

Model Curriculum for Three/Four Year Degree Course  
(With Multiple Entry/Exit Option)  
Based on NEP-2020

# ARCHAEOLOGY



**Odisha State Higher Education Council, Bhubaneswar**  
**Government of Odisha**

## Contents

- 1. Structure and Regulation.....**
- 2. Core Courses (4 Credits each).....**
- 3. Multidisciplinary Courses.....**  
*(3 courses to be chosen from baskets of Multidisciplinary for Semester-I/II/III with 3 credits each)*
- 4. Ability Enhancement Courses.....**  
*(Odia and English are the compulsory courses under Semester-I/II respectively with 4 Credits each)*
- 5. Skill Enhancement Courses (SEC).....**  
*(3 courses to be chosen from baskets of SEC for Semester-I/II/III respectively with 3 credits each)*
- 6. Value Added Courses.....**
  - a. Environmental Studies and Disaster management compulsory under Semester-I with 3 Credits*
  - b. 3 courses to be chosen from baskets of VAC for Semester-III/V/VI with 3 credits each*
- 7. Summer Vocational Course .....**  
*(Students may choose vocational courses after 2<sup>nd</sup> Semester and 4<sup>th</sup> Semester for Certificate Course or Diploma Course respectively with 4 credit each opt for exit)*

**Programme Outcome:**

- To prepare the students for a career in
- To prepare the students for Higher Education and Research in
- To develop a conceptual understanding of the subject and to develop an inquisitiveness in the subject.
- To enable the student to acquire basic skills necessary to understand the subject and to master the skills to handle equipment's utilized to learn the subject.
- To generally promote wider reading on the subject and allied inter disciplinary subject.

## Semester-I

### Core I

### Philosophical Foundations of Education

#### Course Outcomes (COs):

On completion of the course, the students will be able to:

- To understand the philosophical foundation of education as a discipline under the faculty of the Liberal Arts and Social Science.
- To understand various schools of thought, to develop ability to distinguish one from the other and critically analyze each school of thought.
- To understand the basic Indian schools of thought.
- To develop the ability to relate the philosophical foundation with educational practices.

#### Course Contents:

##### UNIT-I: Education in Philosophical Perspective

###### Learning Outcomes

- ✓ *Understand concept of education along with individual and social aims.*
- ✓ *Explain relationship between Philosophy and education.*
- ✓ *Relate the functions of philosophy in our life.*
- Concept of Education, Narrower and broader concept of education.
- Concept of Lifelong Education. Individual and Social Aims of Education.
- Meaning and nature of philosophy of education. Branches of Philosophy- Metaphysics, Epistemology and Axiology, and its educational implications.
- Functions of Philosophy in relation to education.

##### UNIT-II: Western Schools of Philosophy and their Educational Implications

###### Learning Outcomes

- ✓ *Describe the nature of schools of philosophy and its branches.*
- ✓ *Understand Western Schools of Philosophy and their Implications to the current system of education.*
- Idealism with reference to: Aims of Education, Curriculum, Methods of Teaching, Role of Teacher, Discipline.
- Naturalism with reference to: Aims of Education, Curriculum, Methods of Teaching, Role of Teacher, Discipline
- Pragmatism with reference to: Aims of Education, Curriculum, Methods of Teaching, Role of Teacher, Discipline
- Existentialism with reference to: Aims of Education, Curriculum, Methods of Teaching, Role of Teacher, Discipline.

### **UNIT-III: Indian Schools of Philosophy and their Educational Implications**

#### **Learning Outcomes**

- ✓ *Understand Indian Schools of Philosophy and their Implications to the current system of education.*
- ✓ *Compare and contrast Indian and Western philosophies of education.*
- Common Characteristics of Indian Philosophy with reference to Metaphysics, Epistemology, Axiology, Orthodox and Heterodox
- Sankhya, Vedanta, Buddhism, Jainism with reference to: Philosophical doctrines, Aims of education, Curriculum, Methods of Teaching, Role of Teacher

### **UNIT-IV: Contributions of Great Educational Thinkers**

#### **Learning Outcomes**

- ✓ *Critically examine contributions of great thinkers to the field of education and its reflections in curriculum at school and higher education.*
- Contributions of Western thinkers: Plato and Aristotle with reference to their philosophical orientation, aims of education, method of teaching, role of teacher.
- Rousseau and John Dewey with reference to their philosophical orientation, aims of education, method of teaching, role of teacher.
- Paulo Freire and Ivan Illich with reference to their philosophical orientation, with reference to their philosophical orientation, aims of education, method of teaching, role of teacher and student.

**Mode of Course Transaction:** Seminar, Team Teaching, Dialogue, Peer-Teaching, Peer Group Discussion, Collaborative and Cooperative Learning, Field Trip, Concept Mapping, Lecture Method, Self-Learning.

#### **Practicum: 30 Marks (Any one of the following)**

- 1) Field visit to a seat of learning/educational institute in the locality and prepare report and submission.
- 2) Presentation (through PPT) of a paper in Department level seminar on any topic from the above course and submit full paper along with handout of PPT.
- 3) Appraisal of aims of education and curriculum proposed by one of the educational thinkers in the present socio-cultural context of India and submit the report.

(N.B.: The report will be evaluated by both internal and external examiners)

#### **Text Books:**

- ✓ *Safaya, R.N. & Shaida, B.D. (2010). Modern Theory and Principles of Education. New Delhi: Dhanpatrai Publishing Company Pvt. Ltd. Nayak, B.K. (2018).*
- ✓ *Ravi, Samuel. S. (2015). A Comprehensive Study of Education. Delhi: PHI Learning Pvt. Ltd.*
- ✓ *Taneja, V.R. (2000). Educational thought and practice. New Delhi: Sterling Publishers Pvt. Limited.*
- ✓ *Aggrawal, J.C. (2013). Theory and principle of education. New Delhi: Vikash Publishing House Pvt. Ltd.*

## Suggested Books:

- ✓ Anand, C.L. et.al. (1983). *Teacher and education in emerging in Indian society*, New Delhi: NCERT.
- ✓ Brubacher, John.S.(1969). *Modern philosophies of education*. New York: McGraw Hill Co.
- ✓ Clarke, P. (2001). *Teaching and learning: The Culture of pedagogy*. New Delhi: Sage Publication.
- ✓ Dash, B.N. (2011) *Foundation of education*, New Delhi; Kalyani Publishers.
- ✓ Dewey, J. (1916/1977). *Democracy and education*. New York: MacMillan.
- ✓ Dewey, J. (1956). *The Child and the curriculum, school and society*. Chicago, Illinois: University of Chicago Press.
- ✓ Dewey, John (1997). *Experience and education*. New York: Touchstone.
- ✓ Ganesh, K. &Thakkar, U.(Ed.) (2005).*Culture and making of identity in India*. New Delhi: Sage Publications.
- ✓ Govt. of India (1986/'92). *National policy on education*. New Delhi: MHRD.
- ✓ Krishnamurthy, J. (1953). *Education and significance of life*. New Delhi: B.I. Publications
- ✓ Kumar Krishna (1996). *Learning from conflict*. New Delhi: Orient Longman.
- ✓ Ministry of Education (1966).*Education and national development*. New Delhi: Ministry of Education, Government of India.
- ✓ Ministry of Education, Govt. of India (2020).*National education policy 2020*.
- ✓ Mishra, A. D. (nd). *Mahatma Gandhi on Education*.Vikas Publishing
- ✓ Ornstein, Allan C. & Levine, Daniel, U. (1989). *Foundations of education (4th Ed.)*. Boston: Houghton MifflinCo.
- ✓ Pathak, R. P. (2012). *Philosophical and sociological principles of education*. Delhi: Pearson.
- ✓ Pathak, A. (2002). *Social implications of schooling*. New Delhi: Rainbow Publishers.
- ✓ Peters, R.S. (1967). *The Concept of education*. London: RoutledgeKegan& Paul.
- ✓ Radhakrishnan, S. *Indian philosophy Vol. I and Vol. II*
- ✓ Ross, J. S. (1981). *Ground work of educational theory*. Delhi: Oxford University Press
- ✓ Rusk, Robert R., *Philosophical bases of education*, London: Oxford University Press.
- ✓ Salamatullah, (1979).*Education in social context*. New Delhi: NCERT.
- ✓ Srinivas, M.N., (1986). *Social changes in modern India*. Bombay: Allied Publishers.
- ✓ Wingo, G. M. (1975). *Philosophies of education*. New Delhi: Sterling Publisher Pvt. Limited.

## Core2 Psychological Foundations of Education (4 Credits)

### Course Outcomes (COs):

On completion of the course, the students will be able to:

- Understand the concept of educational psychology
- Know different methods of educational psychology to understand learners
- Explain the different stages of growth and development

## Course Contents:

### UNIT-I: Educational Psychology in Developmental Perspective

#### Learning Outcome

- ✓ *Explain concept of educational psychology and its relationship with psychology.*
- ✓ *Describe various methods to understand learners.*
- ✓ *Understand concepts of growth and development of child and adolescence, and underlined general principles of growth and development.*
- ✓ *Describe the typical characteristics of growth and development during childhood and adolescence.*
- ✓ *Explain theory of cognitive development and its educational implications.*
- Concept, nature, scope and relevance of educational psychology.
- Methods to understand learners: Observation, Experimentation and Case Study.
- Concept and difference between growth and development. Principles of growth and development.
- Characteristics of development during childhood and adolescence in different areas: Physical, Cognitive, Social and Emotional.

### UNIT-II: Intelligence, Creativity and Individual difference

#### Learning Outcome

- ✓ *State different forms and characteristics of individual differences and the ways of meeting the classroom issues arising out of the differences.*
- ✓ *Understand concept and nature of intelligence.*
- ✓ *Develop insight into the theories and measurement of intelligence and creativity.*
- Individual difference: concept, nature, factors and role of education
- Intelligence: concept and nature of intelligence, concept of IQ, theories of intelligence- Two factor theories, Guildford's structure of intelligence (SI) model, Gardner's multiple theory of intelligence.
- Measurement of intelligence: individual and group test, verbal, non-verbal test
- Creativity: meaning, nature and stages of creative thinking, strategies for fostering creativity

### UNIT-III: Learning and Motivation

#### Learning Outcome

- ✓ *Develop critical ideas on various theories of learning and processes of learning with their educational implications.*
- ✓ *Explain concept of motivation and theories of personality.*
- Learning: Concept, nature and factors of learning.
- Learning and Maturation. Factors affecting learning.
- Theories of learning and its educational implications: Classical conditioning, operant conditioning, insightful learning and constructivist approach to learning.

- Motivation: concepts, types, and techniques of motivation.

#### UNIT-IV: Personality and Mental health

##### Learning Outcome

- ✓ Critically examine relevance of learning about mental health, and adjustment mechanisms.
- List of characteristics of individual differences
- Find out the concept of intelligence
- Examine the relevance of learning about mental health and adjustment mechanism
- Personality: Concept and nature of personality. Relevance of studying personality for learning.
- Theories of personality: Type theory and Trait theory with implications. Assessment of personality: Subjective, objective and projective techniques.
- Mental health: Concept, mental health of teacher, factors affecting mental health and role of teacher.
- Adjustment mechanism: Concept and Types.

#### Sample Question

1. What is behavior? [ 1 mark]
2. Mention any two educational implications of case study. [2 Marks] [Within 50 Words]
3. Describe the steps of creativity. [3 Marks] [Within 300 words]
4. Explain the factors affecting mental health of the learner? [8 marks] [Within 500 to 800 words]

#### Practicum: 30 Marks (Any one of the following)

- 1) Administration and interpretation of any psychological test relating to intelligence, creativity, and personality and preparation of a report and submission.
- 2) Case Study of a problem child / a slow learner/ a disadvantaged child and preparation and submission of report.
- 3) Analysis of the common behavioral problems observed in the classroom. Suggesting the ways to address them, Preparation and submission of report.

(N.B.: The report will be evaluated by both the Internal and External examiners.)

#### **Mode of Course Transaction:**

Seminar, Team Teaching, Dialogue, Peer-Teaching, Peer Group Discussion, Collaborative and Cooperative Learning, Field Trip, Concept Mapping, Lecture Method, Self-Learning.

#### **Text books:**

- ✓ Aggarwal, J.C. (2014). *Essentials of Educational Psychology*. New Delhi: Vikas Publishing House Pvt Ltd.
- ✓ Chauhan, S.S. (1978). *Advanced educational psychology*. New Delhi: Vikas Publishing House Pvt. Ltd.



- ✓ Mangal, S.K. (2002). *Advanced educational psychology*. New Delhi: Prentice Hall of India.
- ✓ Woolfolk, A. (2015). *Educational psychology (9<sup>th</sup> Ed.)*. New Delhi: Pearson Publication

#### **Suggested books:**

- ✓ Arnett, J. (2007). *Adolescence and emerging adulthood: A cultural approach*. (3rd Edn.). Upper Saddle River, N.J.: Pearson.
- ✓ Berk, Laura E. (2011). *Child development (9th Edn.)*. New Delhi: Prentice Hall of India.
- ✓ Chaube S.P. &Chaube A. (nd). *Foundations of Education, 2nd Edition* Vikas Publishing
- ✓ Flavell, J.H. (1963). *The developmental psychology of Jean Piaget*. New York: Van No strand
- ✓ Hurlock, E. B. (1980). *Developmental psychology: All span approach*. New York: McGraw Hill Book.
- ✓ Hurlock, E.B. (1980). *Child development (6th Edn.)*. Tokyo: McGraw-Hill, Kogakusha Ltd.
- ✓ Hurlock, E.B. (2007). *Child growth and development*. New York: McGraw Hill.
- ✓ Kail, Robert V (2011). *Children and their development (6th Edition)*. Englewood Cliffs, N.J: Prentice Hall.
- ✓ Stephens, J. M.; Evans, E. D. (1973). *Development and classroom learning: An introduction to educational psychology*. New York: Holt, Rinehart and Winston

### **Semester-II**

#### **Core III**

#### **Sociology of Education**

#### **Course Outcomes (COs):**

On completion of the course, the students will be able to:

- Know the concept of educational sociology with its nature, scope and importance.
- Understand the social process
- Analysis the functions of different agencies of education for socialization of children.
- Describe the role of different agencies of education
- Find out the linkage between education and modernization
- Understand the concept of equality and equality

#### **Course Contents:**

#### **UNIT 1: Concept and approaches to sociology of education**

#### **Learning Outcomes**

- ✓ Understand concept of educational sociology along with its nature, scope and importance.
- ✓ Explain relationship between Education and Sociology.
- Concept, nature, scope and importance of Sociology of education.
- Relationship between education and sociology.

- Understanding the evolution of sociology of education as a discipline.
- Sociological theories; functionalism, conflict theory, interactionism and post modernism.
- Thought of Antonio Gramsci and Pierre Bourdieu

## **UNIT -2: Education and social system**

### **Learning Outcomes**

- ✓ *Relate the functions of different agencies of education for socialization of children.*
- ✓ *Describe the different agencies of education and their functions*
- Agencies of education (Family, School, Society, Mass media and State) – it's Importance and functions
- Understanding education as a factor of social stratification and social mobility.
- Socialization: concept and theories of socialization (theory of G.H.Mead, Cooley's theory of the looking-glass self, Durkheim's theory of collective representation);

## **UNIT-3: Education, Social change and Modernization**

### **Learning Outcomes**

- ✓ *Describe the role of education in modernization and globalization*
- Concept, Factors and theories of Social Change, Education as an instrument of social change and social control.
- Modernization; Concept and attributes, Education for accelerating the process of modernization.
- Concept of globalization and its impact on education.

