development of Education System in India. New Delhi: Shipra Publications.
- Bhatnagar, S. (1982). Indian Education today and tomorrow. Meerut U.P.
- Govt. of India. (1986/1992). National Policy of Education, 1992 Modification and their POA's. MHRD, Dept. of Education
- Govt. of India (2022). National Curriculum Framework for Foundational Stage (NCFFS) document
- Guidelines for Preschool Education, National Council of Educational Research and Training, 2020
- National Education Policy, 2020, Ministry of Education, India
- International publishing house. Govt. of India (1996). Indian Education Commission (1964-66) Report. New Delhi.
- Preschool Curriculum, National Council of Educational Research and Training, 2019.
- Sharma, S. (2013). What is RTE? Department of Elementary Education. New Delhi: NCERT.

## Middle and Secondary Stage in Education

- Aggarwal, J.C. (2010). Development of Education System in India. New Delhi: Shipra Publications.
- Chopra, R.K. (1993). Status of Teachers in India. New Delhi: NCERT.
- Dash, M. (2004). Education in India: Problems and Perspectives. New Delhi: Atlantic Publishers
- Govt. of India (1953). Report of Secondary Education Commission. New Delhi.
- Malhotra, P.L. (1986) School Education in India: Present Status and Future Needs. New Delhi: NCERT
- MHRD (1986). National Policy on Education
- MHRD (2014). "Rashtriya Madhyamik Shiksha Abhiyan". National Informatics Centre. New Delhi: Government of India.
- Vittachi, S and Raghvan, N. (Ed.). (2007). Alternative schooling in India, Sage Publishing.
- World Bank (2006). Secondary Education in India: Investing in the future.
- Human Development Unit, South Asia Region, World Bank, draft, April 2006.
- Zaidi, S.M.I.A. et. al. (2012). Secondary Education, Planning and Appraisal Manual. New Delhi: NUEPA.

## Higher Education

- Dash, (2004) ; Education in India- Problems and Perspectives, Atlantic Publishers & Distributors, Rashtriya Printers, Delhi.
- Govt. of India (1996). Indian Education Commission (1964-66) Report. New Delhi.
- Govt. of India. (1986/1992). National Policy of Education, 1992 Modification and their POA's. MHRD, Dept. of Education Emerging Challenges in the Regional Context. New Delhi: Commonwealth.
- Azad, J. L. (1984), Government Support for Higher Education and Research. New Delhi: NIEPA Concept.
- Biteille, Andre (1995), Universities as Centres of Learning. Journal of Higher Education, 18 (3): 358-406.
- MHRD (2020), National Education Policy 2020

## Policy, Politics and Economics of Education

- Aggarwal, Y.P. (1990). Statistical Methods - Concept, Application and Computation. New Delhi: Sterling Publishers Pvt. Ltd.
- Anderson, James E., (1975), Public Policy-Making, Prager, New York.
- Agenda-Building, Johns Hopkins University Press, Baltimore:
- Chandler, Ralph C. and Jack C. Plano, (1982), The Public Administration Dictionary, John Wiley, New York.
- Cobbe, R.W., and C.D. Elder, (1972), Participation in American Politics: The Dynamics of
- Dror, Y, (1968), Public Policy Making Re-examined, Scranton, Pennsylvania.
- Dye, Thomas R., (1978), Understanding Public Policy, Prentice Hall, Englewood Cliffs.
- Easton, David, (1965), A Systems Analysis of Political Life, Wiley, New York.
- Easton, David, (1957) "An approach to the analysis of political systems", World Politics, Vol. 9, No. 1, April.
- Friedrich, Carl J., (1963), Man and His Government, McGraw-Hill, New York.
- Friedman, Lee S , (2002), The Microeconomics of Public Policy Analysis, Princeton University Press, New Jersey.
- GOI, Law Ministry. (2001). "National Commission to Review the Working of the Constitution-A Consultation Paper on Literacy in the Context of the Constitution of India." September 200 1.
- GOI, MHRD. (2003). Annual Report 2002-2003. Ministry of Human Resource Development. Department of Education. 2003.
- Gormley, W.T., (1983), The Politics of Public Utility Regulation, University of Pittsburgh Press, Pittsburgh
- Gordon, Geoffrey, (1987), System Simulation, Prentice-Hall of India, New Delhi.
- Gronlund N.E. (1995). Measurement and Evaluation in Testing. (3rdEdn.). New York: Mac-Millan Publishing Co. Inc.
- Kothari, C.R., (1989), Research Methodology: Methods and Techniques, Wiley Eastern Limited, New Delhi.
- Sadhu, A.N. and A. Singl, (1980), Research Methodology in Social Sciences, Sterling Publishers Private Limited, New Delhi.
- Sapru, R.K., (2004), Public Policy, Sterling Publishers, New Delhi.
- Smith, Thomas, (1989), "Analysis of Policy Failure", Indian Journal of Public Administration, Vol. 35, No. 1, January -March.

## Preparation and Presentation of Theme Paper

- Beilenson, J. (2004). Developing Effective Poster Presentations. Gerontology News.
- Briscoe, M. H.(1996). Preparing Scientific Illustrations: A Guide to Better Posters, Presentations, and Publications. New York: Springer-Verlag.
- Davis M. (1997). Scientific Papers and Presentations. New York: Academic Press.
- Franza J. R. (1996). A Researcher's Guide to Effective Dissemination of Policy-Related Research. Princeton, NJ: The Robert Wood Johnson Foundation.
- Fink A. (1995). How to Report on Surveys. Thousand Oaks, CA: Sage Publications.
- Sorian R, Baugh T. (2002). Power of Information Closing the Gap between Research and Policy.

