# SHAILABALA WOMEN'S AUTONOMOUS COLLEGE, CUTTACK

# STATE MODEL SYLLABUS FOR UNDERGRADUATE COURSE IN TEACHER EDUCATION

# (Bachelor of Education Examination)

# UNDER CHOICE BASED CREDIT SYSTEM

# MAPPING OF COURSES WITH LOCAL, NATIONAL, REGIONAL AND GLOBAL NEEDS

|  | - | Local           |
|--|---|-----------------|
|  | - | National        |
|  | - | Regional        |
|  | - | Global          |
|  | - | Local, National |

- National, Regional, Global

**Mapping Colour Index:** 

**First Year** 

\*Figures within parentheses indicate hours per week

| Course      | Title of the Course                       |          | Marks    | - F 5. 19C | Credits | Contact |
|-------------|-------------------------------------------|----------|----------|------------|---------|---------|
|             |                                           | External | Internal | Total      | 1       | Hours   |
|             |                                           |          |          |            |         |         |
| PERSP       | ECTIVES IN EDUCATION                      | )N       |          |            |         |         |
| PE-1        | Education, School and Society             | 80       | 20       | 100        | 04      | 64(5) * |
| PE-2        | Childhood and Growing up                  | 80       | 20       | 100        | 04      | 64(5)   |
| PE-3        | Learning and Teaching                     | 80       | 20       | 100        | 04      | 64(5)   |
| PE-4        | Contemporary Concerns in Education        | 80       | 20       | 100        | 04      | 64(5)   |
|             | Total                                     | 320      | 80       | 400        | 16      |         |
| CURRI       | CULUM AND PEDAGO                          | GIC STU  | DIES     |            |         |         |
| CPS-2       | Learning Assessment                       | 80       | 20       | 100        | 04      | 64(5)   |
| CPS-3 (a&b) | Pedagogy of a School<br>Subject           | 80       | 20       | 100        | 04      | 64(5)   |
|             | Total                                     | 160      | 40       | 200        | 08      |         |
| COURS       | ES ENHANCING PROF                         | ESSIONA  | L CAPA   | CITIES     | ,       |         |
| EPC-3       | Fine Art/ Performing Art                  |          | 50       | 50         | 02      | 32(2.5) |
|             | (Drama) /Performing Art<br>(Indian Music) |          |          |            |         |         |
| EPC-4       | Physical Education and Yoga               |          | 50       | 50         | 02      | 32(2.5) |
|             | Total                                     |          | 100      | 100        | 04      |         |
| SCHOO       | L INTERNSHIP Part-I                       |          | 100      | 100        | 04      | 8 Weeks |
| SCHOO       | E INTERNSIIII Tait-I                      |          | 100      | 100        | 04      | o weeks |
| OPTIO       | NAL COURSES FOR SK                        | ILL DEV  | ELOPME   | ENT        |         |         |
| OCSD-       | Fruit and Vegetable                       |          | 50       | 50         | 02      |         |
| 1           | Preservation                              |          |          |            |         | 16 (01) |
| OCSD-       | Spinning and Weaving                      |          | 50       | 50         | 02      |         |
| OCSD-       | Tailoring                                 |          | 50       | 50         | 02      |         |
| OCSD-       | Wood Work                                 |          | 50       | 50         | 02      |         |
|             | Total                                     |          | 50       | 50         | 02      |         |
| T           | OTAL (First Year)                         | 480      | 370      | 850        | 34      |         |

# **Second Year**

| Course Title of the Course |                                    |          | Marks    |       |         | Contact  |
|----------------------------|------------------------------------|----------|----------|-------|---------|----------|
|                            |                                    | External | Internal | Total | Credits | Hours    |
|                            |                                    |          |          |       |         |          |
| PERSP                      | ECTIVES IN EDUCATION               | 1        |          |       |         |          |
| PE- 5                      | Knowledge and Curriculum           | 80       | 20       | 100   | 04      | 64(5) *  |
| PE-6                       | Educational Management             | 80       | 20       | 100   | 04      | 64(5)    |
| PE-7a                      | Creating an Inclusive School       | 40       | 10       | 50    | 02      | 32(2.5)  |
| PE-7b                      | Gender, School and Society         | 40       | 10       | 50    | 02      | 32(2.5)  |
| PE-8a                      | Action Research                    | 40       | 10       | 50    | 02      | 32(2.5)  |
| PE-8b                      | <b>Guidance and Counseling</b>     | 40       | 10       | 50    | 02      | 32(2.5)  |
|                            | Total                              | 320      | 80       | 400   | 16      |          |
| CURRI                      | CULUM AND PEDAGOGI                 | C STUD   | IES      | •     | •       |          |
| CPS-1                      | Language across the                | 40       | 10       | 50    | 02      | 32(2.5)  |
|                            | Curriculum                         |          |          |       |         |          |
| CPS-3                      | Pedagogy of a School               | 80       | 20       | 100   | 04      | 64(5)    |
| (a&b)                      | Subject                            |          |          |       |         |          |
| Total                      |                                    | 120      | 30       | 150   | 06      |          |
| COURS                      | SES ENHANCING PROFE                | SSIONAL  | CAPAC    | ITIES | •       |          |
| EPC-1                      | Critical Understanding of ICT      |          | 50       | 50    | 02      | 64(4.5)  |
| EPC-2                      | Understanding the Self             |          | 50       | 50    | 02      | 64(3)    |
| Total                      |                                    |          | 100      | 150   | 04      |          |
|                            |                                    |          |          |       |         |          |
| SCHOOL INTERNSHIP PART-II  |                                    |          | 150      | 150   | 06      | 12 Weeks |
| COMMUNITY ACTIVITIES       |                                    |          | 50       | 50    | 02      |          |
|                            |                                    |          |          | ,     | ,       |          |
| TO                         | TOTAL (Second Year) 440 410 850 34 |          |          |       |         |          |

| GRAND TOTAL                | <sub> </sub> 920 | 78 | 1700 |
|----------------------------|------------------|----|------|
| (First Year + Second Year) |                  | 0  |      |

#### PERSPECTIVES IN EDUCTION (PE)

# PE 1: Education, School and Society

Marks per paper - 80 marks (External) + 20 marks (Internal), Total – 100 marks Credit per paper – 4 Teaching hours per paper – 64 hours

# 1. Understanding Education

- Meaning: derivational, narrow and wide; Eastern and Western viewpoints
- Process: Bi-polar, tri-polar, multi-polar; Life-long process
- Mode: formal/institutional, Informal/Incidental, Non-formal,
- Aims: Individual and social
- Aims of education according to Secondary Education Commission (1952-1953), Education Commission (1964-1966), National Policy on Education (1986/92), and National Curriculum Framework (2005)

#### 2. Foundations of Education

- Philosophy and Education: Meaning and relationship; Influence of philosophy in determining aims, curriculum and methods of Education with reference to major schools of Educational Philosophy Idealism, Naturalism and Pragmatism
- Sociology and Education: Meaning and relationship; Implications of Sociology for aims, curriculum and methods of Education.
- Psychology and Education: Meaning and relationship; Implications of psychology for Education in organizing contents and understanding the teaching-learning process (understanding learner, teacher characteristics and pedagogy)
- Educational thoughts of Gandhi, Tagore, Sri Aurobindo, Rousseau, Dewey and Freire with reference to aims, curriculum and methods