## **Unit-4: Social group and their educational implications**

### **Learning Outcomes**

- ✓ *Describe the function of education to ensure equality and equity*
- ✓ *Explain the process of equalization of educational opportunity and the steps taken towards its attainment*
- Concept of equality, equity and inclusion: its educational implication
- Educational Opportunity and Participation in Education of Scheduled Castes, Scheduled Tribes, Women, Minority and CWSN.
- Group dynamic- cohesion and conflict; conflict resolution
- Classroom climate; Understanding interpersonal relationship of classrooms technique (socio-metric and guess who technique) and its educational effects.
- Social responsibility of Higher education.

## **Practicum: 30 Marks (Any one of the following)**

1. Field visit to Study a social unit (School/Village/Slum) in the locality and prepare a report
2. Organizing some community activities, social intervention, and awareness camp in the locality for participation of disadvantaged groups in education.
3. Presentation (through PPT) of a paper in Department level seminar on any topic from the above course and submit full paper along with handout of PPT.
4. Make a compendium of news articles published in social media and print media about the education of disadvantage groups.

*N.B.: The report will be evaluated by both internal and external examiners)*

**Mode of Course Transaction:**

Seminar, Team Teaching, Dialogue, Peer-Teaching, Peer Group Discussion, Collaborative and Cooperative Learning, Field Trip, Concept Mapping, Lecture Method, Self-Learning.

**Text Books**

- ✓ *Pathak, R. P. (2012). Philosophical and sociological principles of education. Delhi: Pearson.*
- ✓ *Shukla, S. and Kumar, K. (Eds.) (1985). Sociological Perspectives in Education: A Reader. Delhi: Chanakya Publications, 1985.*
- ✓ *Bhattacharya, S. (2006). Sociological Foundation of Education. New Delhi: Atlantic*
- ✓ *Anand, C.L. et.al. (Ed.) (1983). Teacher and Education in Emerging in Indian Society. New Delhi: NCERT.*
- ✓ *Deshpande, S. (2004). Contemporary India: A Sociological View. New Delhi: Penguin*
- ✓ *Gore, M. S., Desai, I.P. and Chitnis, S. (Eds.). (1967). The Sociology of Education in India. New Delhi: National Council of Educational Research and Training.*
- ✓ *Illich, I. (1996). Deschooling Society. Marion Boyers, London.*
- ✓ *Kumar, K. and Oesterheld, J. (Eds.) (1995). Education and Social Change in South Asia. New Delhi: Orient Longman.*
- ✓ *Mathur, S. S. (2000). A sociological Approach to Indian Education. Agra*
- ✓ *VinodPustakMandir*

**Suggested books:**

- ✓ *Ravi, Samuel.S.(2015). A Comprehensive Study of Education. Delhi: PHI Learning Pvt. Ltd.*
- ✓ *Aggrawal, J.C.(2013). Theory and principle of education. New Delhi: Vikash Publishing House Pvt Ltd.*
- ✓ *Tilak,jandhyal B.G(2003) education,society and development. New delhi: APH publishing corporation for NUEPA.*
- ✓ *Safaya, R.N. &Shaida, B.D. (2010), Modern theory and principles of education. New Delhi: DhanpatiPublising Company Pvt. Ltd.*
- ✓ *Ganesh, Kamala & Thakkar, Usha (Ed.) (2005). Culture and making of identity in India. New Delhi: Sage Publications.*
- ✓ *Pathak, Avijit (2002). Social implications of schooling. New Delhi: Rainbow Publishers.*
- ✓ *Clarke, P. (2001). Teaching and learning: The Culture of pedagogy. New Delhi: Sage Publication.*
- ✓ *Taneja, V.R. (2000). Educational thought and practice, New Delhi: Sterling Publishers Pvt. Limited.*
- ✓ *Saraswati, T.S. (Ed.) (1999). Culture, socialization and human development. Theory, research and applications in India. New Delhi: Sage Publication.*
- ✓ *Dewey, John (1997). Experience and education. New York: Touchstone.*
- ✓ *Ornstein, Allan C. & Levine, Daniel U. (1989). Foundations of education (4th Edn.). Boston: Houghton Mifflin Co.*
- ✓ *Anand, C.L. et.al. (1983). Teacher and education in emerging in Indian society, New Delhi: NCERT.*

- ✓ *Salamatullah, (1979). Education in social context. New Delhi: NCERT.*
- ✓ *Dewey, John (1916/1977). Democracy and education. New York: MacMillan.*
- ✓ *Govt. of India (1986/'92). National policy on education. New Delhi: MHRD.*
- ✓ *Ministry of Education (1966). Education and national development. New Delhi: Ministry of Education, Government of India.*
- ✓ *Delor, J. (1996). Learning: The Treasure Within - Report to UNESCO of the International Commission. Paris: UNESCO.*
- ✓ *Coser, L.A. (1996). Masters of Sociological Thoughts Ideas in Historical and SocialContext. Jaipur: Rawat Pub.*

## **Core IV Pedagogical Perspectives in Education**

### **Course Outcomes (COs):**

On completion of the course, the students will be able to:

- Understand the concept of pedagogy.
- Explain different teaching Strategies.
- Find out the relationship between teaching and learning.
- Enlist different approaches and methods of teaching.
- Know the core teaching skills.
- Prepare lesson plans following different designs.

### **Course Contents:**

#### **UNIT I- Concept of Teaching and Learning**

##### **Learning Outcomes**

- ✓ *Explain the concept of pedagogy*
- ✓ *Explain different teaching task with example*
- ✓ *Prepare a lesson plan following different designs*
- Meaning and definition of teaching and learning, Relationship between teaching and learning
- Variables involved in teaching task: independent, dependent and intervening
- Phases of teaching: Pre-active, inter- active and post- active
- Levels of teaching: memory, understanding and reflective
- Lesson plan design- The Herbartian steps, 5 E and ICON design model

#### **UNIT II - Theories of Teaching**

##### **Learning Outcomes**

- ✓ *Differentiate pedagogy from other allied concepts*
- ✓ *Establish relationship between teaching and learning*
- Meaning and nature of teaching theory
- Types of teaching theories:
- Formal theories of teaching- communication theory of teaching
- Descriptive theories of teaching– Gagne’s hierarchical theory of instruction and Bruner’s cognitive theory of instruction
- Normative theories of teaching - Mitra’s psychological theory of teaching and Clarke’s general theory of teaching

### **UNIT III Principles and maxims of teaching**

- General principles of teaching
- Psychological principles of teaching
- Maxims of teaching
- Core teaching skills: Introducing the lesson, explaining, illustrating with examples, stimulus variation, and reinforcement, questioning, probing questions, closure.

### **UNIT IV Approaches and methods of Teaching**

#### **Learning Outcomes**

- ✓ *List out different approaches and methods of teaching*
- Concept of approach, method, strategy and techniques
- Methods of teaching: inductive-deductive, analytic- synthetic, problem solving and project
- Shift in focus from teaching to learning- constructivist approach to learning

#### **Practicum: 30 Marks**

Preparation of rating scale/ checklist /observation schedule to evaluate classroom Teaching and reporting.

*NB: It will be evaluated by both the internal and external examiners.*

#### **Mode of Course Transaction:**

Seminar, Team Teaching, Dialogue, Peer-Teaching, Peer Group Discussion, Collaborative and Cooperative Learning, Field Trip, Concept Mapping, Lecture Method, Self-Learning.

#### **Text Books**

- ✓ Kochar, S.K. (2011). *Methods and Techniques of teaching*. Sterling Publisher Pvt.Ltd., New Delhi
- ✓ Chauhan, S.S. (1995). *Innovations of teaching learning process*. Vikash PublishingHouse, New Delhi
- ✓ Sharma, R.A. (1986). *Technology of Teaching*. International Publishing House, Meerut.

#### **Suggested Books**

- ✓ Aggarwal, J.C. (1995). *Essentials of Educational Technology*. VikashPublishingHouse, New Delhi
- ✓ Walia, J.S. (2013). *Educational Technology*. Jalandhar, Punjab: Ahim Publications.
- ✓ Mangal, S.K. and Mangal, U.(2010) *Essentials of Educational Technology*, NewDelhi, PHI Learning Pvt. Limited
- ✓ Nageswar Rao, S., Sreedhar, P. & Rao, B. (2007). *Methods and techniques ofteaching*, Sonali Publications, New Delhi
- ✓ Oliver,R.A. (1963) *Effective teaching*, JM Dent & SonsPathak, R.P. & Chaudhary, J. (2012) *Educational Technology*, Pearson, New Delhi
- ✓ Ryburn, W.M.(1955) *Principles of Teaching*, Geoffrey Cembridge, OUP
- ✓ Sampath,K, PannirSalvam,A.,&Santhanam, S.(1981) *Introduction to EducationalTechnology*, Sterling Publisher, New Delhi

### **Course Outcome (COs):**

On completion of this course, the students will be able to:

- Understand the meaning of assessment and evaluation
- Know different types of evaluation
- Explain the scales of measurement
- State the taxonomy of instructional learning objectives
- Describe the characteristics of Good test
- Analyze the principles of construction of tests
- **CO7:** Prepare a list of non- standardized

### **Course Content:**

#### **UNIT1: Assessment and Evaluation in Education**

##### **Learning Outcomes**

- ✓ *Understand the concept of measurement, evaluation and assessment*
- ✓ *Gain knowledge about the nature, purpose and types of educational assessment and evaluation.*
- ✓ *Understand different scales of measurement –nominal, ordinal, interval and ratio*
- Understanding the meaning and purpose of test, measurement, assessment and evaluation
- Scales of measurement-nominal, ordinal, interval and ratio
- Types of test-teacher made and standardized
- Approaches to evaluation-placement, formative, diagnostic and summative
- Types of evaluation-norm referenced and criterion referenced
- Concept and nature of continuous and compressive evaluation

#### **UNIT2: Instructional Learning Objectives**

##### **Learning Outcomes**

- ✓ *Explain the importance of instructional objectives for learning and its processes for enhancing the quality of learning and teaching*
- Taxonomy of instructional Learning Objectives with special reference to cognitive domain
- Criteria of selecting appropriate Learning Objectives, and stating of general and specific instructional Learning Objectives
- Relationship of evaluation procedure with Learning Objectives
- Difference between objective based objectivity type test and objective based essay type test

#### **UNIT3: Tools and Techniques of Assessment and construction of Test**

##### **Learning Outcomes**

- ✓ *Develop and use different types of tools and techniques for continuous and comprehensive assessment of learning in the school situation*
- ✓ *Describe the characteristic of a good test.*
- ✓ *Illustrate the principles of test construction in education.*
- Steps of test construction: planning, preparing, trying out and evaluation
- Principles of construction of objectivity type test items-matching, multiple choice, completion and true- false
- Principles of construction of essay type test
- Non-standardized tools: Observations schedule, interview schedule, ratings scale, check list, portfolio and rubrics.

#### **UNIT4:CharacteristicsofagoodTest**

##### **Learning Outcomes**

- ✓ Analyzeandinterpretresultsoftheassessmentusingstandardscores.
- Validity-concept,typesandmethodsofvalidation
- Reliability-conceptandmethodsofestimatingreliability
- Objectivity-conceptandmethodsofestimatingobjectivity
- Usability-conceptandfactorsensuringusability

##### **Practical**

ConstructionofUnittestonaschoolsubjectbasedonblueprintandreporting.

*NB:ItwillbeevaluatedbybothInternalandExternalexaminers.*

##### **Text Books**

- ✓ *Cecil, R. Reynold; Ronalds, B.LivingSone; Victor willium, Arbind, K. Jha; Pearson Education, Second Edition 2017*
- ✓ *Mohan Radha, Measurement, Evaluation and Assessment in Education, PHI Learning Pvt. Ltd.*

##### **Suggested Books:**

- ✓ *Aliken, L.R, Tests and Examinations - Measuring Abilities and Performance, Willey, New York, 1998.*
- ✓ *Airasian, P. Classroom Assessment, Mcraw Hill, New York, 1995.*
- ✓ *Anatasi, A & Urbina, S., Psychological Testing, Prentice Hall, Englewood Cliffs, 1997.*
- ✓ *Banks, S. R Classroom Assessment: Issues and Practices, Pearson Allyn & Bacon, Boston, 2005.*
- ✓ *Cohen, R. J., Swerdlik, M.E. & Philips, S. M., Psychological testing and Assessment, An Introduction to the Tests and measurement, Mayfield Publishing Co. California, 1996.*
- ✓ *Cronbech L. J., Essentials of Psychological Testing, Harper Collins, New York, 1990.*
- ✓ *Ebel, R. L. &Frisbie, D. A. Essentials of Educational measurement, Practice Hall ofIndia, Pvt. Ltd., New Delhi, 1991.*
- ✓ *Grounlund, N. E. Assessment of student Achievement. Allyn & Bacon, Boston, 2003.*
- ✓ *Gregory, R.J. Psychological testing: History, Principles and Applications, Allyn & Bacon, Boston 1992.*
- ✓ *10. Harper, A. E., Jr. & Harper, E. S., Preparing Objective Examinations: A Handbook for Teachers, Students and Examiners, Prentice Hall of India Pvt. Ltd., New Delhi. 1992.*
- ✓ *11. Hopkins, K. D. Educational and Psychological Measurement and Evaluation, Allyn & Bacon, Boston, 1998.*
- ✓ *12. Kaplan, R M. &Saccuzzo. D. P., Psychological Testing Principles Applications &Issues, Wordsworth, California, 2000.*

### **Course Outcomes (COs):**

On completion of the course, the students will be able to:

- Understand the features of education during Vedic period.
- Know the relevance of Gurukul system.
- Enlist the features of education during medieval period.
- Conceptualize the charter's Act (1813), Macaulay's minute (1835) and other reports.
- Analyse the recommendations of committees and commissions in post-independence period.

### **Course Contents:**

#### **Unit – I: Education during Ancient period**

##### **Learning Outcomes**

- ✓ *Know the features , aims of education during Vedic period*
- ✓ *Understand the relevance of Gurukul System*
- Education in Vedic Period - Aims of Education, Curriculum, Method of Teaching, System of Admission, Role of Teacher. Types of Educational Institutions, Merits and limitations
- Education during Buddhist period, Concept of Buddhist Philosophy, features of Buddhist system of Education; Admission system, Aims of Buddhist Education, curricular method of Teaching, Role of the Teacher Discipline. Merits of Buddhist Education, Criticism of Buddhist Education.

#### **Unit – II: Education during medieval Period**

##### **Learning Outcomes**

- ✓ *Point out the features of education during medieval period*
- Education in medieval India - Aims of Education, Curriculum, method of Teaching, System of Admission, Role of Teacher, Medium of instruction,
- Types of Educational institutions, merits and demerits of Medieval Education.

