

Part-II

(Total Marks-120)

ARTS STREAM

LANGUAGE-I: (ODIA/ URDU/HINDI/TELUGU/BENGALI)

(40 marks)

(PEDAGOGY-16 marks)

Unit-1: Learning Odia/Urdu/Hindi/Telugu/Bengali at Upper Primary Level

- Aims and objectives of learning Odia / Urdu / Hindi / Telugu /Bengali as first Language
- Principles of teaching mother tongue
- Development of Language skills- listening, speaking, reading and writing

Unit-2: Teaching Language

- Intensive and extensive reading skills at upper primary level
- Teaching of non-detailed and detailed texts (prose, poetry)
- Teaching of composition and creative writing
- Teaching of grammar
- Challenges of teaching Odia/Urdu/Hindi/Telugu/Bengali in multi-lingual context

Unit-3: Assessment of Language

- Assessment of learning Odia/Urdu/Hindi/Telugu/Bengali languages- listening, speaking, reading and writing
- Planning and designing achievement tests and other tools for assessment

(CONTENT-24 marks)

Unit-4: Elements of Odia/Urdu/Hindi/Telugu/Bengali language

- Comprehension of two unseen passages (one from prose / drama and other from poem) with test items on comprehension, vocabulary and grammar

Unit-5: Language Items

- Parts of speech-noun, pronoun, verb, adverb, adjective, conjunction
- Formation of word-prefix and suffix
- Vocabulary-spelling and meaning of synonym and antonym
- Phrase and idiom

Unit-6: Contribution of famous literates for development of Odia/Urdu/Hindi/Telugu/Bengali language

- Odia-Fakir Mohan Senapati, Gangadhar Meher, Radhanath Ray, Surendra Mohanty, Gopinath Mohanty
- Urdu-Altaf Hussain Hali, Niaz Fatepuri, Ali SadarJafri, Aamir Khusroo, Majrooh Sultanpuri
- Hindi-Bharatendu Harischandra, Mahavir Prasad Dwivedy, Prem Chand, Jayashankar Prasad, Suryakanta Tripathy Nirala.
- Bengali- Rabindranath Tagore, Saraf Chandra Chottopadhaya, Tarasankar Bandopadhyay, Kzi Nazrul Islam, Bibhuti Bhusan Bandopadhyay
- Telugu-Srinanthadu, Gurajuda Appa Rao, Kandukuri Veeresalingam, Arudra, C. Narayan Reddy

LANGUAGE-II: (ENGLISH) (40 marks)

(PEDAGOGY-16 marks)

Unit-1: Learning English at Upper Primary level

- Importance of learning English
- Objectives of learning English

Unit-2: Development of English language skills

- Basic skills of language –listening, speaking, reading writing & interdependence of skills
- Teaching of prose, poetry and composition
- Teaching of creative writing
- Principles of language teaching
- Challenges of teaching English as second language at upper primary level

Unit-3: Assessment of learning English Language

- Assessment of comprehension and language skills-listening, speaking, reading and writing.

(CONTENT-24 marks)

Unit-4: Comprehension

- Two unseen passages-one from prose / drama and another from poem with questions on comprehension, grammar

Unit-5: language Items

- Parts of speech- tense, voice change, change of narration, use of article & use of punctuation mark
- Vocabulary – meaning and spelling

SOCIAL STUDIES

(40 marks)

(PEDAGOGY-16 marks)

Unit-1: Aims and objectives of Teaching Social Studies

- Importance of teaching – learning Social Science at Upper Primary Stage
- Aims and objectives of teaching - learning Social Science
- Specific objectives of teaching - learning Social Science

Unit-2- : Methods and Approaches

- Methods : Survey , field work/trips, project & group work
- Approaches : Activity – based, theme –based

Unit-3- : Evaluation in Social Science

- Tools and techniques for assessment of learning in Social Science
- Diagnostic assessment and remedial teaching

(CONTENTS-24 marks)