## SEMESTER-II

## EDUCATION

### Management and Administration

- Agrawal, J.C. (2007). Educational Management. Daryaganj: Shipra Publication.
- Crawford, M., Kydd, L. & Riches, C. (2002). Leadership and Terms in Educational Management. Philadelphia: Open University Press.
- Naik, J.P. (1965). Educational Planning in India. New Delhi: Allied.
- NIEPA (1999). Total Quality Management in Education. New Delhi: NIEPA.
- Kochhar, S.K. (2011). School Administration and Management. New Delhi: Sterling Publishers Pvt. Ltd.
- Mathur. S.S. (1990). Educational Administration and Management. Ambala: Indian publication
- Mukhopadhyay, M. (2005). Total Quality Management in Education. New Delhi: Sage Publications.
- Milton, Charles R. (1989). Human Behavior in Organizations. Inc USA: Prentice Hall.

### Methods of Research in Education-II

- Agrawal, Y.P. (1988). Better Sampling: Concepts, Techniques and Evaluation. New Delhi: Sterling Publishers Private Ltd.
- Anastasi, A. (1988). Psychological Testing. New York: the Macmillan company.
- Backstrom, C.H. & Gerald, H. (1981) Survey Research. New York: John Wiley & Sons.
- Best J. W. (1993). Research in Education. New Delhi: Prentice-Hall of India Pvt. Ltd.
- Bogdan, R and Taylor, S.J. (1975) Introduction to Qualitative Research Methods. New York John Wiley & Sons.
- Bogdan R.C. & Biklen, S.K. (1998). Introduction to Qualitative Research of Education: An Introduction to Theory and Methods. Boston: Allyn and Bacon.
- Buch, M.B. (Ed). (1974). A Survey of Research in Education. CASE: MSU Baroda.
- Buch, M. B. (Ed) (1979). Second survey of Research in Education. Baroda: SERD.
- Buch, M.B. (Ed) (1986). Third survey of Research in Education. New Delhi: NCERT.
- Buch, M.B. (Ed). (1991). Fourth Survey of Research in Education. New Delhi: NCERT.
- Campbell W.G. (1969). Form and Style in Thesis Writing. Boston: Houghton Mifflin Company.
- Champion, C.M. (1981). The Design of Educational Experiments. New York: McMillan Publishing Co. Inc.
- Champion, D.J. (1981). Basic Statistics for Social Research. New York: McMillan Publishing Co. Inc.
- Cohen, L. & Manion L. (1994). Research Methods in Education. London: Routledge.
- Cronback, L.J. (1970). Essentials of Psychological Testing. New York: Harper & Row Publishers.
- Dayton, C.M. (1974). The Design of Educational Experiments. New York: McGraw Hill Book, Co.
- Denzin, N. K.& Lincoln, Y.S. (EDS) (2000). Handbook of Qualitative Research. London: Sage.
- Desai, H.G. (1979) Style Manual for Dissertations/Theses. Rajkot: Saurashtra University.
- Edwards, A.L. (1957). Techniques of Attitude Scale Construction. New York: Appleton Century Crofts, Inc.

- Gall, M.D., Gall, J.P. and borg, W.R. (2007) Educational Research: An Introduction. Coston: Allyn and Bacon.
- Rathod, R.R. (2012). Variables and Hypothesis in Research. Surat.
- Shukla, S. (2018). Research Methodology and Statistics. Ahmedabad: Rishit Publications.
- ઉચાટ, ડી. એ. અને અન્યો (સ). (૨૦૦૬). શૈક્ષણિક સંશોધનનો સારાંશ (૧૯૭૮-૨૦૦૬). રાજકોટ : શિક્ષણાસ્ત્ર ભવન, સૌરાષ્ટ્ર શનવરસસિટી.
- શત્રવેદી, એમ. ડી. અને પારેખ, બી. (૧૯૮૮). શિક્ષકોમાં આંકડાશાસ્ત્ર. અમદાવાદ:શનવરસસિટી ગ્રંથ શનમાસિણ બયોડસિ.
- દેસાઈ, એચ. જી. અને દેસાઈ, કે. જી. (૧૯૮૭). સંશોધન પદ્ધતિઓ અને પ્રણિણધઓ. અમદાવાદ:શનવરસસિટી ગ્રંથ શનમાસિણ બયોડસિ.
- દેસાઈ, એચ.જી. અને દેસાઈ, કે. જી. (૧૯૮૪). મનોજિજ્ઞાણનક માપન. અમદાવાદ:શનવરસસિટી ગ્રંથ શનમાસિણ બયોડસિ.
- મયોદી, ડી. જે. અને અન્યો. (૧૯૮૧). સંશોધનોની માધુકરી. ભાવનગર શિક્ષણાસ્ત્ર ભવન, ભાવનગરુશનવરસસિટી.
- ળિહ, દદ. બી. (૨૦૦૪). શૈક્ષણિક સંશોધન. અમદાવાદ:શનવરસસિટી ગ્રંથ શનમાસિણ બયોડસિ

## Academic Writing

- Gerald Graff and Cathy Birkenstein (2021), “They Say / I Say: The Moves That Matter in Academic Writing”.
- R R Jordan (1999), “Academic Writing Course: Study skills in English” (3<sup>rd</sup> Edition).
- Ann Hogue (2007), “First Steps in Academic Writing”.
- Dee Broughten and Margarita Kasatkina (2013), “B2 Ready: Academic Writing”.
- Joan Bolker (1998), “Writing Your Dissertation in Fifteen Minutes a Day: A Guide to Starting, Revising, and Finishing Your Doctoral Thesis”.
- William Strunk Jr. and E.B. White (2003), “The Elements of Style”.
- Paul J. Silvia (2007) , “How to Write a Lot: A Practical Guide to Productive Academic Writing”.
- William Zinsser (2020) , “On Writing Well: The Classic Guide to Writing Nonfiction”.
- John M. Swales and Christine B. Feak (2012),“Academic Writing for Graduate Students: Essential Tasks and Skills”.
- Howard S. Becker (2008), “Writing for Social Scientists: How to Start and Finish Your Thesis, Book, or Article”.
- Kate L. Turabian (2013), “A Manual for Writers of Research Papers, Theses, and Dissertations”.
- The University of Chicago Press Editorial Staff (2017), “The Chicago Manual of Style”.
- Lawrence A. Machi and Brenda T. McEvoy (2012), “The Literature Review: Six Steps to Success”.
- Michael Alley (1998), “The Craft of Scientific Writing”.
- Joshua Schimel (2012), “Writing Science: How to Write Papers That Get Cited and Proposals That Get Funded”.