#### **Unit – III: Education during Colonial Period**

##### **Learning Outcomes**

- ✓ *Conceptualise education during pre- independence period*
- Education in British India – Charter Act of 1813, Macaulay's Minute 1835, Woods Despatch of 1854, Hunter Commission Report – 1882, Sadler Commission – 1917, Hartog Commission Report – 1929 and Sargeant Plan – 1944. Wardha Scheme of Education -1937NEP-2020

#### **Unit – IV: Education during Post-Independence Period**

##### **Learning Outcomes**

- ✓ *Analyse the recommendations of committees and commissions during post-independence period*
- ✓ *Examine the impact of policies and programmes on education in the present context*
- Education in post-Independence India (1948-49), The University Education Commission, Secondary Education Commission (1952-53), Report of Kothari Commission (1964-66), National Policy on Education (1968), National Policy on Education 1986 and Its Revised policy 1992. NEP-2020



## **PRACTICAL**

Study on implementation of NPE (1986) in respect for elementary level. It will be evaluated by both Internal and External examiners.

### **Text Books**

- ✓ Aggrawal, J.C. (2010). *Landmarks in the history of modern Indian education*. New Delhi: Vikash Publishing Pvt. Ltd.
- ✓ Dash, B.N. (1911). *Development of education in India*. New Delhi: Ajanta Prakashan
- ✓ Das, K.K. (1993). *Development of education in India*. New Delhi: Kalyani Publishers

### **Reference Books**

- ✓ Naik, J.P. & Narullah, S. (1996). *A student's history of education in India*. New Delhi: Mc Millan Indian Ltd
- Rawat, P.L. (1989). *History of Indian education* New Delhi: Ram Prasad & Sons.
- ✓ Govt. of India. (1992, 1998). *National Policy on education, 1986 (As modified in 1992)*. Retrieved from [http://mhrd.gov.in/sites/upload\\_files/mhrd/files/NPE86mod92.pdf](http://mhrd.gov.in/sites/upload_files/mhrd/files/NPE86mod92.pdf)
- ✓ Keay, F.E. & Mitra, Sukumar (1978). *A history of education in India*. New Delhi: Oxford University Press.
- ✓ Ministry of Education (1966). *Education and national development*. New Delhi: Ministry of Education, Government of India
- ✓ Ministry of Human Resource Development (2004). *Learning without Burden: Report of the National Advisory Committee*. New Delhi: Min of HRD.
- ✓ Mookharjee, R.K. (1989). *The Gupta Empire*. Delhi: Motilal Banarsidass Publishers Pvt. Ltd.
- Mukherji, S.M. (1966). *History of education in India*. Vadodara: Acharya Book dept.
- ✓ Naik, J.P. and Syed, N. (1974). *A student's history of education in India*. New Delhi: MacMillan
- ✓ Rawat, P.L. (1989). *History of Indian education*. New Delhi: Ram Prasad & Sons, Website, [www.mhrd.gov.in](http://www.mhrd.gov.in)

## Course Outcomes (COs)

On completion of this course, the learners will be able to:

- Gain insight into the fundamental ideologies of Indian philosophers.
- Develop understanding about the educational significance of philosophical ideas of Indian thinkers.
- Compare and contrast educational philosophies of modern Indian thinkers.
- Critically examine the contributions of great philosophers to the field of education.
- Relate Indian philosophy to present system of education.
- Appreciate and adopt philosophies of education in life.

## COURSE CONTENTS:

### UNIT-I: Contributions of Swami Dayanand Saraswati and Swami Vivekananda

#### Learning Outcomes

- ✓ *Develop an understanding of the contributions of Swami Dayanand Saraswati to the field of education.*
- ✓ *Analyze the educational implication of Swami Vivekananda and Ramakrishna Mission to present education.*

#### Part A

- Brief life sketch and philosophical orientation of Swami Dayanand Saraswati
- Contribution of Swami Dayanand Saraswati with reference to aims of education, methods of teaching, role of teacher.

#### Part B

- Brief life philosophy of Swami Vivekananda.
- Contribution of Swami Vivekananda with reference to aims of education, methods of teaching and role of teacher.

### UNIT-II: Contributions of Mahatma Gandhi and Gopabandhu Das

#### Learning Outcomes

- ✓ *Critically analyze the teaching-learning practices of Satyabadi Bana Vidyalaya and its relevance to modern education.*
- ✓ *Understand the concept of Basic education of Mahatma Gandhi.*
- ✓ *Apply the principles of truth and non-violence in life.*

#### Part A

- Life philosophy of Mahatma Gandhi-Truth, Non-violence and Nai Talim.
- Contribution of Mahatma Gandhi with reference to Basic education, aims of education, methods of teaching, role of teacher.

#### Part B

- Life philosophy of Gopabandhu Das with reference to Satyabadi Bana Vidyalaya.
- Contribution of Gopabandhu Das with reference to aims of education, methods of teaching and role of teacher.

### **UNIT-III: RabindraNath Tagore and Sri Aurobindo**

#### **Learning Outcomes**

- ✓ *Reflect on the educational precepts of RabindraNath Tagore.*
- ✓ *Understand the concept of integral education and relate it to life.*

#### **Part A**

- Brief life sketch and philosophies of education of RabindraNath Tagore.
- Contribution of RabindraNath Tagore with reference to aims of education, methods of teaching, role of teacher, Shantiniketan.

#### **Part B**

- Brief life sketch and philosophies of education of Sri Aurobindo.
- Contribution of Sri Aurobindo with reference to aims of education, methods of teaching, role of teacher.

### **UNIT-IV: Mahatma JyotibaraoPhule and GijubhaiBadheka**

#### **Learning Outcomes**

- ✓ *Gain insight into the salient features of Mahatma JyotibaraoPhule's effort towards educational reformation.*
- ✓ *Understand the basic concept of children's education as perceived by GijubhaiBadheka.*

#### **Part A**

- Life philosophy of Mahatma JyotibaraoPhule.
- **Relevance of JyotibaRaophule's educational philosophy** with reference to aims of education, methods of teaching, role of teacher and teacher-taught relationship.

#### **Part B**

- Life philosophy of GijubhaiBadheka.
- **Relevance of GijubhaiBadheka's educational philosophy** with reference to aims of education, methods of teaching, role of teacher and NutanBalShikshanSangha.

**Mode of Course Transaction:** Team Teaching, Dialogue, Peer-Teaching, Peer Group Discussion, Collaborative and Cooperative Learning, Field Trip, Self-Learning.

#### **Practicum/Activities**

Each student will be required to prepare and submit a report on any one of the following:

- Write a report on the origin and growth of SatyabadiBanaVidyalaya.
- Visit to a school run by RamKrishna Mission / DAV School/ Integral School/ SaraswatiSishuMandir etc.prepare a report on their educational activities.
- Prepare an album of Indian philosophers and write their thoughts on education.

It will be evaluated by both internal and external examiners

#### **Text Books**

- ✓ *Agarwal, J.C. (2010). Theory and Practice of Education (13th Edition). Noida: Vikas Publishing House Pvt Ltd.*
- ✓ *Joshi, Sunitha. (2000). Great Indian Educational Thinkers. Delhi: Scholarly Books*
- ✓ *Taneja, V.R. (2000). Educational Thought and Practice. New Delhi: Sterling Publishers Pvt. Limited.*

- ✓ *Theory and Practice of Integral Education- Dr. R.N. Pani-Ashish Publication*

### Reference Books

- ✓ *Chakraborty, J. C. (2010). Modern Education: Its Aims and Principles. Kolkata: K. Chakraborty Publications.*
- ✓ *Gupta N.L. (2002). Mahatma Jyotiba Phule: An Educational Philosopher. New Delhi: Anmol Publications.*
- ✓ *Ravi, S. (2015). A Comprehensive Study of Education. Delhi: PHI Learning Pvt. Ltd.*
- ✓ *Joshi, S. (2000). Great Indian Educational Thinkers. Delhi: Scholarly Books.*
- ✓ *Parimala V. R. (2002) 'Educating Women—How and How Much: Women in the Concept of Tilak's Swaraj' In Sabyasachi Bhattacharya (ed), Education and the Disprivileged: Nineteenth and Twentieth Century India. Hyderabad: Orient Longman.*
- ✓ *Safaya, R.N. & Shaida, B.D. (2010). Modern Theory and Principles of Education. New Delhi: Dhanpatrai Publishing Company Pvt. Ltd.*
- ✓ *Wingo, G. M. (1975). Philosophies of education. New Delhi: Sterling Publisher Pvt. Limited.*

### Web Resources

- <http://www.iloveindia.com/spirituality/gurus/dayanand-saraswati.html>
- <https://icpr.in/journals/#:~:text=Journal%20of%20Indian%20Council%20of%20year%201983%20with%20Professor%20D.P.>
- <http://www.springer.com/philosophy/journal/10781>

## Semester-IV

### Core VIII                      **Early Childhood Care and Education (ECCE)**

#### Course Outcomes (COs):

On completion of the course, the students will be able to:

- Describe need and importance of early childhood care and education
- State different policies, programmes and curriculum frameworks on ECCE
- Critically analyse the relevance of different methods and strategies of planning and management of ECCE
- Explain role of teacher in collaboration with school and community
- Reflect on different models and strategies of professional development of teachers at foundational stage
- Prepare exemplar holistic report card for children at ECCE

#### Course Content:

#### **Unit 1: Meaning Nature and Significance of Early Childhood Care and Education**

##### Learning Outcomes

- ✓ *Understand the concept of ECCE*
- Definition and objectives of holistic ECCE
- Significance of ECCE and foundational learning for holistic development

- Rationale for extending ECCE to 8 years for smooth transaction

## **Unit 2: Policies and Programmes and on ECCE**

### **Learning Outcomes**

- ✓ *State different policies, program on ECCE*
- Integrated Child Development Services (ICDS)
- National Policy on Education 1986 and PoA 1992 and on ECCE
- National Education Policy 2020 on Foundational Learning, National Curriculum Framework for Foundational Stage (NCF-FS) 2022
- NIPUN BHARAT 2021, Nutritional support, Immunization

## **Unit 3: Planning and Management of ECCE Curriculum**

### **Learning Outcomes**

- ✓ *Analyse the principles of balanced and contextualized ECCE curriculum*
- Principles of planning a balanced and contextualized ECCE curriculum.
- Long-term and short-term objectives and planning.
- Toy based Pedagogy
- Maintaining an appropriate and inclusive classroom environment.

## **Unit 4: Role of Teachers for ECCE**

### **Learning Outcomes**

- ✓ *Prepare a report on Holistic assessment of ECCE level*
- Partnership with parents and family care and learning of children.
- Professional development of ECCE teachers.
- Issues of ECCE Teachers- autonomy, interaction with parents, community and authority. Issues relating to administration, management and academics
- Holistic assessment and report card
- Foundational stage/ Preparatory stage under NEP-2020

### **Practicum:**

A case study on unique practices of Anganwardi/ Balwardi/Pre-school Education Institution.

### **Mode of Course Transaction:**

Seminar, Team Teaching, Dialogue, Peer-Teaching, Peer Group Discussion, Collaborative and Cooperative Learning, Field Trip and visit to ECCE Center, Lecture Method, Self-Learning.

## **References and Suggested Books**

- ✓ *Bhatnagar, R (2005). Little steps. New Delhi: National Council for Education and Training,*
- ✓ *Kaul, V, et al. (2014). Readiness for school: Impact of early childhood education quality. New Delhi: CECED, AUD.*
- ✓ *Kaul, V. (2010). Early childhood education program. New Delhi: National Council for Educational Researcher and Training.*
- ✓ *MHRD (1986). National Policy on Education 1986, New Delhi*
- ✓ *MHRD (2020). National Education Policy 2020, New Delhi, Government of India*

- ✓ *Mina Swaminathan (1998). The First Five Years: A Critical Perspective on Early Childhood Care and Education in India.*
- ✓ *National Steering Committee for NCF (2022). National Curriculum Framework for Foundational Stage 2022, New Delhi*
- ✓ *NCERT (2006). Position paper on early childhood care and education. New Delhi: National Focus group, NCERT.*
- ✓ *NCTE (2009). National Curriculum Framework for Teacher Education towards Preparing Professional and Humane Teacher, New Delhi, NCTE.*
- ✓ *Swaminathan, M. and Daniel, P. (2004). Play activities for child development: A guide to preschool teachers. New Delhi: National Book Trust.*
- ✓ *WHO (2006). Child growth standards-methods and development, World Health Organization.*

## **Core IX Trends, Policies and Practices in Education**

### **Course Outcomes (COs):**

- Understand the importance of Pre-School and Elementary education.
- Analyze various problems and ensuring quality education.
- Point Out the role of SMC for Education.
- State the importance of secondary education.
- Enlist the importance of Higher Education.
- Know the emerging concerns of Indian Education.
- Elaborate life skill concept.

### **Course Contents:**

#### **Unit- I ECCE and Elementary School Education**

##### **Learning Outcomes**

- ✓ *Understand the need and importance of ECCE*
- Meaning, Nature and ECCE, Challenges with regard to ECCE.
- Foundational Literacy, Numeracy (FLN) meaning nature and aims.
- Universalization of Elementary Education (UEE) – Concepts, Indicators, Efforts to achieve UEE, SSA, SamagraSikshaAbhiyan, RTE Act, 2000 – Objectives, Issues and Problems.
- SMC – Role and importance. Problems of bringing the community to school.
- Concept of Vocational Education as per NEP-2020 at primary level

#### **Unit- II Secondary Education**

##### **Learning Outcomes**

- ✓ *Know the impact of SSA, Samagrasiksha on UEE*
- Organization Structure of Secondary Education as per NEP 2020.
- RMSA – RashtriyaSikhyaAbhiyan Objectives, Features.
- Role of SMDC in promoting Secondary Education
- Secondary Education through non-formal mode- NIOS & Correspondence courses. Problems of vocationalisation at Secondary level.

#### **Unit- III Higher Education and Teacher Education**

##### **Learning Outcomes**

- ✓ *Conceptualize the structure of Higher Education as per NEP-2020*

- Structure of Higher Education as per NEP 2020
- Challenge of Higher Education expansion, quality and inclusion, Concept, Objectives and Role of RUSA and NAAC for quality education, Concept of Lokvidya.
- Role of ODL, MOOCS SWAYAM, Sodh Ganga – Concept & Importance
- Pre- Service Teacher Education- Concept, Objectives and problems. Reforms as per NCFTE-2009. Role of DIET and CTE, IASE.

#### **Unit- IV Emerging Concerns**

##### **Learning Outcomes**

✓ *Understand 360-degree multidimensional report.*

- Reforms - Examination Systems Defects, Internal Assessment, Semester System, Grading
- Open Examination, Online Examination, Peer Assessment, Self-Assessment. Analysis of Knowledge Holistic Development 360 Degree multi-dimensional report, Holistic Assessment, Large scale assessment.
- PARAKH (Performance Assessment, Review and Analysis of Knowledge for Holistic development) – Concept, Objectives, Importance, Problems and issues.
- Peace Education, Concept, Objectives, Importance, Problems and Education

##### **PRACTICAL:**

- Study of Perception of Stakeholder's of Education on any of the current issues and concerns and reporting.
- It will be evaluated both by the Internal and External examiners.