#### 3. Education and School

- School as a formal agency of Education: Purpose (Socio-cultural), Location, infrastructure and time, stakeholders (primary and secondary stakeholders) and programmes
- School Activities: Curricular and other curricular activities- Components, mode of transaction and organization
- School Environment: Learner and Learning-friendly- Characteristics and components; strategies for ensuring learning-friendly environment
- Resource Requirements: Knowledge, Human, Material, Infrastructural, Technological; Their sources and utilization
- School-Community Interface: Importance, Aspects of interface, strategies for strengthening their interrelationships, and their roles in building learning communities

# 4. Education, Society and Culture

- Society as a system; Education and culture as sub-systems; Their interrelationships
- Education as an instrument of social change: Meaning, dimensions and types of social change; Role of education effecting social change and control; Social change influencing education
- Education and Modernization: Meaning of modernization; Characteristics of modernized society; Adaptive demands of modernization and role of education;
- Education and culture: Meaning and elements of culture; Role of education for preservation, transmission and enrichment of culture; influence of culture on education, in general, and promotion of meaningful learning, in particular

# 5. Education and National Development

- National development Dimensions and Indicators
- Education as an investment for Human Resource and Socio-economic Development.
- Education for sustainable development (including sustainable environment)
- Education for inclusive development- Dimensions (social, economic,
- cultural, technological, spatial), Strategies for promoting inclusion, Role of education
- Education to meet the situations arising out of conflicts, insurgencies, national calamities and disasters.

# PE 2: Childhood and Growing up

Marks per paper - 80 marks (External) + 20 marks (Internal), Total - 100 marks Credit per paper - 4
Teaching hours per paper - 64 hours

#### 1. Understanding learner development

- Growth and development Concept and General Principles of Development; Stages of development concept (sequential, structural identity, critical periods, processes-reversible and irreversible), different stages of human growth and development- infancy, childhood, adolescence, adulthood and old age
- Contexts of development: socio- economic, cross-cultural- psychological, and anthropological
- Factors influencing development: heredity, environment, nutrition, child-
- rearing practices, socio economic status, siblings and peers

# 2. Theories of Child and Adolescent Development

• Socio-Emotional Development: Erickson's theory of psycho-social development; Theory of development of social play- Jean Piaget

- Cognitive and Language Development: Cognitive developmental stages of Piaget; Conceptual and Language development theories of Vygotsky; Language development theory of Noam Chomsky; Brief theoretical framework and its educational implications
- Developmental characteristics during childhood: Physical, social, cognitive and emotional; Role of school and teachers

# 3. Developmental characteristics and needs during adolescence

- Growth and development during adolescence: Characteristics during early and late adolescence Physical, Social, Cognitive and Language, Emotional and Moral; Challenges of adolescence
- • Context-specific developmental tasks based on specific needs and
- problems during adolescence; Problems of adjustment
- Role of school and teacher in addressing the challenges of developmental needs of adolescents in various contexts

# 4. Understanding Individual Differences among Learners

- Individual differences due to cognitive, social and emotional attributes; Individual differences in learning in terms of mental ability, rate of learning
- , motivation to learn, learning style, attitude etc.; recognizing the uniqueness of the learner
- Learners with different mental abilities: intelligence, emotional intelligence and creativity-their concept, nature and assessment; categorization of learners based on mental abilities
- Managing individual differences in learning learning needs of different types of learners (gifted and backward learners; fast and slow learners);

#### 5. Addressing learning needs

- Identification of learning needs of children in different stages and contexts of development (socio-economic, cultural, geographical, political, CWSN etc)
- Strategies to meet the learning needs of children in and out of school: organizing learning in heterogeneous classroom ability grouping, heterogeneous grouping, grouping by interest and grouping by choice; addressing individual differences in classroom individual guided learning, peer learning, co-operative and collaborative learning etc.
- Culture-responsive teaching-learning approaches to meet the learning needs of children in different contexts of development learning issues of marginalization, diversity, gender inequality

#### PE 3: Learning and Teaching

Marks per paper - 80 marks (External) + 20 marks (Internal), Total – 100 marks Credit per paper – 4
Teaching hours per paper – 64 hours

#### 1. Understanding learning process

Meaning, nature, and dimensions of learning; Learning as a process and as an outcome

- Basic conditions of learning Maturation, Readiness, Attention,
   Motivation, Fatigue, Materials, Learning Style, Tasks and Methods etc.
- Types/Categories of learning: Gagne's categories of learning

# 2. Theoretical perspectives of learning

- Behaviouristic Theories: Classical Conditioning Theory of Pavlov and Operant Conditioning Theory of Skinner–Theoretical framework and educational implications
- Social Cognitive Theories: Social Learning Theory of Bandura, Advance Organizer Theory of Ausubel Theoretical framework, and educational implications
- Constructivist theories: Radical constructivism of Jean Piaget and Social constructivism of Lev Vygotsky; Theoretical framework, and educational implications

# 3. Meaningful learning

- Meaning and attributes active or manipulative, constructive, reflective, intentional, complex, contextual, collaborative, and conversational;
- Learning as meaning making: Concept and process of meaning making; Learner as meaning maker- Characteristics of learner as meaning maker curiosity, interest, active engagement: Role of inquiry in meaning making
- Meaningful Learning as Experiencing: Observing, Perceiving and internalizing, and Deriving meaning from experiences;
- Facilitating Meaningful Learning in and out of school: strategies and role of teacher

# 4. Teaching for meaningful learning

- Teaching and Learning: Teaching as instructing vs Teaching as facilitating learning; Teaching as empowering learners; Bruner's Model of Teaching for meaningful learning process and implications for classroom instruction in promoting meaningful learning
- Teaching in Diverse Classrooms Paradigm shift in organizing learning: Teacher centric to learner centric, and to learning centric (characteristics and process); Grouping for facilitating learning-Ability Grouping, Heterogeneous Grouping, Grouping by interest, Grouping by Choice; Teaching for motivating towards learning- types of motivation and teaching strategies
- Modes of teaching-learning face to face and distance mode, oral-aural and digital, individualized and group-based; Individualizing instruction in regular classroom

#### 5. Teaching as a profession

- Importance and Characteristics of teaching profession; Characteristics of an effective teacher
- Teacher Preparation: Needs, components and modes of pre-service teacher- education programmes for different school levels (pre-school, elementary, secondary, higher secondary)
- Teacher Development: Needs and Stages Survival, Consolidation, Renewal and Maturity; Continuing Professional Development of In-service Teachers Needs and Strategies
- Teachers' Professional Ethics and Accountability: Meaning, importance and dimensions; Recommendations of NPE 1986/92; Strategies for ensuring teacher accountability

# **PE:4 Contemporary concerns in Education**

Marks per paper - 80 marks (External) + 20 marks (Internal), Total – 100 marks

Credit per paper – 4
Teaching hours per paper – 64 hours

# 1. Diversity, Inequality and Marginalization in Society

- Understanding Indian Society with reference to diversities in Language, Culture, Religion, Socioeconomic class, Ethnic group
- Issues of Inequality in Society and their Socio -cultural and Educational Implications
- Discrimination and marginalization as barriers for Universalization of Education
- Role of Education, School and Teacher in addressing issues related to diversity, inequality and marginalization