## Educational Statistics- I

- Edwards, A. L. (1971) Experimental Designs in Psychological Research. New Delhi: Amerind Publishing Co. Pvt. Ltd. (Indian Edition).
- Ferguson G. A. (1976). Statistical Analysis in Psychology and Education. New York: McGraw Hill.
- Fruchter, B. (1972). Introduction to Factor Analysis. Bombay: John Willey and Sons.
- Garrett, H. E. (1962). Statistics in Psychology and Education. Bombay: Allied Pacific Pvt. Ltd.
- Guilford J. P. (1973). Fundamental Statistics in Psychology and Education. Tokyo: Mac Graw Hill. Kogakusha.
- Gupta S.L. (2019) Statistical Methods. Vol.1. Prism Books.
- Gupta S.L (2019) Statistical Methods. Vol. 2. Prism Books.
- Karte, A. K. and Savuel, T. Mayo. (1980). Statistical methods in Education and Psychology. New Delhi: Naresa Publishing House.
- Mc Nemar. (1962). Psychological Statistics. New York: John Willey & Sons.
- Scheffe, Henry. Statistical Inference in Non-Parametric Case. New York: John Willey & Sons.
- Statistical Methods. Ed. Book (2019). Sultan Chand and Sons. ISBN-13 978-9351611127
- Tate, M. W. (1955) Statistics in Education. New York: Manhattan Co.
- Thomas, G. (1960). Factor Analysis in Human Ability. London: University of London Press Ltd.
- Trivedi M, & Parekh B. U. Shikshan ma Aankadashastra. Ahmedabad: University Granth Nirman Board.
- Walker H. M. & Lev Joseph. (1965). Statistical Inference. Calcutta Oxford and IBH.

## Dissertation I - Research Proposal

- Agrawal, Y.P. (1988). Better Sampling: Concepts, Techniques and Evaluation. New Delhi: Sterling Publishers Private Ltd.
- Anastasi, A. (1988). Psychological Testing. New York: the Macmillan company.
- Backstrom, C.H. & Gerald, H. (1981) Survey Research. New York: John Wiley & Sons.
- Best J. W. (1993). Research in Education. New Delhi: Prentice-Hall of India Pvt. Ltd.
- Bogdan, R and Taylor, S.J. (1975) Introduction to Qualitative Research Methods. New York John Wiley & Sons.
- Bogdan R.C. & Biklen, S.K. (1998). Introduction to Qualitative Research of Education: An Introduction to Theory and Methods. Boston: Allyn and Bacon.
- Buch, M.B. (Ed). (1974). A Survey of Research in Education. CASE: MSU Baroda.
- Buch, M. B. (Ed) (1979). Second survey of Research in Education. Baroda: SERD.
- Buch, M.B. (Ed) (1986). Third survey of Research in Education. New Delhi: NCERT.
- Buch, M.B. (Ed). (1991). Fourth Survey of Research in Education. New Delhi: NCERT.
- Campbell W.G. (1969). Form and Style in Thesis Writing. Boston: Houghton Mifflin Company.
- Champion, C.M. (1981). The Design of Educational Experiments. New York: McMillan Publishing Co. Inc.
- Champion, D.J. (1981). Basic Statistics for Social Research. New York: McMillan Publishing Co. Inc.
- Cohen, L. & Manion L. (1994). Research Methods in Education. London: Routledge.



- Cronback, L.J. (1970). Essentials of Psychological Testing. New York: Harper & Row Publishers.
- Dayton, C.M. (1974). The Design of Educational Experiments. New York: McGraw Hill Book, Co.
- Denzin, N. K.& Lincoln, Y.S. (EDS) (2000). Handbook of Qualitative Research. London: Sage.
- Desai, H.G. (1979) Style Manual for Dissertations/Theses. Rajkot: Saurashtra University.
- Edwards, A.L. (1957). Techniques of Attitude Scale Construction. New York: Appleton Century Crofts, Inc.
- Gall, M.D., Gall, J.P. and Borg, W.R. (2007) Educational Research: An Introduction. Boston: Allyn and Bacon.
- Rathod, R.R. (2012). Variables and Hypothesis in Research. Surat.
- Shukla, S. (2018). Research Methodology and Statistics. Ahmedabad: Rishit Publications.