##### **Text Books**

- ✓ *Kumar, Chanchal & Sachedeva, M.S. (2017). Vision of Secondary Education in India in the context of 21<sup>st</sup> century. Twenty First Century Publications; First Edition edition (2015)*
- ✓ *Pathak, k.R. (2007). Education in the Emerging India. New Delhi: Atlantic Publishers. Saxena, V. (2011). Contemporary trends in education. A handbook for educators, New Delhi: Pearson.*

##### **Reference Books**

- ✓ *Broudy, H.S. (1977) Types of knowledge and purposes of education. In R.C. Anderson, R.J., Spiro an W.E. Montanaque(eds.) Schooling and the acquisition of knowledge (PP. Hillsdale, NJ: Erlbaum.*
- ✓ *Bruner, J.S. (1996). The culture of education. Cambridge, M.A.: Harvard University Press.*
- ✓ *Butchvarov, P. (1970). The concept of knowledge. Evanston, Illinois North Western University Press.*
- ✓ *Dearden R.F. (1984). Theory and practice in Education. Routledge K Kegan & Paul.*
- ✓ *Delors, Jacques, et al;(1996). Learning: the Treasure within report of the international commission on education for 21<sup>st</sup> century, UNESCO.*
- ✓ *Illich (1996). Deschooling society. Marion Boyers, London*
- ✓ *Matheson, David (2004). An introduction to the study of education (2 Ed.). David Fulton Publish.*

## **Core X:**

## **ICT in Education**

### **Course Outcomes (COS):**

On completion of the course, the student will be able to

- Understand the concept of educational technology and ICT in education
- Explain the concept, nature, and scope of ICT in Education.
- Explain the relationship between information technology, communication technology and information and communication technology.
- Describe the importance of the Free and Open-Source software in education
- Demonstrate the use of various application software in education.
- Develop the ability to use various tools connect the world.
- Explore tools and techniques of ICT for assessment and evaluation.
- Understand the ethical, social and legal issues of ICT in education
- Appreciate the various policy and practice of technology in education

### **Course Content:**

#### **UNIT I Educational Technology**

- I. Meaning, nature, and scope of educational technology
- II. Needs and importance of educational technology for the teachers and students.
- III. Approaches to educational technology: Hardware, software, and system approach.
- IV. Innovations in educational technology: Open Educational Resources (OER). Massive Open Online Course (MOOCs)

#### **UNIT II ICT in Education**

- I. Conceptual Understanding: Information Technology, communication technology, and Information communication and technology (ICT)
- II. Meaning, nature, and Scope of ICT in Education
- III. Integration of technology: technology, Pedagogy, and content (TPACK), assessment and evaluation
- IV. Relevance of ICT in education

#### **UNIT III ICT Ecosystem in school**

- I. ICT for teaching and Learning: Hardware, application Software and FOSS
- II. ICT for planning: Scheduling educational activities, ideating, and organizing events
- III. ICT for documentation and classroom management: creation, storing, retrieval, manipulation and sharing of digital information.
- IV. ICT for assessment: e-portfolio, rubrics, concept map, digital storytelling, hot-potatoes.
- V. ICT for continuous professional development: webinar, web conference, e-groups, MOOCs etc.

#### **UNIT IV Emerging Issues of Educational Technologies**

- I. National Policy on ICT 2013, NEP 2020, Curricula for ICT in Education
- II. ICT for inclusion: assistive and adaptive technology.
- III. Social, ethical and Legal Issues of ICT: Security threat and measures, cyber privacy and netiquette, ethical practices in cyber space, cyber law, and cyber safety.



#### IV. Challenges of ICT in education.

#### **Practicum (30 Marks) (Any two of the following)**

1. Create and Develop a LMS using google classroom and design various teaching, learning and assessment activities.
2. Use assessment tools like rubistar, hot potatoes and c-map tools on any topic and submit the report.
3. Prepare a PowerPoint presentation on any topic from the course and present in the form of seminar.
4. Attend an online programme on cyber safety and security from any National or International organization and prepare a report on cyber safety and security.

#### **Suggested Readings:**

- ✓ UNESCO (2002). *Information and communication technology in education: a curriculum for schools and programme of teacher development*. Paris: UNESCO.
- ✓ UNESCO (2005). *How ICT can create new, Open learning environments: Information and communication technologies in schools: A handbook for teachers*. Paris, UNESCO

#### **Reference Books**

- ✓ Mitra, Ananda. (2010). *Digital Security: Cyber Terror and Cyber Security (The Digital World)* Chelsea House Publications
- ✓ Zhang, J., Yang, J., Chang, M., & Chang, T., (Ed) (2016). *ICT in Education in Global Context: The Best Practices in K-12 Schools*. Springer Singapore
- ✓ Haydn, T., & Counsell, C., (2003). *History, ICT and Learning in Secondary School*. Routledge.
- ✓ Howell, J., (2012). *Teaching with ICT: Digital Pedagogies for Collaboration and Creativity*. Oxford University Press
- ✓ Florian, L., & Hegarty, J., (2004). *ICT and Special Educational Needs (Learning and Teaching with Information and Communication Technology)*. Open University Press.
- ✓ Senapaty, H.K. (2011). *Pedagogy-Technology Integration for the Professional Development of Teacher Educators*. Bhubaneswar: Regional Institute of Education (NCERT) Monograph.
- ✓ Senapaty, H.K. (2009). *ICT Integrated Learning Materials on Basic School Subjects from Constructivist Perspectives: Bhubaneswar: Regional Institute of Education (NCERT) Monograph*.
- ✓ Singh, L.C. (Ed) (2010). *Educational Technology for Teacher and Educators*. New Delhi: Vasunandi Publication.
- ✓ Agarwal, L.P., (2015). *Elementary Educational Technology*. Black Prints, New Delhi
- ✓ Pathak, R.P., & Chaudhary, J. (2012). *Educational Technology*. Pearson. New Delhi
- ✓ Huang, R., Spector, J.M., & Yang, J., (2019) *Educational Technology: A Primer for the 21<sup>st</sup> Century*. Springer
- ✓ *Curricula for ICT in Education (2013) NCERT, New Delhi*
- ✓ *National Policy on Education (2020), Ministry of Education, Govt. of India,*
- ✓ *National Policy of ICT (2013) Ministry of Education, Govt. of India*

- ✓ *Feller, J., Fitzgerald, S., Hissam, S.A., Lkahani, K.R., Shirky, C., & Cusumano, M., (2005). Perspective on Free and Open Source Software. MIT Press.*
- ✓ *Sulayman, K.S., Stamelos, I.G., & Samoladas, I., (2007). Emerging Free and Open Source Software Practice. IGI Publishing*
- ✓ *Dexter, S.D., & Chopra, S., (2008). Decoding liberation: the promise of free and open source software. Routledge*

## Semester- V

**Core XI(A)**

### **Pedagogy of Odia**

#### **Course Outcomes (COs):**

On completion of this course, the learners will be able to:

- State the importance and place of Odia as mother tongue in school curriculum.
- Develop the strategies to address the problems of Odia language acquisition in multilingual context.
- Use various strategies for facilitating the acquisition of language skills in Odia.
- Decide appropriate pedagogic approaches to transact different types of lessons in Odia.
- Prepare appropriate tools for comprehensive assessment of learning in Odia.
- Explain the fundamentals of Odia linguistics and their relevance in teaching learning Odia.
- Plan appropriate pedagogic treatment of the prescribed textual contents (in Odia) of classes IX and X.

#### **UNIT 1: Odia as Mother Tongue in School Curriculum**

*LO: Understand the issues related to teaching Odia.*

- Importance of mother tongue in the life and education of an individual
- Place of Odia as mother tongue in school curriculum in Odisha (both at elementary and secondary levels) in the context of language policy recommended by NPE, 1986 (three language formula) and NCF-2005
- Learning Objectives of teaching-learning Odia at elementary and secondary levels
- Inter-dependence of language skills in Odia and Strategies for facilitating acquisition of four-fold language skills in Odia

#### **UNIT 2: Pedagogic Approaches to Teaching-Learning Odia**

*LO: Acquiring skills related to methods of teaching Odia.*

- Psychology of language learning and acquisition with reference to Odia as mother tongue.
- Problems and issues related to acquisition of Odia language in multi-lingual context (iii) Traditional versus modern methods of teaching-learning Odia.

- (iv) Different approaches and strategies to the teaching-learning of: – Odia prose (detailed and non- detailed), Odia poetry, Odia composition, Odia grammar.

### **UNIT 3: Curricular Activities in Odia**

*LO: Develop ability to use appropriate pedagogic approaches to transact different types of lessons in Odia.*

- Pedagogic analysis:
- Content analysis- analysis of topics of Odia text book for identification of language items (new vocabulary, structural words, grammar components), learning Objectives,
- Methods and strategies, teaching learning materials including ICT materials, assessment strategies
- Preparing Lesson Plans following Herbartian, 5E and Interpretation Construction Design Model (ICON)

### **UNIT 4: Assessment in Odia**

*LO: Develop ability to conduct evaluation for Odia language.*

- Types of Assessment-self assessment, peer assessment, teacher assessment, internal assessment and external assessment.
- Techniques of Assessment in Odia: Continuous Assessment of Learners performance in Odia, preparation of different types of objective-based test items (Extended Response Type, Restrictive Response Type and Objective Type), preparation of check list, rating scale and rubric, Portfolio assessment in Odia.

### **PRACTICAL**

- School internship (delivery of 5 Lessons following Herbartian/5E/ICON model)
- It will be evaluated by both Internal and External examiners.

### **Text Books**

- ✓ *Barik, N. (2014). Odiashikshyadanapaddhati. Cuttack: A.K.Mishra Publishers Pvt. Ltd.*
- ✓ *Kocchar, S.K. (2012). Teaching of Mother Tongue. Sterling Publishers, New Delhi.*
- ✓ *Mohanty, J., Barik, N. & Khandai, U. (1983). Odiashikshadanapaddhati. Cuttack: Nalanda.*
- ✓ *Nayak, B.; Mohanty, J. (1999): Odiabhasa O Sahitya Bhitibhumi O Shikshyadan Padhati. Cuttack: Jagannath Process, Toni Road, Cutack-2.*

### **Reference Books**

- ✓ *Daswani, C. J. Language Education in Multilingual India. New/Delhi (UNESCO)*
- ✓ *Dhal, G.B. (1974). Dhwanibijanana. Bhubaneswar: Odisha Rajya Pathya Pustaka Pranayana Sanstha.*
- ✓ *Dhal, G.B. (1972). English uchharanasiksha. Cuttack: Friends Publisher.*
- ✓ *Mathur, S.A. Sociological Approach to Indian Education. Vinod Pustak Bhandar, Agra.*

- ✓ *Mohanty, B. (1970). Odiabhasarautpati O 65arma bikasha. Cuttack: Friends Publishers.*
- ✓ *Mohapatra, D. (1976). Odiadhwanitattwa O sabdhasambhar. Cuttack:GranthaMandir.*
- ✓ *Mohapatra, N. & Das, S. (1943). Sarbasaravykarana. Cuttack : New Student's Store*
- ✓ *Palmer, H.P. Principles of Language Teaching. George G. Harrep and Co. Ltd.*
- ✓ *Rybum, W.M.(1926). Suggestions for the Teaching of Mother Tongue. OUP.*
- ✓ *Saiyadain, K.G. Education and Social Order. Asia Publishing House, Bombay*

## Core XI(B)

## Pedagogy of English

### Course Outcomes (COs):

On completion of this course, the learners will be able to:

- Understand the place of English in school curriculum,
- Use various methods, approaches and strategies for teaching-learning English and transact various types of lesson plans covering all aspects of English language following different approaches
- Develop test items to assess learning in English and provide feedback as well as prepare enrichment materials
- Use the understanding of phonetics for facilitating students' speaking in English
- Plan appropriate pedagogical treatment of the prescribed contents for effective classroom transaction

### UNIT 1: English in School Curriculum

*LO: Understand issues related to teaching English as a second language.*

- Language policy in India with reference to NPE 1986 and NCF 2005
- Place of English as a compulsory subject in school curriculum (both at elementary and secondary levels)
- Learning Objectives of learning English at elementary and secondary levels
- English language skills –components, their independence and interdependence

### UNIT 2: Approaches, Methods and Strategies of Teaching English

*LO: Acquire skills of various methods of teaching English*

- Understanding of different methods and strategies: Bi-lingual Method, Translation Method, Direct Method, Structural Approach, Communicative Approach.
- Listening Skill: Tasks for developing Listening Comprehension (iii)Speaking Skill: Tasks for developing Speaking skills
- Reading skill: Types of Reading, Strategies to develop reading comprehension
- Writing Skill: Strategies to improve writing skill, Qualities of good writing (simplicity, logicity and organization in writing)

### **UNIT 3: Transaction of Contents**

*LO: Develop ability to organise teaching transaction.*

- Teaching of Prose (detailed and non-detailed), poetry, grammar and composition –
- Approaches, Methods and Strategies
- Pedagogic analysis: Content analysis- analysis of topics of English text book for identification of language items(new vocabulary, structural words, grammar components), Learning Objectives, Methods and Strategies, Teaching Learning Materials including ICT materials
- Preparing Lesson Plan following 5E and Interpretation Construction Design Model (ICON)
- Preparation of Lesson Plans following Herbartian approach.

### **UNIT 4: Lesson Delivery Strategies and Assessment**

*LO: Develop ability amongst students to teach and to conduct evaluation for English subject.*

- Lesson Delivery Strategies: Lecturing, Role play and Dramatization, Collaborative Approach, Ability Grouping, Group Work; Learning through Narratives and Discourses; Concept Mapping and Brain Storming
- Techniques of Assessment in English: Continuous Assessment of Learners performance in English, preparation of different types of objective-based test items (Extended Response Type, Restrictive response Type)

### **Practical**

- School Internship (Delivery of 5 Lessons following Herbartian/5E/ICON model)  
It will be evaluated by both Internal and External examiners.

### **Text Books**

- ✓ Kohli, A.L (2010) *Techniques of teaching english*. New Delhi: DhanpatRai publishing Company
- ✓ Jain, R.K (1994). *Essentials of English teaching*, Agra: VinodPustakMandir
- ✓ Sharma, K. L(1970) .*Methods of teaching English in India*. Agra: Laxmi Narayan Agrawal

### **Reference Books**

- ✓ Agnihotri R. K. and Khanna A. L. (1994). *Second language acquisition: socio-cultural and linguistic aspects of English in India*. New Delhi: Sage Publications.
- ✓ Allen, H.B. (1965). *Teaching English as a second language: A book of readings*. New York: McGraw-Hill.
- ✓ Baruah, T.C (1984). *The English teacher's handbook*. New Delhi: Sterling Publishers Pvt.Ltd,
- ✓ Billows, F. L. (1975). *The techniques of language teaching*. London: Longman
- ✓ Bista, A.R(1965). *Teaching of English (Sixth Edition)*. Agra: VinodPustakMandir
- ✓ Bright, J.A(1976). *Teaching English as second language*. London: Long Man Group
- ✓ Catarby, E. V (1986) *Teaching English as a foreign language in school curriculum India*, New Delhi: NCERT
- ✓ Hudelson, Sarah. (1995). *English as a second language teacher resource handbook. A practical guide for K-12 ESL programs*. California.: Corwin Press, Inc.