#### 2. Constitutional provisions, Policies and Acts in Education

- Constitutional provisions and values for resolving the issues of diversity, inequality and marginalization in education
- Policies and programmes for addressing these issues NPE 1968 and 1986
- / 92; SSA and RMSA; State Policy on Multilingual Education in Odisha (2014)
- Problems in implementation of the policies with reference to access, enrollment, retention and quality in education

# 3. Child rights and Human rights

- Human Rights- concept and covenants of human rights (Universal Declaration of Human Rights); constitutional provisions for safeguarding human rights
- Child Right- concept and rights of child; constitutional provisions for safeguarding child rights; UN Convention of Child Rights, 1989
- Initiatives for protection of Child's Right to Education: RCFCE Act, 2009 (RTE Act) objectives and provisions

#### 4. Global concerns for Education

- Environmental Education- context and concept, objectives, scope and strategies
- Life skill education concept and importance; core life skills (WHO identified); role of school, teacher and community for developing life skills of the learners; National Skill Development Framework
- Privatization and globalization of education— meaning and their impact on the contemporary education scenario with reference to curriculum, pedagogy and management
- Peace education concept, need, scope and strategies

# 5. Quality Concerns in Education

- Quality education concept, dimensions and indicators.
- Factors determining quality education
- Initiatives for enhancing quality education in school: decentralized planning, innovative materials and pedagogy, capacity building of teachers, reforming teacher education programme, community

involvement etc.

• Role of school, teacher and community to promote quality education in school

# PE:5 Knowledge and Curriculum

Marks per paper - 80 marks (External) + 20 marks (Internal), Total – 100 marks Credit per paper – 4

Teaching hours per paper – 64 hours

# 1. Understanding the Nature of Knowledge

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

#### 2. Construction of knowledge

- 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

#### 3. Understanding curriculum

- Concept (difference between curriculum and syllabus), types (subject- centered, teacher-centered, learner-centered, learning-centered, experience-centered, activity-centered, hidden-manifest) and components (core- elective)
- 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 –objectives, aspects and recommendations.

#### 4. Curriculum planning and development

- Determinants of curriculum development
- Principles of curriculum development
- Approaches to curriculum planning
- Processes / stages of curriculum development finalization) (preparation, try out and finalization.

# 5. Curriculum transaction, evaluation and renewal

- Classroom Transaction: Planning (time, space, manpower, material and scheme and plan of lessons), Preparation of curricular materials and activities (text and support materials, learning activities), mode of transaction and learners' involvement- resource management (use of TLMs, activity and question banks etc), use of assessment mechanism for learning.
- Evaluation: Mode (internal and external), periodicity (continuous, periodic), Mechanism (research studies, on-site observation, FGD, on-line feedback)
- Renewal: Use of evaluation feedback / inputs for Immediate / long-term revision Specific / comprehensive improvement.
- Current provisions and practices for curriculum development, transaction, evaluation and renewal in School Education and Teacher Education in the State.

#### PE 6: Educational Management

Marks per paper - 80 marks (External) + 20 marks (Internal), Total – 100 marks Credit per paper – 4
Teaching hours per paper – 64 hours

# 1. Educational Management:

- Concept, Scope and Types- centralized and decentralized, democraticand authoritarian, participatory and non-participatory
- Structure at national, state, district, sub-district and institution levels and their roles

# 2. School-based Management:

- Concept, importance, scope and processes
- School Management Committee (SMC) and School Management Development Committee (SMDC)
- State policies on school management (RCFCE ACT, 2009 and StateRules 2010)

# 3. Resource management: Sources, Utilization and Mobilization

- Infrastructural resources physical space (building, open space, furniture, water and sanitation facilities, etc.), barrier free environment.
  - Material resources equipment and TLMs
- Financial resources Grants, Donations, Fees, Funds Generation, other sources
- Human resources Students, Teachers, Parents, Community and local resource persons their interrelationship
- Role of School and Community in resource mobilization: Local resources and other resources through Corporate Social Responsibility and Public Private Partnership; resource management in school

#### 4. School Development Plan (SDP):

Meaning, Importance and Process

- State Policies in School Development Plan
- Actors and their roles in the Preparation of SDP
- Addressing Issues in the implementation of SDP

#### 5. Review, Monitoring and Feedback Mechanisms

Monitoring – Meaning, importance, scope and objectives

Monitoring Mechanisms – Structure, personnel and functions, existing monitoring practices and related issues

Feedback Mechanism – Structured vrs. Unstructured; Use pf feedback for effective school functioning

#### PE 7a: Creating an Inclusive School

Marks per paper - 80 marks (External) + 20 marks (Internal), Total – 100 marks Credit per paper – 4
Teaching hours per paper – 64 hours

#### 1. Inclusive Education

- Changing concept of inclusion (Shifting from Separation to Integration to Inclusion); Inclusion as 'Education for all'
- Inclusion in Education- a human right (Right to Access, Equality andQuality Education
- Inclusive Education: Definition, rationale, characteristics and principles

# 2. Children With Special Needs

- Types of marginalized /disabled children (physical, social and/or emotional) and their needs
- Problems in schooling the CWSN: Physical, Cognitive, Emotional
- Strategies for addressing their educational needs in inclusive set up: Specific
  attention to the ir needs in classroom management seating arrangement, aids and
  appliances, light and ventilation, access to TLMs, mobility inside the class,
  interpersonal relation and support etc, Flexible curriculum, Flexible teachinglearning strategies Child-centered, interactive, individual, group, collaborative and
  participatory classroom transaction

#### 3. Inclusive School

- Barriers for inclusion in school: Psycho-social, Infrastructural, Resource, Whole class-based instruction, Lack of participation
- Concept, dimensions and features of an inclusive school
- Developing an inclusive school: Creating inclusive cultures (building communities, establishing inclusive values), Producing inclusive policies (Developing the school for all, organizing support for diversity), and Evolving inclusive practices (Orchestrating learning, mobilizing resources)

#### PE 7b: Gender, School and Society

#### 1. Gender Related Concepts

- Key concepts: sex and gender, masculinity vs feminism, patriarchy, gender bias, gender parity, gender asymmetry
- Gender identity construction Influence of home, society, culture

# 2. Forms of Gender Inequality and Issues

- Forms and issues: Mortality inequality, Natality inequality, Special opportunity inequality,
   Professional inequality, Basic facility inequality, Ownership inequality, Household inequality
- Gender inequality in school context: access and participation, gender stereotype role assignments, curriculum and textbooks, inadequate gender sensitive facilities, teachers' preferential treatment, sexual abuse in school

# 3. Addressing Gender Issues: Intervention and strategies

- Role of family, school, community and media in addressing the issues
- Policy provisions NPE (1986/92), NCF (2005), RTE (2009), StateWomen's Policy (2014)

# PE 8a: Action Research and Innovation

| Year-2                    | Credit-2         |
|---------------------------|------------------|
| Marks 50(Ext. 40+ Int.10) | Contact Hours 32 |