Unit-4- : History and Political Science

- Methods of historical studies, social, economic and political conditions of Sultanate, Moghul and British period
- Slave, Khiligi, Tughlaq, Lodi Dynasty
- East India Company, British Crown, Impact of British rules, Ancient Period, Kharabela, Ashoka.
- Soma, Ganga, Surya, fall of Odisha, Odisha under Moghuls
- Nationalist movement in India
- Development of Nationalism in India and Europe

Unit-5- : Political Science

- Indian Constitution
- Human Rights
- Governance at Central, State and Local level
- Political Parties and Pressure group

Unit-6- : Geography

- Odisha Geography-physical features, climate, agriculture and industry
- Natural resources- land, water, forest & wild animals, minerals
- Atmosphere, biosphere and hydrosphere
- Earth-crust, internal structure, landscape-hills & mountains, plateau, plains, rivers
- Temperature zones of earth

SCIENCE STREAM

MATHEMATICS

(40 Marks)

(PEDAGOGY-16 marks)

Unit-1: Mathematics at Upper Primary Stage

- Nature of Mathematics-logical, systematic, abstractions, pattern, mathematical language
- Aims and objectives of teaching Mathematics
- Specific objectives of teaching Mathematics

Unit-2- : Methods and Approaches to Teaching- Learning Mathematics

- Methods : Induction, deduction, analysis and synthesis
- Approaches : Constructivist and Activity – based

Unit-3- : Evaluation in Mathematics

- Formal and informal evaluation
- Error analysis
- Remedial and enrichment programmes

(CONTENTS-24 marks)

Unit-4- : Number systems

- Number System (focus on real and rational numbers)
- Properties in different number system

Unit-5 : Algebra

- Basic concepts-terms, co-efficient, powers
- Algebraic equations and their applications with one variable
- Polynomials-operations in polynomials
- Laws of indices
- Identities

Unit-6- : Commercial Arithmetic

- Percentage and its application-profit and loss, simple and compound interest, banking, rebate
- Ratio and proportion
- Variation and its application
- Square, square root, cube, cube root of natural numbers

Unit-7- : Shapes and Spatial Relationship

- Triangles and Quadrilaterals
- Angles, complementary and supplementary angles, opposite angles, exterior angles of the triangle
- Angle sum property
- Parallel lines and properties relating to parallel lines
- Congruency and similarities
- Mensurations-area and circumference of circle , higher order problems relating to area of Square, Triangle, Rectangle, Parallelogram, Trapezium, Pythagorean theorem,

(PHYSICAL SCIENCE - 40 marks)

(PEDAGOGY-16 marks)

Unit-1- : Nature of Science

- Aims and objectives of teaching-learning science at upper primary stage

Unit-2- : Methods and Approaches

- Methods : Observation , Experimentation, Discovery, Project and Problem - solving
- Approaches : Integrated, constructivists approach

Unit-3- :Evaluation in Science

- Tools and techniques for assessing learning in Science

(CONTENTS -24 marks)

Unit-4- :Physical Science

- Metal, Non-metal and Metalloid
- Elements and compounds
- Symbol, valence and chemical equation
- Acid, Base and Salt
- Physical and Chemical changes in Matters
- Force, motion , friction, pressure in solid, liquid & gases
- Electricity and Current , chemical effects of electric current
- Refraction and Reflection of light
- Solar System and Planets

(LIFE SCIENCE -40 marks)

(PEDAGOGY-16 marks)

Unit-1- :Nature of Science

- Aims and objectives of teaching learning science at upper primary level

Unit-2- : Method and Approaches

- Methods : Observation , Experimentation, Discovery, Project and Problem –solving
- Approaches : Integrated approach, constructivists approach.

Unit-3- : Evaluation in science

- Tools and techniques for assessing learning in science

(CONTENTS -24 marks)

Unit-4- : Life Science

- Biological adaptation among living beings
- Respiration and transpiration
- Soil and forest resource
- Cell structure and function of cell organelle
- Micro-organisms
- Adolescence in human being