- ✓ *Joyce, Bruce and Weil, Marsha (2003). Models of teaching. New Delhi: Prentice Hall of India Pvt. Ltd.*
- ✓ *Krishna Swamy, N. and Sri Raman, T. (1994). English teaching in India. Madras : T.R. Publication.*
- ✓ *Mukalel, Joseph C. (2009). Approaches to English language teaching. New Delhi: Discovery Publishing House Pvt Ltd.*
- ✓ *Pal, H.R and Pal, R(2006). Curriculum – yesterday, today and tomorrow, New Delhi: Shipra Publications*
- ✓ *Sachdeva, M.S. (1973). A new approach to teaching of english in India. Ludhiana : Prakash Brothers*
- ✓ *Shrivastava, B.D(1968). Structural approach to the teaching of English. Agra: Ramprasad and Sons*

## **Pedagogy of Social Science (History, Political Science and Geography)**

### **Core XII (A)**

#### **Course Outcomes (COs):**

On completion of the course, the students will be able to:

- State the meaning, scope and importance of Social Studies.
- Specify the skills and competencies to formulate specific learning outcomes for Social Studies.
- Identify the different methods and skills of teaching History, Political Science and Geography for transacting the content effectively.
- Explain the importance of time sense and prepare timeline for teaching History.
- Prepare unit plans and lesson plans in History, Political Science and Geography.

#### **Course Contents:**

##### **UNIT-1: Concept, Objectives and Values of Teaching Social Studies**

*LO: Understand basics of teaching Social Studies.*

- Meaning, nature and scope of Social Studies; Values of teaching Social Studies, Social Studies in Elementary and Secondary levels.
- Recommendations of NCF-2005 and NEP-2020 on teaching of History, Political Science and Geography; correlation of Social Science with other school subjects.
- Formulation of specific learning outcome in Social Studies.

##### **UNIT-II: Methods and Approaches to teaching-learning in Social Science**

*LO: Acquire the skills of various teaching methods of Social Science*

- Story-telling.
- Narration-cum-discussion,
- Source method, project method,
- Observation, lecture-cum-discussion, problem solving.

- Teaching of Social Studies using monuments, field trip in History and Geography, History and Geography Room.
- Qualities of a good Social Science teacher; Characteristics of a good text book in Social Studies.

### **UNIT-III: Development of Resource Materials**

*LO: Prepare teaching aids for Social Science.*

- Curriculum as Resource Material
- Approaches to Curriculum in History, Bio-graphical, Chronological and Concentric
- Preparation, Collection, Procurement and use of teaching – learning materials – Maps, Atlas, Globes, Models, T.V., Video, OHP, Computer.
- Timeline – Concept, types and use.
- ICT in learning of Social Studies.

### **UNIT-IV: Transaction Strategies**

*LO: Apply different teaching transaction skills.*

- Preparation of Unit Plans in Social Studies.
- Preparation of lesson plans – Traditional and 5E Model.
- Activities in History visits to historical places, maintenance of portfolio, group discussion, debate etc.
- Activities in Geography- Field trip, Geography Club and exhibition.
- Assessment in Social Studies
- Evaluation devices – written, oral, practical, project work, portfolio.
- Panning for continuous assessment of classroom learning in History, Political science and Geography.

### **Practicum: 30 Marks (Any one of the following)**

- Identify the learning difficulties in any topic of Social Studies of Class-VI or VII and prepare remedial materials. Preparation of low cost, no cost teaching aids on any one topic.
- Content analysis of any topic of Social Studies.
- Preparation of a blue print and test items of an achievement test in Social Studies for Class-VI or VII.

(N.B.: The report will be evaluated by both internal and external examiner).

### **TEXT BOOKS**

- ✓ *Aggarwal, J.C. (1998). Principles, Methods and Techniques of Teaching. New Delhi: Vikas Publishing House Pvt. Ltd.*
- ✓ *Kochhar, S.K. (2022). Teaching of History. New Delhi: Sterling Publications Pvt. Ltd.*
- ✓ *Kohli, A.S. (2002). Teaching of Social Studies. New Delhi: Anmol Publications Pvt. Ltd.*
- ✓ *Sharma, S. (2005). Morden Teaching of History. New Delhi: Anmol Publications Pvt. Ltd.*

- ✓ *Shaida, B.D. and Singh, S.(2014). Teaching of History. New Delhi: DhanpatRai and Sons.*
- ✓ *Singh, R.P. (2001). Teaching of History. Meerut: R. Lall Book Depot.*
- ✓ *Tyagi, G., Nigam, V. and Verma, J.K. (2002). Teaching of History. Agra: VinodPustakMandir.*
- ✓ *Verma, O.P.(2005). Geography Teaching. New Delhi: Sterling Publishing Pvt. Ltd.*
- ✓ *Yadav, N. (1994). Teaching of Civics and Political Science. New Delhi: Anmol Publications Pvt. Ltd.*

### **Reference Books**

- ✓ *Chaudhury, K.P. (1975). The Effective Teaching of History in India. New Delhi: NCERT.*
- ✓ *Colling Wood, R.G. (1951). The Idea of History. London: Oxford University Press.*
- ✓ *Hill, C.P. (1954). Suggestions on the Teaching of History Towards World Understanding. Paris: UNESCO.*
- ✓ *Strong, C.F., (1950). History in Primary Schools. London: University of London Press.*
- ✓ *West, E. (1949). Improving the Teaching of World History. Washington D.C.: National Council for the Social Studies.*

## **Semester-VI**

**Core XII(B)**

### **Pedagogy of mathematics**

#### **Course Outcomes (COs):**

- On completion of this course, the learners will be able to:
- Narrate the evolution and nature of Mathematics and its importance in the school curriculum in the context of the recent curricular reforms.
- Use various methods and approaches of teaching and learning mathematics especially suitable for the secondary school classes.
- Plan lessons in Mathematics using traditional and constructivist approaches for effective classroom transactions.
- Develop and collect activities and resource materials for their use in enhancing the quality of learning Mathematics at the secondary level.
- Conduct continuous and comprehensive assessment for enhancing the quality of Mathematics learning.
- Explain the concepts in Mathematics included in the secondary school curriculum and make pedagogical analysis of those concepts

#### **Course Contents:**

##### **UNIT I: Understanding Basics of Teaching Mathematics**

*LO: Understand the nature and importance of mathematics in school curriculum.*

- Nature and Scope of Mathematics,



- Learning of Mathematics: Importance of Mathematics at elementary and secondary level, Learning Objectives of teaching-learning Mathematics at the two levels,
- Curriculum Reforms in School Mathematics: Rationale, Learning Objectives, principles, designs and materials in Mathematics, recent curricular reforms at the National and State levels (NCF 2005).

## **UNIT 2: Learning Methods of Teaching Mathematics**

*LO: Apply various methods and approaches of teaching and learning Mathematics*

- Learning by Discovery: Nature and purpose of learning by discovery; guided discovery strategies in teaching Mathematical concepts.
- Teaching for Understanding Proof: Proof by induction and deduction; proof by analysis and synthesis.
- Problem Solving in Mathematics: Importance of problem solving in Mathematics, Steps of problem solving in Mathematics.
- Constructivist approaches: Self-learning and peer learning strategies, Collaborative strategies; 5E and ICON Models.

## **UNIT 3: Curricular Activities in Mathematics**

*LO: Construct lesson plans in Mathematics using constructivist approach.*

- Pedagogical analysis:
- Content analysis- analysis of topics of mathematics text book.
- Learning Objectives, methods and strategies, teaching learning materials including ICT materials
- Learning activities including student and teacher activities, assessment strategies
- Process of preparing lesson plan following Herbatian
- 5E and Interpretation Construction Design Model (ICON)

## **UNIT 4: Assessment in Mathematics**

*LO: Conduct continuous and comprehensive assessment using different assessment tools and methods.*

- Assessment of Mathematics learning: Unit test – Designing blue print, item construction, marking schemes.
- Assessment for Mathematics Learning: Assignments, Projects and portfolios in Mathematics, group and collaborative assessment in Mathematics,
- Non-testing methods of assessment of/for Mathematics Learning: Observation of learners in action, rating of participation in various Mathematics tasks and activities,
- Diagnosis of difficulties in learning Mathematics concepts, Remediation of the difficulties, enrichment programmes in Mathematics learning –National Mathematics Talent Search, Mathematics Olympiad.
- Planning for continuous assessment of classroom learning in Mathematics.

### **Practical:**

School internship (Delivery of 5 Lessons following Herbatian/5E/ICON model).  
It will be evaluated by both Internal and External examiners.

### **Text Books**

- ✓ Sidhu, K. S (1985). *Teaching of mathematics*. New Delhi: Sterling publication.
- ✓ James, A. (2003). *Teaching of mathematics*. Neel Kamal Publication: Hyderabad.
- ✓ NCERT (2011). *Pedagogy of mathematics for two-year B.Ed. course*. New Delhi:

### **Reference Books**

- ✓ Cooney, Thomas J. et al. (1975). *Dynamics of Teaching Secondary School Mathematics*. Boston: Houghton Mifflin.
- ✓ Cooper, B. (1985). *Renegotiating secondary school mathematics*. The Hamer Press: East Sussex.
- ✓ NCERT (2005). *Position paper: national focus group (NFG) on examination reform*. NCERT: New Delhi.
- ✓ Scopes, P.G. (1973). *Mathematics in secondary schools- a teaching approach*. Cambridge: Cambridge University Press
- ✓ Driscoll, M., Egan, M., Nikula, J., & DiMatteo, R. W. (2007). *Fostering geometric thinking: A guide for teachers, grades 6-10*. Portsmouth, NH: Heinemann.
- ✓ Driscoll, M. (1999). *Fostering algebraic thinking: A guide for teachers, grades 5-10*. Portsmouth, NH: Heinemann.
- ✓ Grouws, D.A. (ed) (1992). *Handbook of research on mathematics teaching and learning*. New York: Macmillan Publishing.
- ✓ Malone, J. and Taylor, P. (eds) (1993). *Constructivist interpretations of teaching and learning mathematics*. Perth: Curtin University of Technology.
- ✓ Marshall, S.P. (1995). *Schemes in problem-solving*. New York: Cambridge University Press.
- ✓ Moon, B. & Mayes, A.S. (eds.) (1995). *Teaching and learning in secondary school*. London: Routledge.
- ✓ NCERT (1998). *A textbook of content-cum-methodology of teaching mathematics*. New Delhi: NCERT.
- ✓ NCERT (2005). *National curriculum framework 2005*. New Delhi: NCERT.
- ✓ NCERT (2006). *Position paper: National focus group on teaching mathematics*. New Delhi: NCERT.
- ✓ TESS India (2015). *Key resources*. The Open University U.K. (<http://creativecommons.org/licences/> and <http://www.tess-india.edu.in/>)

## **Core XIII**

## **Pedagogy of mathematics**

### **COURSE OUTCOMES (COs):**

On completion of this course, the learners will be able to:

- Narrate the evolution and nature of Mathematics and its importance in the school curriculum in the context of the recent curricular reforms.
- Use various methods and approaches of teaching and learning mathematics especially suitable for the secondary school classes.

- Plan lessons in Mathematics using traditional and constructivist approaches for effective classroom transactions.
- Develop and collect activities and resource materials for their use in enhancing the quality of learning Mathematics at the secondary level.
- Conduct continuous and comprehensive assessment for enhancing the quality of Mathematics learning.
- Explain the concepts in Mathematics included in the secondary school curriculum and make pedagogical analysis of those concepts

### **Course Contents:**

#### **UNIT I: Understanding Basics of Teaching Mathematics**

*LO: Understand the nature and importance of mathematics in school curriculum.*

- Nature and Scope of Mathematics,
- Learning of Mathematics: Importance of Mathematics at elementary and secondary level, Learning Objectives of teaching-learning Mathematics at the two levels,
- Curriculum Reforms in School Mathematics: Rationale, Learning Objectives, principles, designs and materials in Mathematics, recent curricular reforms at the National and State levels (NCF 2005).

#### **UNIT 2: Learning Methods of Teaching Mathematics**

*LO: Apply various methods and approaches of teaching and learning Mathematics*

- Learning by Discovery: Nature and purpose of learning by discovery; guided discovery strategies in teaching Mathematical concepts.
- Teaching for Understanding Proof: Proof by induction and deduction; proof by analysis and synthesis.
- Problem Solving in Mathematics: Importance of problem solving in Mathematics, Steps of problem solving in Mathematics.
- Constructivist approaches: Self-learning and peer learning strategies, Collaborative strategies; 5E and ICON Models.

#### **UNIT 3: Curricular Activities in Mathematics**

*LO: Construct lesson plans in Mathematics using constructivist approach.*

- Pedagogical analysis:
- Content analysis- analysis of topics of mathematics text book.
- Learning Objectives, methods and strategies, teaching learning materials including ICT materials
- Learning activities including student and teacher activities, assessment strategies
- Process of preparing lesson plan following Herbatian
- 5E and Interpretation Construction Design Model (ICON)

#### **UNIT 4: Assessment In Mathematics**

*LO: Conduct continuous and comprehensive assessment using different assessment tools and methods.*

- Assessment of Mathematics learning: Unit test – Designing blue print, item construction, marking schemes.

- Assessment for Mathematics Learning: Assignments, Projects and portfolios in Mathematics, group and collaborative assessment in Mathematics,
- Non-testing methods of assessment of/for Mathematics Learning: Observation of learners in action, rating of participation in various Mathematics tasks and activities,
- Diagnosis of difficulties in learning Mathematics concepts, Remediation of the difficulties, enrichment programmes in Mathematics learning –National Mathematics Talent Search, Mathematics Olympiad.
- Planning for continuous assessment of classroom learning in Mathematics.

## **PRACTICAL**

School internship (Delivery of 5 Lessons following Herbatian/5E/ICON model).  
It will be evaluated by both Internal and External examiners.