# **Understanding Action Research**

- Need research in improving educational practices
- Importance, Characteristics and objectives of action research
- Comparison among Pure, Applied and Action Research;

#### 2. Conducting Action Research

- Designing Action Research Project
- Procedure and steps in conducting Action Research;
- Tools and techniques used in conducting action research

# 3. Reporting Action Research

- Format and style;
- Evaluating an Action Research Project;
- Sharing and reflecting on the process of research and implications of theoutcome

#### PE 8b: Guidance and Counselling

# 1. Understanding School Guidance Programme

- Concept, Need and Importance and Principles of Guidance.
- Types of Guidance: Educational, Vocational and Personal (Nature andObjectives at Elementary and Secondary levels)
- Guidance Services in Schools Coun selling, Occupational Information Service, Placement, Pupil Inventory Services, etc.
- Organizing guidance programmes in schools
- Addressing Issues of Guidance programme in school

# 2. Understanding School Counseling Programme

- Meaning, principles and purposes of counseling
  - Types of Counseling: Directive, Non-directive and Eclectic counseling
  - Processes involved in counseling
  - Qualities and role of a school counselor

# 3. Tools and techniques of Guidance and Counseling

- Guidance and counseling for Individual and Group
- Tools in guidance and Counseling: Blanks, Cumulative Record Cards, Rating scale,
   Questionnaires, Psychological Tests and Inventories
- Techniques of Guidance (Observation, Interview and Sociometry) and Counseling (Lecture, Discussion and Dramatics); Group Guidance – concepts and techniques

#### B. CURRICULUM AND PEDAGOGIC STUDIES (CPS)

#### **CPS 1:** Language across the Curriculum

#### 1. Language background of Learners

- Varied language contexts of the learners dialect, regional varieties andstandard language; significance of first language in learning
- Home language Vrs School Language Transmission and movement:challenges and strategies
- Understanding multilingual context -Challenges and strategies

#### 2. Language in Classroom

- Nature of classroom discourse and significance of language
- Communication skills promotion of oral skills through questions, discussion, sharing and interaction
- Language across various disciplines and subjects humanities and science; Role of language in ensuring optimum learning in subject areas

# 3. Reading-writing connection

- Reading in different content areas for information and data gathering, critical understanding; Strategies for developing reading skills such as scanning, skimming, indepth reading, note making
- Reading-writing connection in different content areas Use of note making for preparing a write-up, use of information gathering for summarizing,
- Writing for various purposes preparing report, writing paragraph, explanatory notes, expansion of ideas, presenting information in various forms such as flow-chart, diagram, pie-chart, histogram
- process writing generating / gathering ideas, drafting, revising and finalizing

#### **CPS 2: Learning Assessment**

#### 1. Assessment, Evaluation and Learning

- Assessment and Evaluation: Meaning, ; purpose of assessment (improving learning and teaching); purpose of evaluation (placement, diagnosis, promotion, certification, providing feedback); Interrelationship between assessment and evaluation
- Classification of Assessment based on: Purpose (Placement, Formative, Diagnostic, and Summative), Scope (Teacher-made, Standardized), Attributes Measured (Achievement, Attitude, Aptitude etc.), Nature of Information gathered (Qualitative, Quantitative), Mode of Response (Oral, Written and Performance), Nature of Interpretation (Norm- referenced and Criterion-referenced), and the Context (Internal, External).

The terms to be explained in brief with suitable examples.

• Continuous and Comprehensive Assessment: Meaning, Importance and Scope; Learning and Assessment: Assessment of Learning, Assessment for Learning, and Assessment as Learning; CCA vs CCE

 Assessment of Learning: Assessment at the end of learning experience; Processes of assessment of learning – testing, measurement, and non-testing methods of assessment – observation, interview, FGD

#### 2. Assessment for Learning

- Meaning, Importance and Purpose; Nature formative, continuous with learning, comprehensive (assessing all aspects of learning-cognitive, affective and psychomotor), culturally responsive (elements from the local culture of the learners are extensively used in the assessment); relevance for CCA
- Tools and Techniques: Wide range of formal(testing, observation schedules, video recordings etc.) and informal methods (participant observation, talking, taking notes, interviewing, engaging in activities etc.); use of testing (achievement tests of different forms, diagnostic tests, proficiency testes etc.) and non-testing (analysis of verbal and non-verbal activities, reflective journals, projects, portfolio etc.)tools; use of multiple methods and tools (situation specific combinations)
- Self and Peer-assessment techniques, Observation, Portfolio, interview, focused group discussion, rubrics

(Their description with examples and the context in which they are used)

 Provision of feedback for students and parents- need and modes, for teachers (for timely improvement of teaching-learning process); Role of community in CCA

#### 3. Construction of test and Its Use

- Steps: Planning, Preparing, Trying-out and Evaluation;
  - Planning the test: Development of table of specifications (blueprint)
  - Preparing the test: principles of preparing test items- objective based items-Extended and Restricted response types, Objective type items (free response type- short answer and completion; fixed response type- matching, forced/alternate choice, multiple choice); Assembling and editing the items

- Characteristics of a good test: Reliability, Validity, Usability (discussion on concept and use)
- Administration of the test and analysis of students' performance; Preparation of report and its use in enhancing learning.

#### 4. Issues in Assessment and Policy Provisions

- Current practices: Over-emphasis on Summative Assessment (Periodic and common/high-end examinations) and marking; competitive examination- its adverse effects on learners, education system and society
- Issues and Problems: Marking vs. Grading, objectivity vs. subjectivity, Close-ended vs. Open-ended test items, relative neglect of non-cognitive aspects, non-use of diverse methods and tools for assessing diverse learners
- Policy perspectives: Recommendations of NPE 1986/92, NCF 2005, RCFCE Act 2009; Non-detention policy and its implications for assessment and quality of learning
- Emerging practices in assessment online assessment, participatory assessment

# 5. Elementary Statistics

- Measures of Central Tendency: Mean, Median, Mode-their uses and imitations
- Measures of Variability: Range, Average Deviation, Quartile Deviation, Standard Deviation - their uses and limitations
- Correlation: Meaning and uses; Calculation of correlation coefficients byRankdifference and Product moment method
- Characteristics of normal curve and its uses
- Standard Scores Z-Score, T-score and Percentile

#### **CPS 3 (a&b): Pedagogy of Mathematics**

#### 1. Foundations of Mathematics Education

- Nature of Mathematics: Nature and Scope of Mathematics, Nature of Mathematical propositions, Mathematical proof, structure and logic; history of Mathematics with special reference to Indian Mathematics.
- Learning of Mathematics: Importance of Mathematics at elementary and secondary level, Objectives of teaching-learning Mathematics at the two levels,
- Curriculum Reforms in School Mathematics: Rationale, objectives, principles,

designs and materials in Mathematics, recent curricular reforms at the National and State levels (NCF 2005).