SEMESTER-III

EDUCATION

Inclusion: Concept and Policy Framework

- Clough, P., & Corbett, J. (2000). Theories of Inclusive Education. Paul Chapman Publishing, London.
- Constitution of India (1950). Article 41, Ministry of Law and Justice, New Delhi.
- Jha, M. M. (2002). School without Walls: Inclusive Education for All. Oxford, Heinemann.
- Jorgensen, C. M., Mc Sheehan, M., & Sonnenmeier, R. M. (2009). Essential best practices in inclusive school. Institute on Disability/UCe, University of New Hampshire
- Mukhopadhyay, S., & Mani, M. N. G. (2002). Education of Children with Special Needs, in Govinda, R. (2002) (Ed) India Education Report. Oxford University Press, New Delhi.
- Peterson, M., & Hittie, M. (2009). Inclusive teaching: The journey towards creating effective schools for all learners. Merrill, New Jersey.
- Skidmore, D. (2004) Inclusion: The Dynamic of School Development, Open University Press, Buckingham.
- Villa, R. A., & Thousand, J. S. (2005) Creating an Inclusive School, Association for Supervision and Curriculum Development. ASCD, Alexandria.
- Clough, P., & Corbett, J. (2000). Theories of Inclusive Education. Paul Chapman Publishing, London.
- Jha, M. M. (2002). School Without Walls: Inclusive Education for All. Oxford, Heinemann.
- Wade, S. E. (2000). Inclusive Education: A Casebook and Readings for Prospective and Practicing Teachers. Lawrence Erlbaum Associates, New Jersey.
- Bartlett, L. D., & Weisentein, G. R. (2003). Successful Inclusion for Educational Leaders. New Jersey: Prentice Hall.
- Chaote, J. S. (1991). Successful Mainstreaming. Allyn and Bacon.
- Choate, J. S. (1997). Successful Inclusive Teaching. Allyn and Bacon.
- Daniels, H. (1999). Inclusive Education. London: Kogan.
- Deiner, P. L. (1993). Resource for Teaching Children with Diverse Abilities. Florida: Harcourt Brace and Company.
- Gartner, A., & Lipsky, D.D. (1997). Inclusion and School Reform Transferring America's Classrooms. Baltimore: P. H. Brookes Publishers.
- Giuliani, G. A. & Pierangelo, R. (2007). Understanding, Developing and Writing IEPs. Corwin press: Sage Publishers.
- Gore, M. C. (2004). Successful Inclusion Strategies for Secondary and Middle School Teachers. Corwin Press, Sage Publications.
- Hegarthy, S. & Alur, M. (2002). Education of Children with Special Needs: from Segregation to Inclusion. Corwin Press, Sage Publishers.
- Karant, P., & Rozario, J. (2003). Learning Disabilities in India. Sage Publications.
- Karten, T. J. (2007). More Inclusion Strategies that Work. Corwin Press, Sage Publications.
- King-Sears, M. (1994). Curriculum-Based Assessment in Special Education. California: Singular Publications.
- Lewis, R. B., & Doorlag, D. (1995). Teaching Special Students in the Mainstream. 4th Ed. New Jersey: Pearson.
- McCormick, S. (1999). Instructing Students who Have Literacy Problems. 3rd Ed. New Jersey: Pearson.

- Rayner, S. (2007). *Managing Special and Inclusive Education*, Sage Publications.
- Ryandak, D. L. & Alper, S. (1996). *Curriculum Content for Students with Moderate and Severe Disabilities in Inclusive Setting*. Boston, Allyn and Bacon.
- Turnbull, A., Turnbull, R., Turnbull, M., & Shank, D.L. (1995). *Exceptional Lives: Special Education in Today's Schools*. 2nd Ed. New Jersey: Prentice-Hall. Inc.
- Westwood, P. (2006). *Common sense Methods for Children with Special Educational Needs - Strategies for the Regular Classroom*. 4th Edition, London Routledge Falmer: Taylor & Francis Group.
- MHRD. (2009). *The Right of Children to Free and Compulsory Education Act, 2009*. New Delhi: Ministry of Human Resource Development.
- Julka, A. (2015) *Including Children with Special Needs: Upper Primary Stage*, New Delhi: NCERT.

## Technology in Education

- Agrawal, J.C. & Ansari M.S. (2013). *Educational Technology and Management*. Agrawal Publications, Agra. ISBN 978-93-80011-62-2
- Bagulia, Abdul, Mannan. (2005). *Modern education audio-video aids*. New Delhi: Anmol Publication Pvt. Ltd.
- Battacharya, S. K. (2006). *Educational technology*. New Delhi: Abhishek Publication.
- Bhatt, B.D., Sharma, S.R. (1992). *Educational technology: Concept & technique*. New Delhi: Kanishka Publishing House.
- Brown, J.S. Collins, A. & Duguid, P. (1989). *Situated cognition and the culture of learning*. *Educational Researcher*, 18(1), 32-42.
- Clancey, W.J.(1997). *Situated cognition: On human knowledge and computer representation*. Cambridge: Cambridge University press.
- Gamrat, C., & Zimmerman, H. T. (2015). *An online badging system supporting educators' STEM Learning*. 2nd International Workshop for Open Badges in Education
- Kress, G. (2005). *Gains and Losses: New forms of text, knowledge and learning*. *Computers and Composition*. 2005, 22, 5–22
- UNESCO (2002). *Information and Communication Technologies in Teacher Education: A Planning Guide*. Paris: UNESCO.
- *Technology and Learning: A Guide for Educators and Trainers* by Tony Bates
- *Understanding Digital Literacies: A Practical Introduction* by Rodney H. Jones and Christoph A. Hafner
- *The Gamification of Learning and Instruction: Game-Based Methods and Strategies for Training and Education* by Karl M. Kapp
- *Augmented Reality in Education: Cases, Places, and Perspectives* edited by Gregory C. Dede

## Measurement and Evaluation

- Agarwal, R.N. (1991). Measurement and Evaluation in Psychology and Education. Agra: Vinod Pustak Mandir.
- Bloom, B.S. (1956). Taxonomy of Educational Objectives: Cognitive Domain. New York: David McKay Co.
- Bloom, B. & Hastings and Madaus, (1971). Handbook on Formative & Summative Evaluation of Student Learning. New York: Mc Graw Hill Book Co.
- Dave, R.H. (1969). Developments in Educational Testing Volume-I. London: University of London Press. P. 203-214.
- Gronlund N.E. (1995). Measurement and Evaluation in Testing. (3rd Ed.). New York: Mac-Millan Publishing Co. Inc.
- Guilford, J. P. (1993). Fundamental Statistics in Psychology and Education. Tokyo: Mc-Graw Hill.
- Hambleton, R.K. & Swaminathan, H. and Rogers, H. J. (1991). Fundamentals of Item Response Theory. C.A. Newbury Park: Sage.
- Popham, W. J. (1991). Modern Educational Measurement: A Practitioners Perspective. USA: Prentice Hall.
- Robert, J. M. (2007). The New Taxonomy of Educational Objectives. Corwin Publishers. ISBN-13 978-1412936293
- Singh, P. Criterion Referenced Testing: A Monograph. New Delhi: NCERT Publication.
- Sternberg, R. J. and Grigorenko, E. L. (2002). Dynamic Testing: The Nature and Measurement of Learning Potential. New York: Cambridge University Press, 40 West 20th Street, NY-10011-4211-USA.
- Tabachnick, B.G. and Fidell, L.S. (1989). Using Multivariate Statistics (2nd Ed.) New York: Harper & Row Publishers.