## **Text Books**

- ✓ *Sidhu, K. S (1985). Teaching of mathematics. New Delhi: Sterling publication.*
- ✓ *James, A. (2003). Teaching of mathematics. Neel Kamal Publication: Hyderabad.*
- ✓ *NCERT (2011). Pedagogy of mathematics for two-year B.Ed. course. New Delhi*

## **Reference Books**

- ✓ *Cooney, Thomas J. et al. (1975). Dynamics of Teaching Secondary School Mathematics. Boston: Houghton Mifflin.*
- ✓ *Cooper, B. (1985). Renegotiating secondary school mathematics. The Hamer Press: East Sussex.*
- ✓ *NCERT (2005). Position paper: national focus group (NFG) on examination reform. NCERT: New Delhi.*
- ✓ *Scopes, P.G. (1973). Mathematics in secondary schools- a teaching approach. Cambridge: Cambridge University Press*
- ✓ *Driscoll, M., Egan, M., Nikula, J., & DiMatteo, R. W. (2007). Fostering geometric thinking: A guide for teachers, grades 6-10. Portsmouth, NH: Heinemann.*
- ✓ *Driscoll, M. (1999). Fostering algebraic thinking: A guide for teachers, grades 5-10. Portsmouth, NH: Heinemann.*
- ✓ *Grouws, D.A. (ed) (1992). Handbook of research on mathematics teaching and learning. New York: Macmillan Publishing.*
- ✓ *Malone, J. and Taylor, P. (eds) (1993). Constructivist interpretations of teaching and learning mathematics.*
- ✓ *Perth: Curtin University of Technology.*
- ✓ *Marshall, S.P. (1995). Schemes in problem-solving. New York: Cambridge University Press.*
- ✓ *Moon, B. & Mayes, A.S. (eds.) (1995). Teaching and learning in secondary school. London: Routledge.*
- ✓ *NCERT (1998). A textbook of content-cum-methodology of teaching mathematics. New Delhi: NCERT.*
- ✓ *NCERT (2005). National curriculum framework 2005. New Delhi: NCERT.*
- ✓ *NCERT (2006). Position paper: National focus group on teaching mathematics. New Delhi: NCERT.*
- ✓ *TESS India (2015). Key resources. The Open University U.K. (<http://creativecommons.org/licences/> and <http://www.tess-india.edu.in/>)*

Core XIV

**Semester- VI**  
**Knowledge and Curriculum**

**Course Outcomes (COs):**

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

- State and explain the nature of knowledge
- Describe the process of constructing knowledge
- Differentiate different types of curriculum
- Explain the processes and principles of curriculum planning and development
- Elaborate the transaction, evaluation and renewal processes of curriculum.

**Course Content:**

**UNIT I Understanding the Nature of Knowledge**

*LO: Understand the concept of knowledge.*

**LO: Differentiate between knowledge and skill.**

- Knowledge: Concept (difference between knowledge and skill, knowledge Information, teaching and training, reason and belief) and Nature
- Types and theories of knowledge
- Knowledge Acquisition: Source of knowledge and process of acquisition

**UNIT II Construction of Knowledge**

*LO: Analyze the theories of Piaget and Vygotsky on knowledge construction.*

- Knowledge transmission (teacher-centric) vs. Knowledge construction (learner-centric)
- Process of knowing: activity, discovery and dialogue-views of Dewey, Ausubel and Bruner
- Construction of knowledge: theories of Piaget and Vygotsky; implications for curriculum

**UNIT III Understanding Curriculum**

*LO: Analyze various components of curriculum.*

- Concept of curriculum and syllabus, types of curriculum (subjectcentred , teacher centred, learning-centred, experience-centred, activity-centred, learner centred,) and components of curriculum.
- Mandates for formulation of curriculum policy (Constitutional, socio-cultural, political, economic, global concerns, environmental, etc.)

- Curriculum framework- Concept, principles and coverage; NCF 2005, SCF 2009 and NCFTE-2009 and its objectives, aspects and recommendations.

#### **UNIT IV Curriculum Planning and Development**

*LO: Explain the determinants of curriculum.*

*LO: Understand the principles of curriculum development.*

- Determinants of curriculum development
- Principles of curriculum development
- Approaches to curriculum planning
- Processes/stages of curriculum development and curriculum evaluation

#### **Practical/ Assignments/Activities:**

Each student is required to submit Practical/Project report/Assignments selecting any one of the following:

- Preparation of an appraisal report on any one aspect of the Systemic Reform envisaged in the NCF- 2005 and its reflection in current practices.
- Identification of learning resources and designing of beyond classroom activities for transacting a lesson.
- Preparation of a transactional blue print of any content unit in any school subject at the secondary level.
- Preparation on of an appraisal report on the curriculum renewal process based on NEP-2020 and its reflection in current practices

\*It will be evaluated by both internal and external examiner.

#### **Books Recommended**

#### **Transaction Mode**

Workshop, ICT-Lab Learning. Lecture Method, Seminar, team teaching, tutoring, peer group discussion, mobile teaching, self-learning, Collaborative learning. Cooperative learning.

- Aggarwal, J.C. (1990). Curriculum reform in India – world overviews, Doaba World Education Series-3 Delhi, Doaba House, Book seller and Publisher.
- Arora, G.L. (1984). Reflections on curriculum. New Delhi: NCERT.
- Brady, L. (1995). Curriculum development. Prentice Hall.

#### **Suggested Readings**

- ✓ Dewey, John (1956). *The child and the curriculum*. Chicago, Illinois: University of Chicago Press
- ✓ Dewey, John (1997). *Experience and Education*. New York: Touchstone.
- ✓ Dewey, John (1997). *My pedagogic creed*. in D.J. Flinders and S.J. Thorton (eds) *Curriculum studies reader*. New York: Routledge, Kegan & Paul.
- ✓ Egan, K. (2005). *An imaginative approach to teaching*. San Francisco: Jossey-Bass
- ✓ Erickson, H.L. (2002). *Concept-based curriculum and instruction*. California: ( Press.
- ✓ Jangira, N. K. & Singh, A. (1982). *Core teaching skills: The microteaching app* New Delhi: NCERT,

- ✓ Mohapatra, J.K., Mahapatra, M. and Parida, B.K. (2015). *Constructivism: The paradigm: From theory to practice*. New Delhi: Atlantic Publishers.
- ✓ NCERT (2005). *National curriculum framework 2005*. New Delhi: NCERT.
- ✓ NCTE (1990). *Policy perspective in teacher education*. New Delhi: NCTE
- ✓ Olivia, Peter F. (1988). *Developing the curriculum*. London: Scott and Foresman.
- ✓ Sharma, S. (2006). *Constructivist approaches to teaching and learning*. New NCERT.
- ✓ Taba, Hilda (1962). *Curriculum development: Theory and practice*. New York: Ha Brace and Wald.
- ✓ Von Glasersfeld, F. (1995). *Radical constructivism: A way of knowing and le* Washington D.C.: Falmer Press.
- ✓ Vygotsky, Lev (1986). *Mind in society*. Cambridge, MA: Harvard University Press

## **Core XV                      Community Engagement and Services**

### **Course Outcomes (COs):**

On completion of the course, the students will be able to:

- Understand the concept of community engagement.
- State the relationship between educational institution and community linkage.
- Critically reflect on community participation and mobilization activities under SamagraSiksha.
- Prepare a field engagement report based on planning and follow up activities.
- Elaborate Sustainable Development Goals with examples.

### **UNIT-ICommunity Engagement: Need and Importance**

*LO: Describe meaning and scope of community engagement.*

*LO: State different tasks involved in community engagement and mobilization*

- Community engagement :Meaning and Scope
- School /educational institution and community linkage and collaboration
- Vidyanjali:School Volunteer Programme

### **UNIT-II Community Mobilization and Services**

*LO: Explain different activities under Vidyanjali: School Volunteer Programme*

*LO: List the qualities and skills of a teacher as community mobilizer/facilitator*

*LO: Critically reflect on Community participation and mobilization activities under Samagra Sikshya*

- Community mobilization: Meaning and importance
- Tasks involved, role and skills of community mobilisers
- Community participation and mobilization under SamagraSikshya

### **UNIT-III Planning and Implementation of Community Engagement Services**

*LO: Prepare plan of action through need assessment for community engagement.*

- Identification of community needs through survey
- Organization of community service activities in different areas based on need assessment i.e. school education, sustainable development, health and hygiene, plantation etc.

#### **UNIT-IV Reporting and follow-up of Community Engagement Services**

**LO:** Prepare exemplar reports based on filed engagement activities.

- Analysis of the information received from field survey
- Reporting community engagement : different components of report i.e. introduction, method and procedure, analysis , Critical reflection and conclusion
- Planning follow-up activities based on the field report

#### **Suggested Activity**

Prepare tools- Questionnaire, Interview Schedule, Observation Schedule, Check list.

#### **References**

- Ministry of Human Resource Development (2009):The Right of Children to Free and Compulsory Education Act, 2009, NewDelhi.
- Govinda. R &DiwanRashmi (2003) Community Participation and Empowerment in Primary Education, Sage Publications, New Delhi
- Ministry of Education(2022). SAMAGRASHIKSHA:An Integrated Scheme for School Education. Department of School Education and Literacy, New Delhi. [https://samagra.education.gov.in/docs/ss\\_implementation.pdf](https://samagra.education.gov.in/docs/ss_implementation.pdf)
- Ministry of Education(2021). Vidyanjali: A school Volunteer Programme. Department of School Education and Literacy, NewDelhi. [https://vidyanjali.education.gov.in/assets/pdf/Final\\_Guidelines\\_Vidyanjali\\_%20December.pdf](https://vidyanjali.education.gov.in/assets/pdf/Final_Guidelines_Vidyanjali_%20December.pdf)

### **Semester-VII**

#### **Core XVI Educational Management and Leadership**

##### **Course Outcomes (Cos)**

On completion of the course, the students will be able to:

- Understand the concept of Educational Administration, Management and Leadership.
- Describe the functions of Educational Administration, Management and Leadership.
- List down various types of Educational Administration.
- Elaborate the principles of Educational Management.
- Explain the functions of National and State level Educational bodies.
- Highlight the role of Head Master as leader.

##### **Course Content:**

##### **UNIT-1: Educational Administration**

**LO:** Understand the concept of educational management and leadership.

- Concept, objectives and scope of Educational Administration.



- Types of Educational Administration – Centralized and decentralized, democratic and authoritarian.
- Participatory and non-participatory.
- Basic Functions of Educational Administration – Planning, Organizing, Directing and Controlling.

## **UNIT-2: Structure of Educational Administration at the Centre, State and Local Level and their Functions**

*LO: Familiar with educational structure and administration at Centre, State and local level.*

- Educational Administration at the Central Level-Structure and Functions of MHRD, NCERT, CBSE, CABE, NAAC, NCTE, NIEPA.
- Educational Administration at the State level (Odisha).
- Department of School and Mass Education, Department of Higher Education, SCERT, Board of Secondary Education, Odisha OSEPA, Odisha AadarshaVidyalayaSangathan – Their Structure and functions.
- Educational Administration at the local level.

## **UNIT-3: Educational Management**

*LO: Distinguish between management and administration.*

- Meaning and nature of Management
- Meaning, nature and scope of Educational Management
- Distinction between Management and Administration
- Functions of Educational Management, Functions of School Management and Development Committee, State Policies on School Management (RCFCE Act, 2009).

## **UNIT-4: Educational Leadership**

*LO: Develop leadership skills among students.*

*LO: Understand the role of SchoolHeads.*

- Meaning and characteristics of leadership
- Importance of leadership in education
- Leadership Style: Autocratic or Authoritarian Leaders, Participative or Democratic Leaders, Laissez Faire or Free Rein Leaders.
- Leadership role of Head Masters of Schools, Teacher as a leader of the Group.

## **Practicum: 30 Marks (Any one of the following)**

1. Observation of SMC/SMDC meeting and preparation of a report.
2. Observing the duties of a Head master of a school and preparation of a report.
3. Visiting a state level educational organization like SCERT, Board of Secondary Education or OSEPA and preparation of a report on their structure and functions

(N.B.: The report will be evaluated by both internal and external examiner).

(Mode of course Transaction: Lecture, Discussion, Field Trip, Seminar)

## **Text Books**

- ✓ Chaudhury, A. and Meta, J.(2021). *Educational Management, Administration and leadership*. Gaziabad: NB Publications.
- ✓ Kochhar, S.K. (2020). *Secondary School Administration*. New Delhi: Sterling Publishers Pvt. Ltd.
- ✓ Nayak, R.K. and Swain, B.C. (2022). *Essentials of Educational Administration and Management*. New Delhi: Kunal Books.
- ✓ Swain B.C. and Das, R. (2022). *Educational Management*. New Delhi: Kunal Books.
- ✓ Safaya, R.N. and Shaida, B.D. (2012). *School Administration and Organisation*. Jalandhar: DhanpatRai and Sons.
- ✓ Tyagi, R.S. (2009). *Administration and Management of School Education*. Delhi: Shipra Publications.

### **Suggested Readings**

- ✓ Bhatnagar, R.P. and Aggarwal, V. (2022). *Educational Administration*. Meerut: R. Lal Book Depot.
- ✓ Naik, J.P. (1999). *Role of Government of India on Education*. New Delhi: Ministry of Education.
- ✓ Oliva, P.S. and Pawlas, G.E. (1997). *Supervision for Today's Schools*. New York: Longman Publishers.
- ✓ Orlasky, D.E.; Mcclearcy, L.E., Shapiro, A. and Webb, D.L. (1984). *Educational Administration Today*. New York: McGraw Hill.

## **Core XVII                      Fundamentals of Educational Research**

### **Course Outcomes (COS):**

On completion of the course, the students shall be able to:

- Understand fundamentals of research including identifying a problem, preparing synopsis, designing methodology and analyze data.
- Differentiate basic, applied, and action research, and elucidate their roles in shaping education.
- Acquire proficiency in developing and employing different quantitative as well as qualitative research tools for collection of data.
- Carry out researchwith scientific methods.

### **COURSE CONTENTS**

#### **Unit-I: Introduction to Educational Research**

*LO: Understand what is research and special features of research in education.*

*LO: Demonstrate proficiency in conducting purposeful literature reviews using primary and secondary sources;*

*LO: Familiar with formulation of research problems.*

- Meaning, Nature and Scope of Educational Research.
- Research Problem: Sources, Selection Process and Conceptualization
- Review of Literature: Purpose and Sources-Primary and Secondary

- Hypothesis: Meaning, Purpose, Characteristics, Types, Formulation and Testing

### **Unit –II: Approaches to Educational Researches**

*LO: Understand various methods of research and their applicability.*

- Methods of Quantitative Research: Descriptive, Correlational, Experimental and Causal Comparative.
- Methods of Qualitative Research: Historical, Phenomenology, Ethnography, Grounded Theory, Case Study, Narrative Research Designs.
- Methods of Mixed Research: Convergent Parallel, Explanatory Sequential and Exploratory Sequential.
- Steps of Research: Quantitative, Qualitative and Mixed Research.

### **Unit-III: Sampling Strategies and Data Collection**

*LO: Develop ability to identify research sample and to collect data.*

- Population and Sample: Concept; Characteristics of a Good Sample, Methods of Sampling: Probability and Non-Probability; Sampling Error; Purposeful sampling.
- Tools and Technique of Quantitative Approach: Tests, Inventories and Scales- Types, Construction and Uses; Questionnaire: Forms, Construction and Uses
- Tools and Technique of Qualitative Approach: Questionnaire, Interview, Observation, Focus Group Discussion, Photographs, Anecdotes, Field diary
- Methods of Establishing Validity, Reliability and Objectivity of Quantitative and Qualitative Tools

### **Unit-IV: Writing Proposal, Analysing Data and Reporting**

*LO: Develop ability to conduct research and write the dissertation scientifically.*

*LO: Compose comprehensive research proposals with ethical considerations, covering key components.*

- Developing Research Proposal: General Considerations (ethics of research, legal obligations, cooperation); Components-Introduction, Methodology, Data analysis, Expected Outcomes;
- Organizing Quantitative and Qualitative Data: Categorizing Data, Protecting Data, Displaying Data.
- Data Analysis - Data Reduction and Classification, Analytical Induction and Constant Comparison, Triangulation.
- Writing research report: General Guidelines; Format of research report (Journal Article, Thesis and Dissertation); APA reference style; Evaluation of research report.