# 2. Methods of Teaching-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, Problem Posing,
  Generating and solving real life problems using Mathematical principles, Situation
  model for solving word problems.
- Constructivist approaches: Self-learning and peer learning strategies, Collaborativ e strategies; 5E and ICON Models,

# 3. Curricular Activities in Mathematics

- Preparation of Lesson Plans (Traditional, Activity and Constructivist Approaches),
- Activities in Mathematics: Mathematics Quiz, Mathematics Club activities,
   Mathematics Exhibition, Planning and organizing Mathematics laboratory activities, Mathematics outside the classroom.
- Learning Materials in Mathematics: Types, functions, preparation and utilization of learning materials - Textbook, Models, Calculators and computers, Graphic calculators, Maintaining portfolio in Mathematics
- Key Learning Resources in Mathematics: Assessing progress and performances, Monitoring and giving feedback, Local and community resources, Using pair work, Using group work, Using questioning (both by teacher and learners) to promote thinking, Talk for learning and Involving all

#### 4. Assessment of and for Mathematics Learning

- 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 Mathematical 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.

#### 5. Pedagogical Treatment of Content

Each of the following contents shall be analyzed in terms of the pedagogical treatment indicated in the right cell below.

| Content | Aspects treatment | of | Pedagogical |
|---------|-------------------|----|-------------|
|---------|-------------------|----|-------------|

- Number System, Ratio and Proportion
- Set, Relations, and Functions
- Algebraic equations: Linear, Simultaneous and Quadratic Equations and their graphical solutions, Polynomials
- Theory of Indices, Logarithm and Antilogarithm
- Lines and Angles, Axioms, Triangles, Polygons and Circles, Coordinate Geometry,
- Trigonometric Ratios and Identities Problems on Height and Distance

- Identification of concepts and sub-concepts
- Expected specific learning outcomes
- Methods / approaches of teaching-learning
- Teaching-learning materials to beused
- Expected teacher and students activities
- Assessment strategies

# CPS 3 (a&b): Pedagogy of Physical Science

# 1. Physical Science in School Curriculum

- Nature of Physical Science: Nature and Scope of Science and Physical Science in particular, Importance of Physical Science in daily life,
- Objectives of teaching-learning Physical Science at the secondary schoollevel
- Curriculum Reforms in Science Education: Rationale, objectives, principles, designs and materials in Science, recent curricular reforms atthe National and State levels (NCF 2005).

#### 2. Methods of Teaching-learning Science

- Discovery Nature and purpose; guided discovery strategies in teaching and learning of concepts in science.
- Experimentation- Experimentation under controlled conditions withinlaboratory and beyond laboratory situation; Process and limitations.
- *Problem Solving* Problem identification, formulation of hypotheses, collection of data, testing hypotheses and arriving at solution.
- Demonstration-cum-Discussion
- Project Situation analysis, selection of the project, preparation of the project
   proposal, implementation of the project, evaluation and reporting.
- Constructivist Approaches: Self-learning and peer learning strategies. Collaborative strategies; 5E and ICON Models

#### 3. Curricular Activities

• Preparation of Unit Plan; Preparation of Lesson Plans (Traditional, Activity

Approach and constructivist approach)

- Teaching- Learning Materials Preparation, collection, procurement and use of teaching-learning materials in Science like, Charts, Graph, Bulletin Board, Models; ICT materials like, Filmstrips, Slides, Transparencies, TV, Audio and Video, Computer, and Internet;
- Learning Activities Science Laboratory Activities; Field Trip, Science Club, Science Seminar, Science Exhibition
- Key Learning Resources in Science: Assessing progress and performances, Monitoring and giving feedback, Local and community resources, Using pair work, Using group work, Using questioning (both by teacher and learners) to promote thinking, Talk for learning and Involving all

#### 4. . Assessment in Science learning

- Construction of Classroom tests and Unit tests, designing blueprint, preparation of test items.
- Assessment devices; Assignments, projects work, portfolios,
   Observation of activities.
- Diagnosis of learning difficulties in Physical Science, Remediation of difficulties, Enrichment Programmes.
- Planning for continuous assessment of classroom learning.

# 5. Pedagogical treatment of Contents

Each of the following contents shall be analyzed in terms of the pedagogical treatment indicated in the right cell below:

| Content                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Aspects of pedagogical                                                                                                                                                                                                                                                                                     |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | treatment                                                                                                                                                                                                                                                                                                  |
| <ul> <li>Atomic Structure: Atoms and Molecules, Classification of elements,</li> <li>Motion, Laws of Motion, Concepts of Work, Energy, Pressure and their measurement,</li> <li>Energy: Sources and forms of energy, Renewable and non-renewable energy</li> <li>Electricity and Magnetism: Electric Circuit, Potential Difference, Magnetic Field, Lines of Force, Electromagnetic induction.</li> <li>Chemical Reactions and Equation</li> <li>Heat, Light and Sound</li> </ul> | <ul> <li>Identification of concepts and sub-concepts,</li> <li>Expected specific learning outcomes,</li> <li>Methods / approaches of teaching-learning,</li> <li>Teaching-learning materials to be used,</li> <li>Expected teacher and students activities, and</li> <li>Assessment strategies.</li> </ul> |

#### CPS 3 (a&b): Pedagogy of Biological Science

#### 1. Biological Science in School Curriculum

- *Nature of Biological Science*: Nature and Scope of Science and Biological Science in particular,
- Place of Biological Science in school curriculum, Importance of Biological Science in daily life,
- Objectives of teaching-learning Biological Science at the secondary school level,
- Curriculum Reforms in Science Education: Rationale, objectives, principles, designs and materials in Science, recent curricular reforms at the National and State levels (NCF 2005).

# 2. Approaches and Methods of Teaching-learning Biological Science

- Observation Types, importance in Bio-Science, process, recording of observation
- Experimentation: Experimentation under controlled conditions withinlaboratory and beyond laboratory situation; Process and limitations.
- Problem Solving: Problem identification, formulation of hypotheses, collection of data, testing hypotheses and arriving at solution.
- Demonstration-cum-Discussion
- Project: Situation analysis, selection of the project, preparation of the project proposal, implementation of the project, evaluation and reporting.
- Use of ICT for self-learning, collaborative learning Concept Mapping.

## 3. Curricular Activities

- Preparation of Unit Plan; Preparation of Lesson Plans -Traditional, Activity Approach and constructivist approach, (ICON & 5E model).
- Teaching-Learning Materials in Science: Preparation, collection, procurement and use of teaching-learning materials in Science like, Charts, Graph, Bulletin Board, Models, ICT materials like Filmstrips, Slides, Transparencies, TV, Audio and Video, Computer, and Internet;
- Learning Activities Science laboratory activities; Observing flora and fauna in their natural setting, Science Club, Science Seminar, Preservation of biological specimens for learning and building Biological Museum, Science Exhibition
- Key Learning Resources in Science: Assessing progress and performances,
   Monitoring and giving feedback, Local and community resources, Using pair work,
   Using group work, Using questioning (both
   by teacher and learners) to promote thinking, Talk for learning and Involving all

# 4. Assessment in Science learning

- Construction of Classroom tests and Unit tests, designing blueprint, preparation of test items.
- Assessment devices ; Assignments, projects work, portfolios,
   Observation of activities.
- Diagnosis of learning difficulties in Biological Science, Remediation of difficulties, Enrichment Programmes.
- Planning for continuous assessment of classroom learning.