## Guidance & Counselling Services

- Adams, James F. (1986): Counseling and Guidance: A Summary view (6th printing) New York: McMillan.
- Beride, R.F. et. Al. (1963): Testing in Guidance and Counseling New York: McGraw Hill.
- Bengalee, M.D. (1984): Guidance and Counseling Bombay: Sheth Publishers.
- Bernard, H.W. (1977): Principles of Guidance (2nd ed.) New York: Harper and Row.
- Burkes, H.M. and Steffir B. (1979): Theories of Counseling (3rd ed.) New York: McGraw Hill.
- Crow, L.d. and Crow A. (1962): An Introduction to Guidance New Delhi: Eurisia.
- Farwell, G.F. and Paters H.J.(1959) : Guidance Reading for Councillors Chicago : Rand McNally.
- George, R.L. and Cristiani, T.S. (1981): Theories, Methods and Processes of Counseling and Psychotherapy Englewood Cliffs, N.J.: Prentice Hall.
- Gibson, R.L. and Mitchell, M.H. (1981): Introduction to Guidance New York: McMillan.
- Gingberg, E. and others (1972): Occupational choice – an approach to General Theory (2nd ed.) New York: Columbia University Press.
- Holland, J.L. (1966): The Psychology of Vocational Choice Waltham Mass: Blaisdell.
- Humphy, I.A. and Traxler, A.E. (1954): Guidance Services Chicago: Science Research Associates, Inc.

- Humphy, I.A. and Traxler, A.E. (1954): Guidance Services Chicago: Science Research Associates, Inc.
- Jones, Arthur, J. (1970): Principles of Guidance (6thed.) New Delhi: Tata McGraw Hill Publishing Co.
- Mehdi, B. (1976): Guidance in Schools New Delhi: N.C.E.R.T.
- Ohlsen, Merle M. (1977): Group Counseling (2nded.) New York: Holt Rinehart and Winston.
- Pasricha P. (1976): Guidance and Counseling in Indian Education New Delhi: N.C.E.R.T.
- Patel R.S. (2009) Statistical Methods for Educational Research Ahmedabad: Jay Publication.
- Patel, R.S.: (2012) Statistical Techniques for Data Analysis (International Version) LAP LAMBERT Academic Publishing GmbH & Co. Saarbrucken, Germany.
- Patterson, C.H. (1962): Counseling and Guidance in School New Delhi : Harper
- Patterson, C.H. (1962): Training and Reference Manual for job analysis Washington D.C. : Department of Labour, U.S. Employment Services.
- Shertger, B. and Stone S. (1976): Fundamentals of Guidance (3rded.) Boston: Houghton Mifflin Co.
- (1980): Fundamentals of Counseling (3rded.) Boston: Houghton Mifflin Co.
- Super, B.E. (1957): The Psychology of Carrees New York: Harper.
- Super, D.E. and Cities, J.O. (1968) : Appraising Vactional Fitness by means of Psychological Tests (revised ed. ) Delhi : Universal Book Stall.
- Traxler, A.E. and Worth R.D. (1964): Techniques of Counseling (2nd ed.) New York: McGrawHill.
- Anastasi, A. (1982): Psychological Testing New York: Macmillan Publishing Co. (5th Ed.)
- Buros, D.K. (Ed) (1972): The Mental Measurement Year Book Highland Park: N. H. Gryphon Press.
- Chronbach, L.J. (1970): Essentials of Psychological Testing New York: Harper (3rd Ed.)
- Freeman, F.S. (1972): Theory and Practice of Psychological Testing New Delhi: Oxford and IBH Co.

## Educational Statistics-II

- Edwards, A. L. (1971) Experimental Designs in Psychological Research. New Delhi: Amerind Publishing Co. Pvt. Ltd. (Indian Edition).
- Ferguson G. A. (1976). Statistical Analysis in Psychology and Education. New York: McGraw Hill.
- Fruchter, B. (1972). Introduction to Factor Analysis. Bombay: John Willey and Sons.
- Garrett, H. E. (1962). Statistics in Psychology and Education. Bombay: Allied Pacific Pvt. Ltd.
- Guilford J. P. (1973). Fundamental Statistics in Psychology and Education. Tokyo: Mac Graw Hill. Kogakusha.
- Gupta S.L. (2019) Statistical Methods. Vol.1. Prism Books.
- Gupta S.L (2019) Statistical Methods. Vol. 2. Prism Books.
- Karte, A. K. and Savuel, T. Mayo. (1980). Statistical methods in Education and Psychology. New Delhi: Naresa Publishing House.
- Mc Nemar. (1962). Psychological Statistics. New York: John Willey & Sons.
- Scheffe, Henry. Statistical Inference in Non-Parametric Case. New York: John Willey & Sons.
- Statistical Methods. Ed. Book (2019). Sultan Chand and Sons. ISBN-13 978-9351611127
- Tate, M. W. (1955) Statistics in Education. New York: Manhattan Co.
- Thomas, G. (1960). Factor Analysis in Human Ability. London: University of London Press Ltd.

- Trivedi M, & Parekh B. U. Shikshan ma Aankadashastra. Ahmedabad: University Granth Nirman Board.
- Walker H. M. & Lev Joseph. (1965). Statistical Inference. Calcutta Oxford and IBH.