**Practicum: 30 Marks** (The examination will be conducted by both internal and external examiners)

Each student is required to develop a research proposal on which he/she has to do intensive study under the guidance of a supervisor. The research proposal will be presented, all the students and faculty members of the department will remain present and

participate in discussion on the presentation. Marks shall be awarded to each student on the basis of relevance, standard and quality of the proposal, style of presentation and clarification of doubts raised by the participants. There will be an open viva-voce.

## References

- ✓ Ary, D., Jacobs, L. C., & Razavieh, A. (2002). *Introduction to research in education (6th ed.)*. Belmont, CA : Wadsworth/Thomson Learning.
- ✓ Best J.W. and Kahn, J. V. (2006). *Research in Education., 9th Ed.* New Delhi: Pearson Education Inc.
- ✓ Bhandarkar, P.L. and Wilkinson, T.S. (2010). *Methodology and Techniques of Social Research*. Himalaya Publishing House, New Delhi.
- ✓ Bogdan, R.C. & Biklen, S.K. (1998). *Qualitative Research for Education: An Introduction to Theory and Methods (3rd ed.)*. Boston, MA: Allyn and Bacon
- ✓ Borg, W.R. & Gall, M.D. (1989). *Educational Research: An Introduction*. New York: Longman.
- ✓ Creswell, J.W. (1994). *Research Design: Qualitative & Quantitative Approaches*. Thousand Oaks, CA: Sage Publications.
- ✓ Creswell, J.W. (2007). *Qualitative Inquiry and Research Design: Choosing Among Five Approaches*. London: SAGE Publication.
- ✓ Denzin, N. K., & Lincoln, Y. S. (Eds.). (2003). *Strategies of qualitative inquiry (2nd ed.)*. Thousand Oaks, CA: Sage.
- ✓ Denzin, N.K., & Lincoln, Y.S. (Eds.). (1994). *Handbook of Qualitative Research*. Newbury Park, CA: Sage.
- ✓ Gay, L.R. (1990). *Educational Research-Competencies for Analysis and Application (3rd Ed.)*, Macmillan Publishing Company, New York.
- ✓ Kerlinger, F.N. (1973). *Foundation of Behavioral Research*. New York: Holt Rinehart & Winston.
- ✓ Johnson, B. & Christensen, L. (2008). *Educational Research: Quantitative, Qualitative, and Mixed Approaches*. London: Sage Publication
- ✓ McMillan, J.H. & Schumacher, S. (1989). *Research in Education- a Conceptual Introduction*. New York: Harper Collins.
- ✓ Patton, M. (1990). *Qualitative evaluation and research methods (pp. 169-186)*. Beverly Hills, CA: Sage.

## Semester-VIII

### Core XVIII

### Statistics in Education

#### Course Outcomes (COs):

On completion of the course, the students shall be able to:

- Describe the importance of Statistics.
- Organise and represent educational data.

- Compute various statistical measures and use the measures for solution of problems.
- Describe the concept and importance of Normal Probability Curve.
- Understand the divergence of data from normality.

### **UNIT I Educational Statistics**

*LO: Know the concept of Statistics*

*LO: Understand various statistical measures and graphical presentation.*

- Statistics: Meaning, nature, scope, need and uses. Educational statistics: Meaning, nature, need and uses.
- Organization of data: frequency distribution, tabulation of data and cumulative frequency distribution
- Graphical representation of data: Histogram, frequency polygon, cumulative frequency polygon or ogive and pie-diagram.

### **UNIT II Measures of Central tendency and Variability**

*LO: Describe the measures of Central Tendency.*

- Mean, median and mode – Concept, Computational process, merits, limitations, applications and uses.
- Meaning, definitions and need of variability
- Range, quartile deviation, Average Deviation and Standard Deviation – Concept, Computational process, merits, limitations and uses.

### **UNIT – III Correlational Statistics**

*LO: Understand the types of Correlation, Coefficient of Correlation*

*LO: Explain different methods of computation of Correlation Coefficient.*

- Meaning and types of correlation, co-efficient of correlation.
- Computation of co-efficient of correlation by Rank difference method. Merits and Demerits of Rank difference method.
- Computation of co-efficient of correlation of Karl Pearson's product moment method.

### **UNIT IV Normal Probability Curve and Divergence From Normality.**

*LO: Understand Normal Probability Curve, Skewness and Kurtosis.*

*LO: Understand Z score and t score.*

- Meaning and need of probability, normal probability curve – characteristics, properties and applications.
- Measuring Divergence from normality – skewness and kurtosis.
- Interpretation of derived score: Z-score and T-score.
- Chi square-Tests of significance.

### **Practical**

- Analysis of Achievement Data of a particular class and Reporting .

NB: It will be evaluated by both Internal and External examiners.

### **Text Books**

- ✓ Aggarwal, Y.P. (2009). *Statistical methods: concepts, application and computation*. New Delhi: Sterling Publishers Pvt. Ltd.
- ✓ Garrett, H.E. (1971). *Statistics in psychology and education*. New Delhi: Paragon International Publisher
- ✓ Mangal, S.K. (2008). *Statistics in education and psychology*. New Delhi: Prentice-Hall of India Private Limited

### Reference Books

- ✓ Ferguson, G.A. (1971). *Statistical analysis in psychology and education*. Kogakusha, Tokyo: McGraw-Hill
- ✓ Guilford, J.P. & Fruchter, B. (1981). *Fundamental statistics in psychology and education*. New York: McGraw Hill
- ✓ McCall, R. (1993). *Fundamental statistics for the behavioral Science*. New York: Harcourt Brace
- ✓ Ravid, Ruth. (2000). *Practical statistics for education*. New York: University Press of America.
- ✓ Seigel, S. & Castel lan N.J. (1988). *Non-parametric statistics for the Behavioral Science*. Singapore: Graw-Hill Book Co.

## Core XIX                      **Guidance and Counselling in Education**

### Course Outcomes (COs):

On completion of this course, the learners will be able to:

- Describe the concept, nature and purpose of guidance and counselling.
- Understand the techniques and theories of counselling.
- Identify the concept and technique of group and individual guidance.
- Develop skills for guidance and counselling in secondary schools.

### Course Contents:

#### Unit-I: Introduction to Guidance and its Types

*LO: Understand theoretical aspects of guidance, types of guidance and guidance service.*

- Concept and Purpose of guidance: self-understanding, self-discovery, self-reliance, self-direction, self-actualization.
- Guidance: Scope and Principles with reference to India.
- Types of guidance-educational guidance, vocational guidance and personal guidance.
- Types of guidance services: Orientation, Information, Individual Inventory, Counselling, Placement, Follow-up, and Research & Evaluation, Resources required for organizing guidance services.

#### Unit-II: Concept and Techniques of Counselling:

*LO: Understand concept of counselling and develop basic guidance ability.*

- Counselling—Meaning, Need, Procedure and Types.

- Techniques of counselling: Directive counselling-concept, advantages and limitations. Non-Directive Counselling-concept, advantages and limitations. Eclectic Counselling-concept, advantages and limitations
- Theories of Counselling (Behaviouristic, Rational, Emotive and reality)

### **Unit-III: Individual and Group Guidance**

*LO: Differentiate individual and group guidance.*

- Meaning, advantages, principles and kinds of individual and group guidance.
- Organizing guidance services at school and college level ,Individual guidance with special emphasis on problems of adolescents
- Group guidance techniques: Career talk, orientation talk, group discussion, career conference, career corner
- Role of principal and teachers in guidance programmes. Integration of guidance and curriculum: need, importance and role of teachers.
- Nature and causes of behavioural problems among underachieving students. School discipline problems, bullying, drug abuse, truancy, and dropout.

### **Unit-IV: Guidance Service**

*LO: Organise guidance programme at school.*

- Counselling for Placement and Higher education
- Aptitude tests for choice of career.
- Soft skill training for improving employability.
- Organising guidance programme at school.

#### **Mode of Transaction:**

Lecture, seminar, workshops, team teaching, tutoring, dialogue, peer group discussion, mobile teaching, self-learning, collaborative and cooperative learning and role play.

#### **Suggested activities:**

1. Case Study of a Child with Special Needs or a child coming from socially disadvantaged background.

\*It will be evaluated by both Internal and External examiners.

#### **Suggested Readings:**

- ✓ *Gibson, R. L., & Mitchell, M. H. (2008). Introduction to counselling and guidance. New Jersey: Pearson Prentice Hall.*
- ✓ *Gupta, S. (2013). Guidance and career counselling. New Delhi: A.P.H. Publishing Corporation.*
- ✓ *Jothiet. al. (2009). Guidance and counselling. New Delhi: Centrum Press.*
- ✓ *Naik, D. (2007). Fundamentals of guidance and counselling. New Delhi: Adhyayan Publishers and Distributors.*
- ✓ *Nayak, A. K. (2014). Guidance and counselling. New Delhi: A.P.H. Publishing Corporation.*

- ✓ *Pal, O. (2011). Educational and vocational guidance and counselling. New Delhi: A.P.H. Publishing Corporation.*
- ✓ *Sharma, R. N., & Sharma, R. (2013). Guidance and counselling in India. New Delhi: Atlantic Publishers and Distributors (P) Ltd.*
- ✓ *Siddiqui, M. H. (2015). Guidance and counselling. New Delhi: A.P.H. Publishing Corporation. Suggested*
- ✓ *Suggested e-books*
- ✓ *Educational and Vocational Guidance in Secondary Schools*
- ✓ <http://www.counselling-directory.org.uk>
- ✓ [www.psychologytoday.com](http://www.psychologytoday.com)
- ✓ <http://qu.edu.iq/eduw/wp-content/uploads>
- ✓ <http://www.csbsju.edu/psychology/student-resources/issues>

## **Semester-VIII**

### **Core XX**

### **Art and Craft Education**

#### **Course Outcomes (COs):**

On completion of the course, the students will be able to:

- Define arts education and craft education.
- Differentiate different forms of art education.
- Develop aesthetic sensibility among learners about the environment, including classroom, school, home and community through an integrated learning approach.
- Develop a perspective and appreciation of art, nature, and human existence relationship.
- Develop awareness about the rich cultural heritage of their own locality/state/region as well as that of the nation.

Reflect on life and work of artists and their contribution to teaching and learning.

#### **UNIT I: Understanding Basics of Art Education**

*LO: Familiar with art traditions.*

- Meaning and Concept of Art Education(i)Visual Arts (ii) Performing Arts and its significance in school Education
- Nature and Scope of Art Education
- Knowledge of Regional Arts and Crafts (Local Specific) and its Relevance in Regional Art and Craft, Teaching Students about Folk Objects and Traditional Arts, Knowledge of contemporary Arts and Artists

#### **UNIT II: Expression through Art Forms**

*LO: Understand and create new art expressions.*

- Expressing ideas about different aspects of life
- Expressing various emotions
- Enhancing communication and presentation skills, developing imagination, creativity and aesthetic sensibility among the student teachers



- Utilizing different art expressions in teaching learning situation

### **UNIT III: Literature and Art**

**LO:** *Understand literary expressions and the methods of teaching.*

- Meaning and Aims of Literature art
- Different parts of literary Education
  - Story writing
  - Poem writing
  - Writing of drama
- Method of teaching of literary art at the elementary stage.
- Evaluation of literary art at the elementary stage.

### **UNIT IV: Cultural heritage of India**

**LO:** *Familiar with cultural heritage of India.*

- Exposure to the cultural heritage of (i) Locality (ii) state/region (iii) Nation
- Reflection and incorporation of the rich cultural heritage during the celebrations of festivals, functions and special days
- document processes of an art or craft form from the pedagogical point of view; such as weaving or printing of textiles, making of musical instruments, folk performances in the community.

Mode of Course Transaction:

*Seminar, Team Teaching, Dialogue, Peer-Teaching, Peer Group Discussion, Collaborative and Cooperative Learning, Field Trip, Concept Mapping, Lecture Method, Self-Learning.*

- Preparation of an album of greeting cards with appropriate caption.
- Prepare three rangoli / paintings / teracota art
- Conduct Art Exhibition in the institution by displaying art of different forms
- Dramatize any topic for classroom presentation
- Conduct of story/ poem writing competition in the school and document those writings.

### **Suggested Readings**

- ✓ Dodd, Nigel and Winifred Hickson (1971/1980). *Drama and theatre in education*. London: Heinmann.
- ✓ Gupta, Arvind (2003). *Kabad se Jugad: Little Science*. Bhopal: Eklavya.
- ✓ Khanna, S. and NBT (1992). *Joy of Making Indian Toys, Popular Science*. New Delhi: National Book Trust.
- ✓ NCERT, (2006). *Position Paper National Focus Group on Arts, Music, Dance and Theatre*. New Delhi: NCERT.
- ✓ Sahi, Jane and Sahi, R. (2009). *Learning through art*. Bhopal: Eklavya.

- ✓ NCERT (2023). Art Integrated Learning, New Delhi  
<https://ncert.nic.in/deaa/pdf/ArtIntegratedLearning-Handbook-Classes%20VI-VIII.pdf>

## **Core XXI Inclusive Education**

### **Course Outcomes (COs)**

On completion of the course, the students will be able to:

- Define meaning and scope of inclusive education.
- Identify the assumptions of disability underlying current general and Special education practices.
- Understand the various suggestions given by different recent commissions on education of children with disabilities for realizing the Concept of "Universalization of Education".
- Explore and utilize pedagogical approaches that can support students with a variety of learning profiles in respectful ways.
- Explain the meaning and implications of universal design in learning (UDL) for classroom pedagogy.
- Examine the different support services and collaboration for inclusive education.

### **UNIT I: Meaning, Genesis and Scope Inclusive Education**

*CO: Understand aspects of Inclusive Education.*

1. Special education and inclusive education: Concept and Principles.
2. Historical developments of special and inclusive education in India.
3. Medical and social models of disability.
4. Examining the practice of labelling.
5. Social, psychological and educational contexts of inclusion.

### **UNIT II: Policies & Frameworks Facilitating Inclusive Education**

*CO: Become familiar with both national and international policies for promotion of Inclusive Education.*

1. International Declarations: Universal Declaration of Human Rights (1948). World Declaration for Education for All (1990).
2. International Conventions: United Nations Convention of Rights of Persons with Disabilities (UNCRPD) (2006).
3. International Frameworks: Salamanca Framework (1994), Biwako Millennium Framework of Action (2002).
4. Constitutional Obligations: RCI Act 1992: PWD 1995 and NTA 1999; RTE-SSA and RPD Act. 2016.

### **UNIT III: Understanding and Support Needs of Students with Disability**

*CO: Understand disability and needs of students with disability.*

1. Understanding and support needs of students with different Labels of Disability including: Autism, Learning Disabilities, Speech & Hearing Disability, Blindness.
2. Intellectual Disabilities in inclusive classroom.

#### **UNIT IV: Frameworks, Support and Collaboration for Inclusive Education**

*CO: Understand teaching practice for promotion of Inclusive Education.*

6. Universal Design for Learning: Multiple Means of Access, Expression, Engagement and Assessment.
7. Principles of Differentiated Instruction and Assessment.
8. Capacity Building of Teachers for Inclusive Education.
9. Assistive Technology and Devices for Inclusive Education.

#### **Transaction Mode:**

Workshop, ICT-Lab Learning, Lecture method, Seminar, Team teaching, Tutoring, Peer group discussion, Mobile teaching, Self-learning, Collaborative learning, Cooperative learning.