# 5. Pedagogical treatment of Contents

Each of the following contents shall be analyzed in terms of thepedagogical treatment indicated in the right cell below:

| Content |                                                                                                                                                                                                                                                                                              | Aspects of pedagogical treatment                                                                                                                                                                                                                                                                           |
|---------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|         | Improvement of Food production, Cell and its Organization, Nutrition, Respiration, Excretion and Reproduction Biodiversities, Natural Resources and its Pollution, Our Environment; Ecosystem, Ecological system flow of energy, Biogeochemical cycles in nature, Environmental degradation. | <ul> <li>Identification of concepts and sub-concepts,</li> <li>Expected specific learning outcomes,</li> <li>Methods / approaches of teaching-learning,</li> <li>Teaching-learning materials to be used,</li> <li>Expected teacher and students activities, and</li> <li>Assessment strategies.</li> </ul> |

# CPS 3 (a&b): Pedagogy of Social Science (Geography)

# 1. Geography in School Curriculum

Meaning, nature and scope of Geography
Importance of Geography in school curriculum at elementary and secondary levels
Correlation of Geography with other school subjects
Objectives of teaching-learning Geography at the secondary schoollevel

# 2. Methods and Approaches to Teaching-learning Geography

Emerging Curricular trends in Geography as per NCF-2005 Constructivist approach to Teaching – Learning Geography

Methods of teaching — learning Geography:

- Lecture-cum-discussion
- Observation
- Discovery
- Problem-solving
- Project Method

To be discussed in terms of meaning, process, merits and limitation

# 3. Learning Resources in Geography

- Preparation, collection, procurement and use of teaching-learning materials like Maps, Globe, Charts, Graphs, Bulletin board, Models
- ICT in Learning of Geography Film strips, Slides, transparencies
  - T.V., Video, computer, internet
- Map reading and map preparation
- Geography Laboratory and Resource Room
- Use of community resources

# 4. Curricular Activities

Preparation of unit plans

Preparation of lesson plans - Traditional, Activity and Constructivist approaches (ICON and 5E model)

Activities in geography – field trip, Geography club, exhibition

Assessment

- Evaluation devices-written, oral, assignment, project work, Portfolio
- Planning for continuous assessment of classroom learning
   Geography.

Remedial Teaching in Geography

# 5. Pedagogical Treatment of Contents

Each of the following contents shall be analyzed in terms of the pedagogical treatment indicated in the right cell below:

| Content                                                                                                                                                                                                                                                                                              | Aspects of Pedagogical treatment                                                                                                                                                                                                                                                               |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul> <li>Latitudes &amp; Longitudes</li> <li>Rotation &amp; Revolution</li> <li>Agents of denudation</li> <li>Physical division of India</li> <li>Climate and vegetation</li> <li>Natural resources</li> <li>Social and economic resources</li> <li>Conservation of Forests and wildlife.</li> </ul> | <ul> <li>Identification of concepts and sub-concepts</li> <li>Expected specific learning outcomes</li> <li>Methods / approaches of teaching-learning</li> <li>Teaching-learning materials to beused</li> <li>Expected teacher and student activities</li> <li>Assessment strategies</li> </ul> |

# CPS 3 (a&b): Pedagogy of Social Science(History and Political Science)

# 1. Concept, Objectives and Values of Teaching History and Political Science

Meaning, Nature and Scope of History and Political Science

Values of teaching History and Political Science

Recommendations of NCF – 2005 on teaching of History and Political Science

Correlation of History and Political Science with other school subjects

Objectives of teaching History and Political Science at elementary and secondary

Formulation of specific learning outcomes in History and Political Science Lessons

# 2. Methods and Approaches to Teaching-Learning History and PoliticalScience

- Story-telling
- Narration-cum-discussion
- Dramatization
- Source Method
- Project method
- Teaching History using monuments
- Field Trips

# 3. Development of Resource Materials

#### Curriculum as resource material

- Approaches to curriculum in History Bio-graphical, Chronological and Concentric
- Development of teaching-learning materials Maps, Atlas, Globes, Charts, Graphs, Models, Film strips, T.V. Video, OHP, and Computer
- Timeline Concept, Aspects, Type and Use

# 4. Transactional Strategies

- Preparation of unit plans
- Preparation of lesson plans (Traditional and Activity approach)
- Activities in history and political science
  - Visit to Historical Places Group Discussion and DebateMaintenance of Portfolio

#### Assessment

- Evaluation devices-written, oral, practice Assignment, projectwork,
   Portfolio
- Planning for continuous assessment of classroom learning inHistory and Political science.
- Remedial Teaching in History and Political science.

# 5. Pedagogical Analysis of Contents

| Content                                                                                                                                                                                                                                                                                                                                                                                                                        | Aspects of Pedagogical treatment                                                                                                                                  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul> <li>Rise of the British power in India</li> <li>The Great Indian Revolt of 1857</li> <li>Socio-religions movements in 19<sup>th</sup> Century</li> <li>India's struggle for freedom, AmericanWar of Independence</li> <li>French Revolution</li> </ul>                                                                                                                                                                    | Pedagogical analysis of the units with reference to:  - Identification of concepts and sub-concepts - Expected specific Learning outcomes - Methods/approaches of |
| <ul> <li>First World War and Second World War</li> <li>Political Science</li> <li>Salient features of Indian Constitution</li> <li>Fundamental Rights,</li> <li>Legislative Assembly and its functions</li> <li>Powers of Prime Minister</li> <li>Governor and President</li> <li>Functions of Parliament; High Court and Supreme Court – Structure and Functions</li> <li>Role of National Human Rights Commission</li> </ul> | teaching-learning  Teaching-learning materials to be used  Expected teacher and students activities  Assessment strategies (Formative)                            |

# CPS 3 (a&b): Pedagogy of Language (Odia)

# 1. Odia as Mother Tongue in School Curriculum

- 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)
- Objectives of teaching-learning Odia at elementary and secondary levels
- Inter-dependence of language skills in Odia
- Strategies for facilitating acquisition of four-fold language skills in Odia

# 2. Pedagogic Approaches to Teaching-Learning 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-lingualcontext
- Traditional versus modern methods of teaching-learning Odia.
- Different approaches and strategies to the teaching-learning of:
  - Odia prose (detailed and non-detailed)
  - Odia poetry
  - Odia composition (through Rubric)
  - Odia grammar
  - Strategies for enrichment of Odia vocabulary (word formation andspelling)
  - Strategies for developing creative writing skills

# 3. Curricular Activities in Odia

- Preparation of Unit Plan
- Preparation of Lesson Plan following constructivist approach (5E and ICON Models)
- Learning resources and planning learning activities
- Learning assessment in Odia: Assessing comprehension and expressionskills; preparation of objective-based and objective-type test items
- Portfolio Assessment in Odia
- Comprehensive Assessment of Learning in Odia
- Planning remedial measures

# 4. Relevance of Linguistics in Odia Language Acquisition

- ☐ Elements of Language sound, vocabulary and structure
- Odia Dhwani (Sound) Types and manner of articulation
- Odia Vocabulary Types (Tatsama, Tadbhava, Deshaja, Baideshika), Word formation process and principles (use of Upasarga, Anusarga, Pratyaya, Samasa and Sandhi), Semantics (Lexical and Contextual)
- Odia Syntax Processes and Principles
- Use of Linguistics in effective teaching-learning of Odia language