## Dissertation II - Tool Development

- Dash, P.C and Biswal, B, Statistics in Education & Psychology, Dominant Publishers,
- Gregory, R. J. (2004). Psychological testing: History, principles, and applications. Allyn & Bacon. Needham Heights, MA, US
- Newton, Paul E. & Stuart S. Validity in educational & Psychological Assessment, Sage.
- Publication Manual of the American Psychological Association, Seventh Edition (2020)
- Urbina, S. (2014). Essentials of psychological testing (2nd ed.). John Wiley & Sons Inc. John Wiley & Sons Inc
- Agrawal, Y.P. (1988). Better Sampling: Concepts, Techniques and Evaluation. New Delhi: Sterling Publishers Private Ltd.
- Anastasi, A. (1988). Psychological Testing. New York: the Macmillan company.
- Backstrom, C.H. & Gerald, H. (1981) Survey Research. New York: John Wiley & Sons.
- Best J. W. (1993). Research in Education. New Delhi: Prentice-Hall of India Pvt. Ltd.
- Bogdan, R and Taylor, S.J. (1975) Introduction to Qualitative Research Methods. New York John Wiley & Sons.
- Bogdan R.C. & Biklen, S.K. (1998). Introduction to Qualitative Research of Education: An Introduction to Theory and Methods. Boston: Allyn and Bacon.
- Champion, C.M. (1981). The Design of Educational Experiments. New York: McMillan Publishing Co. Inc.
- Champion, D.J. (1981). Basic Statistics for Social Research. New York: McMillan Publishing Co. Inc.
- Cohen, L. & Manion L. (1994). Research Methods in Education. London: Routledge.
- Cronback, L.J. (1970). Essentials of Psychological Testing. New York: Harper & Row Publishers.
- Dayton, C.M. (1974). The Design of Educational Experiments. New York: McGraw Hill Book, Co.
- Denzin, N. K.& Lincoln, Y.S. (EDS) (2000). Handbook of Qualitative Research. London: Sage.
- Desai, H.G. (1979) Style Manual for Dissertations/Theses. Rajkot: Saurashtra University.
- Edwards, A.L. (1957). Techniques of Attitude Scale Construction. New York: Appleton Century Crofts, Inc.
- Gall, M.D., Gall, J.P. and Borg, W.R. (2007) Educational Research: An Introduction. Boston: Allyn and Bacon.
- Rathod, R.R. (2012). Variables and Hypothesis in Research. Surat.
- Shukla, S. (2018). Research Methodology and Statistics. Ahmedabad: Rishit Publications.

## SEMESTER-IV

## EDUCATION

### Curriculum Planning, Evaluation and Research

- Armstrong, D.G. (1989). Developing and Documenting the Curriculum. Boston: Allyn & Bacon, Inc.
- Bruner, J.S. (1960). The Process of Education. Harvard University Press.
- Lieane, J.A. (et. al.) (1986). Curriculum Planning and Development. London: Allyn and Bacon, Inc.
- Doll, R. C. (1996). Curriculum Improvements: Decision Making and Process. 6th ed., Boston: Allyn & Bacon.
- Eisner, E.W. (1970). The Educational Imagination. New York: Mac Millan.
- Good, C. V. (1973). Dictionary of Education. New York: Mc Graw-Hill.
- NCERT (2005). National Curriculum Framework for School Education, New Delhi: NCERT
- Oliva, P. F. (1988). Developing the Curriculum, (2nd edition), London: Scott, Foreman.
- Ornstein, A. C. and Hunkins, F.P. (1988): Curriculum, Foundations, Principles and Issues. New Jersey: Prentice Hall.
- Tanner, D., & Tanner, L. (2007) Curriculum Development: Theory into Practice. 4th ed. Upper Saddle River, NJ: Pearson.
- Sharpe, D.K. (1988). Curriculum Tradition and Practices. London: Routledge.
- Stenhouse, L. (1975). An Introduction to Curriculum Research and Development. London: Heinemann.
- Tanner D. and Tanner L. N. (1980). Curriculum Development: Theory into Practice. New York: Macmillan.

### Indian Knowledge System

- Agrawal J. C. (2005). Philosophy of Education. Neelkamal Publication: New Delhi Shad Darshan books
- Basics in Education (Text book for B.Ed.)(1994) New Delhi: NCERT.
- Bhasham, A.L, (1954), Wonder that was India: A Survey of the Culture of the Indian Subcontinent - Before the Coming of the Muslims. London, Sidgwick and Jackson'
- Datta, D.M.(1975). Six ways of Knowing. Calcutta: Calcutta University press.
- NCERT. 2005. National Curriculum Framework–2005, New Delhi.
- Kane, P.V. History of Dharmashastra (Ancient and Medieval Religious and Civil Law), vol. II, parts 1-2; vol. III 3rd ed. Pune: Bhandarkar Oriental Research Institute,[ 1941, 1946].
- Pandey, Govind Chandra, Foundations of Indian Culture, Books and Books,New Delhi,1984.
- Swami Satprakashananda. 1995. Methods of Knowledge according to Advaita Vedanta. Advaita Ashrama (Publication Department), Calcutta.
- Pride of India- A Glimpse of India's Scientific Heritage edited by Pradeep Kohle et al. Samskrit Bharati (2006).
- Textbook on The Knowledge System of Bhārata by Bhag Chand Chauhan, Concept Publishing

- Textbook on The Knowledge System of Bhārata by Bhag Chand Chauhan, Concept Publishing Company, New Delhi ISBN:978-81-8069-595-7
- Tripathi, Radhavallabh,(2016), ed. India's Intellectual Traditions: A Revealed Through Sanskrit Sources. New Delhi: Sahitya Akademi.