#### **Practical**

- Visit to a centre for students with special needs (special school/special institute). Observe the process of teaching learning and write a report.
- \*NB: It will be evaluated by both Internal and External examiners..

#### **Text Books**

- ✓ *Panda, K.C. (nd). Education of Exceptional Children*
- ✓ *Daniels, H. (1999). Inclusive education. London: Kogan.*
- ✓ *Mangal, S.K. (2013). Exceptional Children, New Delhi: PHI Learning Pvt. Ltd.*

#### **Reference Books**

- ✓ *Bartlett, L. D., & Weisentein, G. R. (2003). Successful inclusion for educational leaders. New Jersey: Prentice Hall.*
- ✓ *Deiner, P. L. (1993). Resource for Teaching Children with Diverse Abilities. Florida: Harcourt Brace and Company.*
- ✓ *Dessent, T. (1987). Making Ordinary School Special. Jessica Kingsley Pub.*
- ✓ *Gargiulo, R.M. Special Education in Contemporary Society: An Introduction to Exceptionality. Belmont: Wadsworth.*
- ✓ *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, Crowin 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.
- ✓ Kluth. P. (2009). *The autism checklist: A practical reference for parents and teachers*. San Francisco, CA: Jossey-Bass.
- ✓ Lewis. R. B. & Doorlag. D. (1995). *Teaching Special Students in the Mainstream*. 4th Ed. New Jersey: Pearson.
- ✓ Rayner. S. (2007). *Managing Special and Inclusive Education*, Sage Publications.
- ✓ Rose, D. A., Meyer, A. & Hitchcock, C. (2005). *The Universally Designed Classroom: Accessible Curriculum and Digital Technologies*. Cambridge, MA: Harvard Education Press.
- ✓ Ryandak, D. L. & Alper, S. (1996). *Curriculum Content for Students with Moderate and Severe Disabilities in Inclusive Setting*. Boston, Allyn and Bacon.
- ✓ Thousand, J., Villa, R., & Nevin, A. (2007). *Differentiating instruction: Collaborative planning and teaching for universally designed learning*. Thousand Oaks, CA: Corwin Press.
- ✓ 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
- ✓ Udvari-Solner, A. & Kluth, P. (2008). *Joyful Learning: Active and collaborative learning in inclusive classrooms*. Thousand Oaks, CA: Corwin Press.

## Core XXII

## Teacher Education

### Course Outcomes (COs)

On completion of the course, the students will be able to;

- Explain concept, aims and objectives of teacher education at different levels.
- Narrate pre-service and in-service teacher education programme at different stage
- Describe the function of the institutions and agencies of teacher education.
- Describe the approaches to teacher education and teacher's capacity building programmes.
- Justify teaching as a profession and code of professional ethics of teachers and teacher educators.
- Understand the problems and recent trends in teacher education.

### Course Contents

#### Unit-I: Teacher Education: Policy Perspectives

**LO:** Understand structure of education and role of education.

**LO:** Familiar with Pre-service learning needs of teachers.

- Meaning, Nature and Scope of Teacher Education; Aims and objectives of teacher education at different levels: Elementary, Secondary and Tertiary. Types of Teacher Education Programs.
- Structure of Teacher Education Curriculum and its Vision in Curriculum Documents of NCERT and NCTE at Elementary, Secondary and Higher Secondary Levels.
- Organization of Components of Pre-service Teacher Education Transactional Approaches (for foundation courses) Expository, Collaborative and Experiential learning.

## **Unit-II: Pre-service and in-service Teacher Education**

*LO: Understand the structure of Pre-service and In-service Teacher training.*

*LO: Familiar with institutions and engaged in Teacher Education at National, State and District level.*

- Need of Pre-service Teacher Training at different levels of School education.
- Need of In-service Teacher Training at different levels of School education.
- Role of various institutions and agencies for pre-service and in-service Teacher Education: NCTE, SCERT, NCERT, IASES, CTES, DIETS, UGC-HRDC.

## **Unit-III: Teaching as a Profession and Development**

*LO: Know about performance of teachers and how to strengthen Teacher Education.*

- Concept of Profession and Professionalism, Teaching as a Profession, Professional Ethics of Teachers. Personal and Contextual factors affecting Teacher Development.
- Performance appraisal of teachers and teacher educators, Capacity building programmes, Modification of Teachers' Behaviour, Micro teaching, Simulation, Interaction analysis, Team Teaching.
- Recommendations of Justice Verma Committee in strengthening teacher education programme.

## **Unit-IV: Problems and issues in Teacher Education**

*LO: Understand contemporary challenges of Teacher Education and policies to meet the challenges.*

- Issues related to School internship: co-operative school, supervision and mentoring.
- Curriculum of teacher education with reference to National Curriculum Framework for Teacher Education-2009. NEP-2020-Teacher Education, Objectives, structure and recommendation for professional development.
- Challenges and Prospects related to teacher education policy, Privatization of teacher education.

## **Sample Questions**

10. What is Teacher education? (1 Mark)
11. Write any two functions of NCTE. (2 Marks, Within 50 words)
12. Critically reflect on the structure and functions of Teacher Education with reference to NEP 2020. (5 Marks, Within 300 words)
13. Elaborate the issues and challenges of Teacher Education with reference to contemporary society. (8 Marks, Within 500 to 800 words).

## **Practical/Assignment/Project:**

Each student is required to submit Practical/Project report/Assignments (selecting any one of the following)

1. Study on implementation of National Curriculum Framework for Teacher Education-2009 at secondary level of Odisha.
2. Analysis of any policy documents being implemented in the field of Teacher Education
3. Visit to a Centre of Excellence (anyone IASE of Odisha), observe the process of teaching learning practices and write a report.
  - It will be evaluated by internal and External Examiners.

### **Transaction Mode:**

Lecture, Seminar, team teaching, tutoring, dialogue, peer group discussion, mobile teaching, self-learning, Collaborative learning, Cooperative learning and Role play.

### **Books Recommended**

- ✓ Aggarwal, J.C. (1973). *Landmarks in the history of modern Indian education*. New Delhi: Vikas Publishing House Pvt. Ltd.
- ✓ Aggarwal, J.C. and Aggarwal, S.P. (1992). *Educational planning in India with a slant to educational financing and administration*. New Delhi: Concept Pub.
- ✓ Chattopadhyaya, D. P. (1985). *The teacher and society: report of national commission on teachers in 1983-85, Govt. of India, New Delhi*.
- ✓ MHRD (1985). *National policy on education 1986 (with modifications undertaken in 1992)*. New Delhi MHRD.
- ✓ MHRD (1993) *Learning without burden report of the national advisory committee appointed by the ministry of human resource development*. New Delhi: Govt. of India, Ministry of Human Resource Development.
- ✓ MHRD (1995). *The teacher and society, Chattopadhyaya committee report (1983-95)*. New Delhi: MHRD, GOI.
- ✓ Ministry of Education (1966). *Education and national development, report of the education commission 1964-66*, New Delhi: Author.
- ✓ Ministry of Law Justice (2009). *The Right of Children to Free and Compulsory Education Act, 2009. The Gazette of India, Ministry of Law Justice, Govt. of India*,
- ✓ Mishra, S. (2004). *Privatization of higher education: Policy perspectives and role of regulatory bodies*. University News, Association of Indian Universities, New Delhi.
- ✓ Mohanty, J. (2008). *Teacher education*, New Delhi: Deep & Deep.
- ✓ Mudaliar, A. L. (1953). *Report of the secondary education commission 1952-53*. New Delhi: Govt. of India.
- ✓ Mukherjee, S.N. (Ed.) (1968). *Education of teachers in India (Vols. 1 & 2)*, New Delhi: S Chand & Co.
- ✓ NCERT (1978). *Teacher education curriculum-a framework*. New Delhi: NCERT.
- ✓ NCERT (1988a). *Teacher education curriculum: a framework*. New Delhi: NCERT.
- ✓ NCERT (1988b). *Teacher education curriculum: a framework-revised draft*. New Delhi: NCERT.
- ✓ NCERT (2004). *Curriculum framework for teacher education*. New Delhi: NCERT.
- ✓ NCERT (2006a). *National curriculum framework-2005*. New Delhi: NCERT.
- ✓ NCERT (2006b). *Teacher education for curriculum renewal*. New Delhi: NCERT.

- ✓ NCERT (2007). *Professional support system and classroom performance of parateachers*. New Delhi: NCERT.
- ✓ NCERT (2008). *Sixth survey of research in education Vol II*. New Delhi: NCERT, NCTE(1998a). *Policy perspectives in Teacher Education: Critique & Documentation*. New Delhi: NCERT.
- ✓ NCTE (1998b). *Curriculum framework for quality teacher education*. New Delhi NCTE.
- ✓ NCTE (1998c). *Competency based and commitment-oriented teacher education for quality school education: pre-service education*. New Delhi: Author.
- ✓ NCTE (2009). *National curriculum framework for teacher education towards preparing professional and humane teacher*. New Delhi: NCTE.
- ✓ Ram, S. (1999). *Current issues in teacher education*. New Delhi: Sarup & Sons Publications.
- ✓ Report of the National Commission on Teachers (1983-85), Website: <http://www.education.nic.in/cd50years/r/20/42/toc.htm>
- ✓ Verghese, B.V. (2004). *Recruitment and training of primary teacher*. New Delhi: Anmol.
- ✓ Yadav, M.S. & Lakshmi, T.K.S. (2003). *Conceptual inputs for secondary teacher education the instructional role*. New Delhi: NCTE.

## **Core XXIII Computer applications in teaching learning**

### **Course Outcomes (COs):**

On completion of this course, the learners will be able to:

- Learn basis of Basics of MS Windows.
- Demonstrate basic understanding of computer applications with reference to MS Windows, MS excel and MS PowerPoint.
- Generate spread sheets, charts and presentations.
- Design personal, academic and business documents using MS Office.
- Model the modes of development of self-learning materials and prepare different types of instructional material.
- Explain different OERs, MOOCs available for effective learning.
- Develop learners' e-portfolios.
- Classify various e-resources for effective learning.
- Describe the concept of artificial intelligence and its applications in teaching learning.
- Determine similarity index of the various documents like dissertations, theses etc.

### **Course Contents**

#### **Unit-I: Basics of Computer Applications**

*LO: Able to use a computer.*

*LO: Operate MS Window System, MS Excel, PPT and Hyperlinking.*

- Basics of MS Windows: Desktop, Recycle bin, My Computer, Documents, Pictures, Music, Videos, Task Bar and Control Panel. MS-Word and its features: Creating,

Editing, Formatting and Printing of Documents, Inserting, Word Art, Page Numbers, Mail Merge.

- MS-Excel and its features: Creating a new worksheet, selecting cells, Entering and editing Text, Numbers, Inserting Rows/Columns, changing widths and heights of row and columns, Formulae, referencing cells, changing of font sizes and colours.
- MS-PowerPoint and its features: Creating, Inserting and Deleting Slides of a Presentation. Adding Pictures, Inserting Objects, Audio, Video, Custom Animation and Hyperlinking of documents.

## **Unit-II:Introduction to E-learning**

*LO: Understand and use E-learning facilities through computer and other digital instruments like mobile and tablets.*

- Concept of e-learning, benefits of E-learning, Introduction to LMS using E-learning
- Approaches to e-learning: Offline, Online, Synchronous, Asynchronous, Blended learning and Mobile Learning.
- Security concerns related to interactive contents: Viewing, disabling and managing interactive content; securing the computer from viruses and other internet attacks.

## **Unit-III:Application of E-Learning**

*LO: Able to apply E- Learning tools.*

- Creating and Sharing: (i) G-Suite: Gmail, Drive, Calendar, Meet, Chat, Doc, Sheet, Slides (ii) Surveying: SurveyMonkey, Google Forms, online spreadsheets (iii) Google Classroom: conducting classes, assessment and evaluation.
- Development of Self-Learning Materials (SLM) and e-content: Concept and its purposes, Conventional Teaching versus SLMs & e-content, Types of SLMs and E-content,
- Process of Developing SLMs and e-content, Content Organization, Integrating video and audio into SLMs.

## **Unit-IV:Trends in Teaching Learning Practices**

*LO: Understand contemporary utilisation of E-tools for teaching learning process.*

- Open Education Resources: Creative Common, Massive Open Online Courses; creating learners' E-portfolios; accessing Online Repositories, Online Libraries and E-Resources.
- Artificial Intelligence: Concept and its applications in teaching learning practices. Introduction to SPSS and R, Latex.
- Plagiarism: Regulations, similarity index of the various documents like dissertations, theses etc. through plagiarism testing software (Mendeley, Zotero).

### ***Transaction Mode***

Workshop, ICT-Lab Learning, Lecture Method, Seminar, team teaching, tutoring, peer group



discussion, mobile teaching, self-learning, Collaborative learning, Cooperative learning.

### **Practical/ Assignment/ Activities:**

Each student is required to submit Practical/Project report/Assignments selecting any one of the following:

1. Prepare Project Report on Role of Technology for Women Empowerment.
2. Overview of different Plagiarism detection tools and suggestive measures.
3. Prepare a Power Point Presentation of any content of your course and Presentation including Viva Voice.

\* It will be evaluated by External and Internal Examiners.

### **References Books:**

- ✓ *Creating learning materials for open and distance learning: A Handbook for Authors and Instructional Designers (2005). Commonwealth of Learning. Vancouver: Canada*
- ✓ *Excel 2020 in easy steps-Michael Price – TMH publications*
- ✓ *Foundations of Self-Learning Materials. [http://wikieducator.org/Session\\_3](http://wikieducator.org/Session_3).*
- ✓ *Garrison, D.R. and Anderson, T. (2003). e-learning in the 21st century: a framework for research and practice. London: Routledge.*
- ✓ *Haas, K.B. and Packer, H.Q. (1990): Preparation and use of audio-visual aids, 3rd Edition, Prentice Hall, Inc.*
- ✓ *Jayaram, K and Dorababu, K.K. (2015). Self-learning materials in distance education system. International Journal of Current Research. Vol. 7, Issue, 10, pp.21929-21934.*
- ✓ *Minnick, D.R. (1989). A guide to creating Self Learning Materials. International Rice Research Institute Los Baños, Laguna, Philippines.*
- ✓ *MS Office 2007 in a Nutshell –Sanjay Saxena – Vikas Publishing House.*
- ✓ *Murthy, CRK and Santosh Panda (2002). Report of the workshop on strategies for revision of self-learning materials, IGNOU, New Delhi. (Unpublished).*
- ✓ *Oreyet.al. (2009). Educational media and technology. New York: Springer Science Business Media.*
- ✓ *Rana, S. (1994): Open Learning in India, Commonwealth Publishers, New Delhi.*
- ✓ *Roblyer, M.D. (2008). Integrating educational technology into teaching. New Delhi: Pearson.*
- ✓ *Rowntree, Derek (1986). Teaching through self-instruction, Kogan Page, London/Nichola Pub. Comp. New York.*
- ✓ *Senapaty, H.K. (2009). ICT integrated learning materials on basic school subjects from constructivist perspectives. Bhubaneswar: Regional Institute of Education, NCERT.*
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