#### 5. Pedagogical Treatment of Content

Each of the following contents shall be analyzed in terms of the pedagogicaltreatment indicated in the right cell below.

|   | <b>Content</b>                  | Aspects of Pedagogical treatment                   |
|---|---------------------------------|----------------------------------------------------|
| - | Poems – Matira Manisha, Gopa    | Identification of language items (new              |
|   | Prayana, Hey Mora Kalama, Padma | vocabulary, expression and grammar                 |
| - | Prose Pieces – Jatiya Jivana,   | components)                                        |
|   | Prakruta Bandhu, Odia Sahitya   | <ul> <li>Identification of scope in the</li> </ul> |

| Katha Grammar – Karaka, Bibhakti, Samasa              | content to be presented forfacilitating learning languageskills  Formulation of learning                                                                                                                                     |
|-------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| (Pieces to be selected from Class X Textas indicated) | <ul> <li>objectives</li> <li>Selection of methods and approaches / strategies</li> <li>Preparation of teaching-learning materials</li> <li>Designing of learning activities</li> <li>Planning teacher and student</li> </ul> |
|                                                       | activities for effective interaction  Assessment strategies (focusing formative)                                                                                                                                             |

## CPS 3 (a&b): Pedagogy of Language (English)

# 1. English in School Curriculum

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

# 2. Acquisition of Second Language (English): Methods, Approaches and Strategies

- Psychology of language acquisition and language learning
- Acquisition of English language: problems and issues with reference tomultilingual context
- Importance of language context and input-rich classroom environment for acquisition of English language
- Psychology of language acquisition and language learning
- Acquisition of English language: problems and issues with reference tomultilingual context
- Importance of language context and input-rich classroom environment for acquisition of English language
- Understanding of different methods and strategies: Translation Method, Direct Method, Bi-lingual Method, Communicative Approach including Silent Approach, Suggestopaedia, skill-based activity, Group Learning

# 3. Transaction of Contents and Learning Assessment in English

- Transaction of Prose (detailed and non-detailed), poetry, grammar and composition lessons Approaches, Methods and Strategies
- Preparation of Unit Plan
- Preparation of Lesson Plan following communicative approach and and and and approach (5E and ICON Models)
- Strategies for enrichment of vocabulary in English: word formation skilland spelling
- Teaching-learning materials in English: Types and Uses: preparation of low cost no-cost teaching-learning materials in English
- Assessment in English: assessing skills in English; framing different types
  of objective-based test items (Extended Response Type, Restrictive Response Type
  and Objective Type), Portfolio assessment in English, Continuous Assessment of
  Learners performance in English within and beyond classroom situations
- Key Learning Resources in Mathematics: Assessing progress and performances, Monitoring and giving feedback, Local and community resources, Using pair work, Using group work, Using questioning (both by teacher and learners) to promote thinking, Talk for learning and Involving all

# 4. English Language and its Articulation

- Characteristics of language
- Analysis of English language with reference to its substance, form and context
- Sounds of English language : Consonants and Vowels (Pure and Diphthongs)
- Articulation of sounds in English appropriate use of organs of speech
- Patterns of stress and intonation in English language
- Kinds of errors made by the Odia speaking learners while speaking Englishand their remediation

# 5. Pedagogical Treatment of Content

Each of the following contents shall be analyzed in terms of the pedagogicaltreatment indicated in the right cell below.

| <b>~</b> |                                     |
|----------|-------------------------------------|
| Content  | Aspects of Pedagogical treatment    |
| Content  | ASDECTS OF I EURZUZICAL II CATHICIT |
|          |                                     |

- Any six topics (3 prose pieces and 3 poems) from the prescribed text for Classes IX and X by BSE, Odisha
- Parts of Speech
- Time and Tense
- Change of Voice
- Direct and Indirect speech
- Sentence Pattern
- Translation and Composition (Writing letter and essay, noting, reporting)

- Identification of language items (new vocabulary, expression and grammar components)
- Identification of scope in the content to be presented for facilitating learning of language skills
- Specification of learning objectives
- Selection of methods and approaches / strategies
- Preparation of teaching-learning materials
- Designing of learning activities
- Planning teacher and studentactivities for effective interaction
- Assessment strategies (focusing formative)

#### C. ENGAGEMENT WITH THE FIELD

- 1. Tasks and Assignments (Indicated under each course)
- 2. Courses on Enhancing Professional Capacities (EPC)
- 3. School Internship (SI) 4. Community

**Activities (CA)** 

# 2. Courses on Enhancing Professional Capacities (EPC)

**EPC-1: Critical Understanding of ICT** 

#### 1. Computer Fundamentals

- What is computer Basic anatomy of computer: Input Devices Keyboards, Mouse, Touch Screen, MICR, Light Pen, Joy Stick, Digitizer, Scanner; Output Devices - VDU, Printers, laser, Inkjet; Data storage devices - Hard disk, Compact disk, Optical disk, Pen drive and other devices.
- Operating System: Types of Operating System DOS, UNIX, WINDOWS; Brief introduction of Window; Utility & application of software.
- Introduction to Networking: Types of networking LAN, WAN, WAN; World Wide Web website.

# 2. Introduction to Computer Applications

- Word Processing: Creating Documents; Formatting Documents; Proofing and saving Documents; Printing Documents; Use of MS- Words in education.
- Power Point Presentation (PPT): Creating a new PPT; Adding to presentation, Text Colours, Fill-colors, Fill Effects, Line Effects; Line- styles, Object Effects, Word Art, Animation Effects; Using Transition Effect; Giving an On-Screen Presentation, Navigation during presentation, Pausing the presentation; Use of PPT in education.
- Spread Sheet MS Excel: Opening and saving a Worksheet; Spreadsheet operations; Editing a spreadsheet; Using Formulas and Functions; Use of MS Excel in Education.

# 3. ICT in Education

- Concept, Need and Importance of ICT in Education.
- Multimedia approach to education: Role of video conferencing, radio conferencing, television, EDUSAT and Internet in teaching-learning process. Their advantages and limitations.
- Challenges and Barrier to integration of ICT in Indian schools Classrooms
- ICT Skilled Teacher ICT skills and qualities of ICT teacher

# **EPC-2: Understanding the Self**

# 1. Self Concept

- What is self:
- Dimensions of individual self, Maslow's Hierarchy of Needs
- Self-identity and self-esteem
- Self acceptance: ability to see and recognize all aspects of one's own self without judgments either positively or negatively, involves self- understanding a realistic awareness of one's strengths and weaknesses.