## Teacher Education

- Arora, G.L. (2002) Teachers and Their Teaching Delhi, Ravi Books.
- Biddle, B.J., Good, T., Goodson, L.I.F. (Eds.) International Handbook of Teachers and Teaching Vols. I & II, Dordrecht, Kluwer, Academic.
- Chaurasia, G. (1967). New Era in Teacher Education. New Delhi: Sterling Publishers.
- Gupta, A.K. (1984) Teacher Education: Current and Future Prospects New Delhi, Sterling. Handbook of Teachers and Teaching Vols. I & II, Dordrecht, Kluwer, Academic.
- Mukerji, S.N. (1968). Education of Teachers in India (vol. I and II). New Delhi: Sultan Chand and Co.
- Kerawalla. G.J. (Ed.) (1990) Redesigning Teacher Education: A Systems Approach Department of Education, University of Bombay.
- Kundu, C.L. (1998) Indian Year Book on Teacher Education New Delhi, Sterling Publishers Privatization Ltd.
- Lawrence J. Saha & A. Gary Dworkin.(2009). International Handbook of Research on Teachers and Teaching e-ISBN 978-0-387-73317-3. Springer.
- Murray, Frank B. (Ed.) (1996) Teacher Educator's Handbook; Building A Base for Preparation of Teachers, San Francisco, Jossey – Bass Publishers
- NCTE (1998) Policy Perspectives in Teacher Education, NCTE, New Delhi
- Singh, L.C. (1990) Teacher Education in India: A Resource Book, NCERT, New Delhi.
- Smith, E.R. (1962). Teacher Education. A Reappraisal. New York: Harper Row Publishers.
- Stinnet, T.M. (1965). The Profession of Teaching. New Delhi: Prentice Hall of India (Pvt) Ltd.
- Stone, J. C. (1970). Breakthrough in Teacher Education. San Francisco: Jossey Bass Inc.

## Environment Education

- Aggrawal, Y.P. (1978). Environment and Nature, New Delhi
- Ambasht R.S. (1990). Environment & Pollution-An Approach Ecological.
- Bandhu, D. &Aulakh, G.S.(1981). Environmental Education. New Delhi
- Bharucha, E. (2005) Textbook of Environmental Studies for Undergraduate Courses, Hyderabad: Universities Press (India) Private Limited.
- Botkin, D. B. & Keler, E. A. 8th Ed. (2011) Environmental Science: Earth as a Living Planet, New Delhi: Wiley India Pvt. Ltd.
- Callan, S.J., and Thomas, J.M., 2013. Environmental economics and management: Theory, policy, and applications. Cengage Learning.



## Value Education

- Aggarwal J. C. (2005). Education for Values, Environment and Human Rights, New Delhi: Shipra Publication
- Dhokalia, R. P. (2001). External Human Values and world Religions. New Delhi: NCERT.
- Kothari, D. S. Education and Values, Report of the orientation course-cum workshop on Education in Human Values. New Delhi
- Krishnamurthy, J. (2000). Education and the Significance of Life. Pune: KFI.
- Olivelle, Patric. (2006 )(text and trans.) Manu's Code of Law: A Critical Edition and Translation of the Manava-Dharmashastra. New Delhi: Oxford University Press.
- Ruhela, S. P. (1986). Human Values and Education. New Delhi: Sterling Publications Corporation

## Dissertation III- Report Submission

- Becker, L. (2015). Writing successful reports and dissertations. SAGE Publications Ltd, <https://doi.org/10.4135/9781473909786>
- Dash, P.C and Biswal. B. Statistics in Education & Psychology, Dominant Publishers,
- Gregory R. J. (2004). Psychological testing: History, principles, and applications. Allyn & Bacon. Needham Heights, MA, US
- Newton, Paul E. & Stuart S. Validity in Educational & Psychological Assessment, Sage.
- Publication Manual of the American Psychological Association, Seventh Edition (2020)
- Urbina, S. (2014). Essentials of psychological testing (2nd ed.). John Wiley & Sons Inc. John Wiley & Sons Inc
- Agrawal, Y.P. (1988). Better Sampling: Concepts, Techniques and Evaluation. New Delhi: Sterling Publishers Private Ltd.
- Backstrom, C.H. & Gerald, H. (1981) Survey Research. New York: John Wilev & Sons.
- Best J. W. (1993). Research in Education. New Delhi: Prentice-Hall of India Pvt. Ltd.
- Bogdan, R and Taylor, S.J. (1975) Introduction to Qualitative Research Methods. New York John Wilev & Sons.
- Bogdan R.C. & Biklen, S.K. (1998). Introduction to Qualitative Research of Education: An Introduction to Theory and Methods. Boston: Allyn and Bacon.
- Champion, C.M. (1981). The Design of Educational Experiments. New York: McMillan Publishing Co. Inc.
- Champion, D.J. (1981). Basic Statistics for Social Research. New York: McMillan Publishing Co. Inc.
- Cohen, L. & Manion L. (1994). Research Methods in Education. London: Routledge.
- Cronbach, L.J. (1970). Essentials of Psychological Testing. New York: Harper & Row Publishers.
- Dayton, C.M. (1974). The Design of Educational Experiments. New York: McGraw Hill Book, Co.
- Denzin, N. K. & Lincoln, Y.S. (EDS) (2000). Handbook of Qualitative Research. London: Sage.
- Desai, H.G. (1979) Style Manual for Dissertations/Theses. Rajkot: Saurashtra University.
- Edwards, A.L. (1957). Techniques of Attitude Scale Construction. New York: Appleton Contury Crofts, Inc.

- Gall, M.D., Gall, J.P. and Borg, W.R. (2007) Educational Research: An Introduction. Coston: Allyn and Bacon.
- Rathod, R.R. (2012). Variables and Hypothesis in Research. Surat.
- Shukla, S. (2018). Research Methodology and Statistics. Ahmedabad: Rishit Publications.

# Syllabus Developed, Reviewed & Approved by

## Academic Council

- Dr. Harshad A. Patel, Vice-Chancellor, Chairman, IITE
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- Dr. Viral B. Jadav, Director, Centre of Research, IITE
- Prof. Jayna K. Joshi, Director, Centre of Extension Services, IITE
- Dr. Sonal Thareja, Director, Centre of Training, IITE
- Prof. Divya M. Sharma, Director, Special Education, IITE
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- Prof. Prerana H. Shelat, Professor, Centre of Education, IITE
- Prof. Jayna K. Joshi, Professor, Centre of Education, IITE
- Dr. Sonal Thareja, Professor, Centre of Education, IITE
- Prof. H. B. Patel, Professor, School of Education, Central University of Gujarat
- Shri Gajanand Londhe, Member, National Focus Group, ECCE & FLN
- Dr. Sudhirkumar Tandel, Associate Professor, Centre of Education, IITE
- Prof. (Dr.) Bharat Joshi, Senior Professor, Department of Education (IASE), Gujarat Vidyapith
- Dr. Kalpesh H. Pathak, Principal, Centre of Education, IITE
- Dr. T. S. Joshi, Ex. Director, Gujarat Council of Educational Research and Training
- Prof. (Dr.) Bharat Ramanuj, Professor & Head, Department of Education, Saurashtra University
- Dr. Nalini Patil, Principal, SNTD College of Education
- Prof. (Dr.) Prem Narayan Singh, Director, Inter University Centre for Teacher Education IUCTE, Banaras Hindu University
- Prof (Dr.) Amrut J Bharvad, Professor, Department of Education, Gujarat University
- Dr. Viral Jadav, Associate Professor, Centre of Education, IITE
- Raulji Isha Hitendrasinh, PhD Scholar, Centre of Education, IITE
- Acharya Kandarp Umakant, M.Sc.-M.Ed. Sem. 3, Centre of Education, IITE
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## Board of Studies

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4	Dr. Viral Jadav, Chairperson, Board of Studies for Practice Teaching	Associate Professor, Centre of Education, IITE
5	Dr. Rushi Joshi	Assistant Professor, Centre of Education, IITE
6	Dr. Jyoti Raval	Assistant Professor, Centre of Education, IITE
7	Prof. Sujata Srivastava	Professor, Department of Education, Faculty of Education and Psychology
8	Dr. Jignesh Patel	Associate Professor, Faculty of Education, Children's University
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4	Prof. Jignesh Patel	Professor, Faculty of Education, Gujarat Vidyapith
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3	Dr. Sheetal Helaiya	Assistant Professor, Centre of Education, IITE
4	Dr. S. Mani	Professor, Department of Educational Planning and Administration, Tamilnadu Teachers Education University
5	Dr. Mahesh Dixit	Associate Professor, Faculty of Education, Gujarat Vidyapith
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5	Dr. Jayendra Amin	Professor & Chairperson, Centre for Studies and Research in Education, School of Education, Central University of Gujarat
6	Dr. Keval Andharia	Assistant Professor, Smt. M.N.K. Dalal Education College for Women
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4	Dr. Divya Sharma, Chairperson, Board of Studies for Inclusion in Education	Professor, Centre of Education, IITE
5	Dr. Rajiv Ratan Sharma	Professor, Department of Education, University of Jammu
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4	Prof. Arvind Kumar Pandey	Professor, Department of Education, Mahatma Gandhi Kashi Vidyapith
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3	Dr. Asheesh Srivastava	Professor, School of Education, Mahatma Gandhi Central University
4	Dr. Bharat Joshi	Faculty of Education, Gujarat Vidyapith
5	Prof. Sanjeev Sonawane	Professor, Department of Education & Extension, Savitribai Phule Pune University
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4	Prof. Seema Singh	Uttar Pradesh Rajarshi Tandon Open University
5	Dr. Rajani Ranjan Singh	Professor & Head, Department of Education, Dr. Shakuntala Misra National Rehabilitation University,
6	Mala Arora	Education Consultant, Inclusion, Diversity and Mental Health
7	Dr. Ajit Kumar	Assistant Professor (Special Education), Composite Regional Centre for Skill Development, Rehabilitation and Empowerment of Persons with Disabilities

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4	Dr. Jayna Joshi, Chairperson, Board of Studies for Sanskrit	Professor, Centre of Education, IITE
5	Dr. Jayna Joshi, Chairperson, Board of Studies for Hindi	Professor, Centre of Education, IITE
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7	Dr. Nishant Joshi	Assistant Professor, Centre of Education, IITE
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5	Dr. Jagdish Joshi	Director, UGC-HRDC, Gujarat University
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4	Dr. Param Pathak	Professor & Head, Department of Gujarati, Sardar Patel University
5	Dr. Darshana Dholakiya	Professor, Krantiguru Shyamji Krishna Verma, Kachch University
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4	Dr. Kunjan Shah	Assistant Professor, Centre of Education, IITE
5	Prof. Jayant Vyas	Professor, Department of Education, Maharaja Krishnakumarsinhji Bhavnagar University
6	Dr. Paresh Acharya	Associate Professor, Department of Education, Sardar Patel University
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8	Dr. Sanjay Shah	Lecturer, District Institute of Education & Training

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4	Dr. Mehul Dave, Chairperson, Board of Studies for Life Sciences	Associate Professor, Centre of Education, IITE
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7	Dr. Amrut Bharwad	Professor, Department of Education, Gujarat University
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5	Prof. K. S. Chikhalia	Professor, Department of Chemistry, Veer Narmad South Gujarat University
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6	Dr. Snehal Bagthariya	Joint Director, Gujarat State Biotechnology Mission
7	Dr. Ketan Tatu	Senior Scientist, GEER Foundation

## યુનિવર્સિટી ગીત

રાષ્ટ્રની ઉજળી આવતી કાલના અમે છીએ ઘડવૈયા  
અંધકારની સામે અડીખમ પ્રકાશના લડવૈયા  
તૂટે તિમિર તણા હર બંધન .....(0૨) આઈ.આઈ.ટી.ઈ. તુજને વંદન .....(0૨)

ઘડવૈયાનું ઘડતર કરતું ઉત્તમ વિદ્યાધામ,  
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સુરાષ્ટ્રના નિર્માણને સાર્થક કરતું ઉત્તમ શિક્ષણ  
પ્રગટે જ્ઞાન તણા જ્યાં સ્પંદન ..... (0૨) આઈ.આઈ.ટી.ઈ. તુજને વંદન .....(0૪)



॥ न हि ज्ञानेन सदृशं पवित्रमिह विद्यते ॥

**भारतीय शिक्षक प्रशिक्षण संस्थान, गांधीनगर**  
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