(Activity: Critical Thinking Practices: Organization of brainstorming sessions to develop cognitive skills-independent thinking to promote critical thinking and creative thinking; decision making and problem solving with all their components

Purpose of this activity is to help student teachers in understanding their cognitive skills using their cognitive resources of their self)

#### 2. Development of Self-Actualization

- Self-awareness: Ability to see oneself objectively both strengths & weaknesses, living in the present moment, free of past conditioning & reactions, observing oneself as the first step to awareness, Self awareness as a necessary condition for effective living, a quality only human being possess.
- Self-motivation: Critical awareness about one's abilities and opportunities to develop independent thinking, critical thinking and creative thinking, decision

# making and problem solving

Self-actualization: Meaning and strategies of development

(Activity: Encouraging Nature observation, inner observation, nature walks, and reading biog raphies of great people who contributed their might out of self-abnegation but not with self-centeredness and sharing personal experiences)

# 3. Development of Professional Identity

- Professional Identity of Teacher: Variations(gender, relational, cultural); implicit beliefs, stereotypes and prejudices resulting from variations
- Problems related to professional identity of a teacher: Lack of self-esteem, social status,
- Addressing problems related to professional identity

Activity: Self-critical awareness about one's abilities and assets in different contexts of professional life and limitations in terms of knowledge, attitudes, skills and values.

#### **EPC-3: Fine Art**

#### 1. Visual Art

Visual art: Importance, Scope, Characteristics of child art, folk art and fine art; Developing skills in visual art.

#### 2. Survey of the natural resources:

Survey of the natural resources in the immediate environment; collection of specimens for preparation of artistic materials; preparation of report on the collected materials and their use.

# 3. Reproduction of Art:

Reproduction of child art, tribal art, handicrafts, landscape, flowers, vegetables, trees, birds, animals, book illustrations comprising of human figures book covers, newspapers advertisements, invitation and greeting cards- collect ion of at least six of each kind and preparation of an album with proper captions.

Drawing of pictures of vegetables, fruits, flowers, animals, birds, human figures and houses in simple form on the black board.

#### 4. Finished Drawing:

Outlines of flowers, birds, animals and human figures; Multicolored design with geometrical forms and floral motif suitable for textile designs, book cover, invitation and greeting cards; Technique of preparing designs for line block and halftone printing.

## 5. Pencil and colored layouts:

Preparation of pencil and colored layouts for book cover designs, invitationand greeting

card designs and poster designs; Practice of simple and decorative lettering suitable for block designs and signboards; Mounting pictures and organizing exhibitions.

#### EPC 4: Physical Education and Yoga

# 1. Understanding Physical Education

- Concept, need, scope, objectives
- Organization of various Physical Education Activities
- Role of Physical Education Teacher
- Preliminary idea of some common Games.

# 2. Programmes of Physical Education

- Preliminary idea of some common programmes of physical education
- Recreation and work-values of play
- Need for recreation, different types recreationary activities and theirorganization
- Provisional play and recreation in school time table
- Physical education in the context of NCF 2005

# 3. Yoga and Life goals

- Concept, need and objectives of Yoga
- Asthanga Yoga
- Benefits of Yogic practices
- Different postures / asanas
- Relation between Yogic practices and life goals

# 3. School Internship

#### **Duration**

- Eight (08) weeks in first year
- Twelve (12) weeks in the  $2^{nd}$  / final year

#### Levels

- Upper Primary Level (Classes VI VIII)
- Secondary Level (Classes IX X) or Higher Secondary Level (Classes XI –XII)

#### **Organization**

# a. Pre-internship Activities

- Orientation of the student-teachers
- Observation of school site and activities by the student-teachers (timetable, work allocation among teaching and non-teaching staff, regular classroom with regular

- teacher, day-to-day other school activities etc.)
- Sharing meeting with the teachers and Headmasters of the cooperating schools in the institution and working out the programme details for the internship
- Demonstration lessons by the faculty members followed by post- demonstration discussion
- Criticism lessons by the student-teachers(one lesson by each student- teacher in any one of the methods opted) under the supervisory support of the method teachers, attended by all student-teachers of the method concerned
- Placement of student-teachers in cooperating schools for internship activities.

# b. During Internship Activities

- Preparation of lesson plans by the student-teachers in their concerned method subjects
- Delivery of practice lessons with supervisory support and feedback from faculty members. Each student-teacher shall deliver 40 lessons (20 lessons in each method subject) excluding the criticism lesson. Out of the 40 lessons, 30% (12nos.) shall be delivered in the upper primary classes (Classes VI to VIII) and the remaining 70% (28 nos.) lessons in thesecondary classes (Classes IX and X).
- Observation of five peer-lessons and recording of the performance of the peer student-teachers with authentication by concerned supervisors.
- Feedback session in the Teacher Education Institution after each spell of ten-day practice teaching to be attended by all student-teachers for sharing their experiences.
- Administration of diagnostic tests on the students and identifying their learning difficulties by the student-teachers
- Attendance in school assembly
- Participation in campus cleaning and beautification activities
- Taking arrangement classes when required
- Organization and participation in literary and recreational activities of theschool
- Participation in school games and sports activities
- Organization and participation of science exhibition, science fair, scienceclub/nature study club/eco club activities
- Organization of awareness campaign on HIV/AIDS, blood donation, conservation and protection of environment etc.
- Organization of blood donation camps
- Preparation of report on Annual sports and celebration of importantoccasions and events
- Preparation of report on maintenance of registers and records by the school
- Preparation of scheme of lessons in any subject for any class
- Dialoguing with SMC / SMDC members and preparation of reports on theirmeetings in the school

- Conducting case studies / action research
- Liaison with parents community and authorities
- Sharing learner perceptions, teacher perceptions and parental / community perceptions

# c. Post-Internship Activities

- Overall sharing of student-teachers' internship experiences in the institution.
- Suggestions and feedback from the teachers and Heads of the practicingschools for further improvement of the internship activities
- Exhibition / demonstration of innovative and creative work done by the student-teachers during internship.
- Student-teachers' feedback on overall organization of internship programme by the institution for future action.

# **Assessment of Internship Performance**

 Assessment by supervisors, cooperating teachers and headmasters, and peerassessment on the basis of observation and records

# 4. Community Activities: 50 Marks

- Organisation and participation in any community awareness building programme, and preparation of report: 10 marks
- Conducting any community activity like plantation, mass safai, public utility service (road repair, cleaning water sources and public places etc.), blooddonation camp, health check-up and submission of a report. : 10 marks
- Survey of community resources and their utilization in school improvement :10 marks
- Survey and mobilization of out of school children in the community and preparation of a report : 20 marks.

# C. OPTIONAL COURSES FOR SKILL DEVELOPMENT(OCSD)

#### OCSD-1: Fruit and Vegetable Preservation

#### 1. Need and importance

- The need for fruit preservation industry-its relationship with horticultural development, developing and modernizing.
- Fruit preservation as a home scale industry and as an educative craft, causes of wastage and spoilage and remedies.

# 2. Raw materials

- Raw materials for fruits and vegetables preservation-kinds, varieties and types of useful raw materials, Geographical and seasonal distribution, quantity produced.
- Medicinal value, suitability for processing and preservation,
- Effects of processing on the food value of preserved fruits and vegetables and possible industrial applications

# 3. Principles and Methods of Preservation

- Various types of tin and glass containers and packing materials, general principles
  of preservation-selecting, grading, washing, bunching, peelingand pitting of fruits
  and vegetables-pasteurization and sterilization.
- Methods of preservation: Heating, drying, salting freezing, use of oil and vinegars, use of sugar, use of chemicals by fermentation and by the production of vinegar.