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**DIRECTORATE OF TEACHER EDUCATION AND SCERT :
ODISHA : BHUBANESWAR**

No. 3788
TE/CUR-20/2021

Educational Information

Date 19/07/2022

From

**The Director,
TE and SCERT,
Odisha, Bhubaneswar**

To

**The Special Secretary to Government,
School & Mass Education Department,
Government of Odisha, Bhubaneswar**

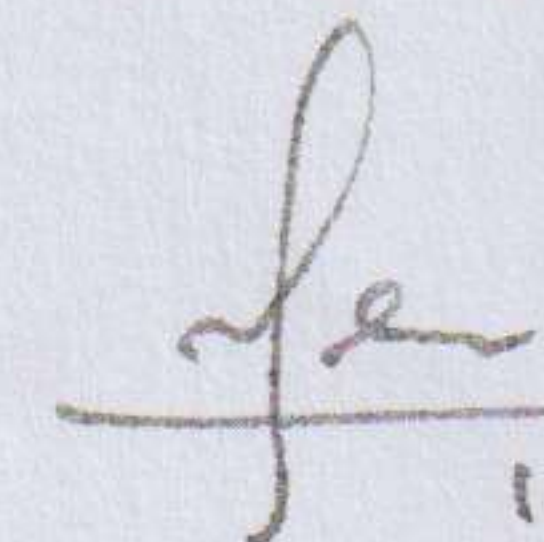
**Sub: Regarding preparation of syllabus for conducting online test for
engagement of Junior Teacher (Contractuals).**

Sir,

In inviting a reference to Government letter No. 13167/SME, Dtd. 22.06.2022 on the above mentioned subject, I am to submit herewith the report of subject experts, worked out through a workshop regarding online test of engagement of Junior Teachers for necessary action at your end.

Encl: As above

Yours faithfully,


19/7/22

**Director
TE & SCERT**

Syllabus / Scheme for CBT for Recruitment of Junior Teachers (Primary)

Class – I to V

Test	Subjects	No. of Questions	Total Marks	Time
Part - I	General English	10	10	150 minutes
	General Odia	10	10	
	General Knowledge & Current Affairs	10	10	
	Reasoning Ability	10	10	
	Computer Literacy	10	10	
	Child Development, Learning, Curriculum & Assessment	20	20	
	Total	70	70	
Part - II	Subject Contents	50	50	
	Pedagogy	30	30	
	Total	80	80	
	Grand Total	150	150	

Note :

- All the questions will be of MCQ type carrying one mark each.
- Part - I & II are compulsory for both the teachers of Science & Arts for Class-I-V.
- In Part-II**
 - Math – 13 marks from Content + 07 marks from Pedagogy
 - Environmental Science-12 marks from Content + 08 marks from Pedagogy
 - Odia - 13 marks from Content + 07 marks from Pedagogy
 - English - 12 marks from Content + 08 marks from Pedagogy
- All questions except English, Odia to be set both in Odia & English language
- The questions will be up to 10th level and as per the enclosed prescribed syllabus.

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Part – I

(Total Marks -70)

[General English, Odia, General Knowledge and Current Affairs, Reasoning Ability, Computer Literacy and Child development, Curriculum, Learning & Assessment]

★ General English

1. Questions on comprehension , inference & grammar from one unseen Passage (05 Marks)
2. Questions on comprehension, appreciation from a Poem (05 Marks)

★ General Odia

1. Questions on comprehension, inference & grammar from one unseen Passage (05 Marks)
2. Questions on comprehension, appreciation from a Poem (05 Marks)

★ General Knowledge and Current Affairs

(10 Marks)

- I. Current events of state (Odisha), national and international importance
- II. History of Odisha/India
- III. Indian and World Geography
- IV. Indian Polity
- V. Economic and Social Development
- VI. Everyday Science

★ Reasoning Ability

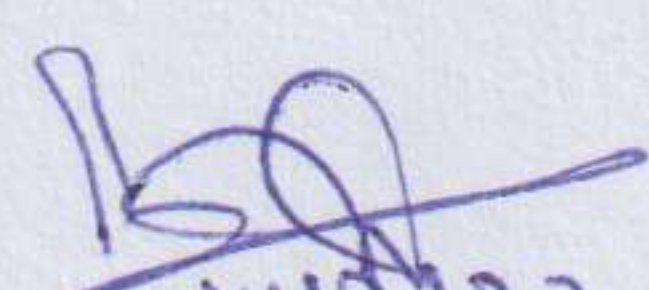
(10 Marks)

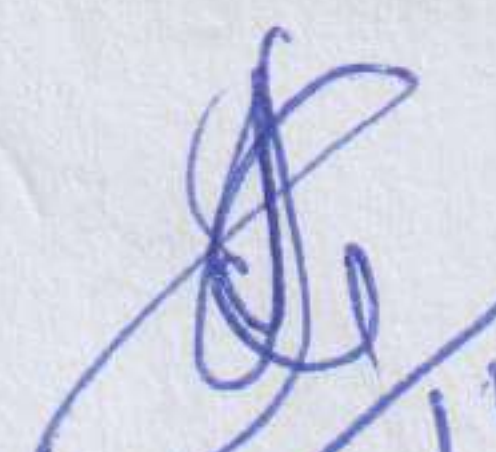
- I. General mental ability
- II. Logical reasoning and analytic ability
- III. Basic numeracy
- IV. Decision making & Problem solving


★ Computer Literacy

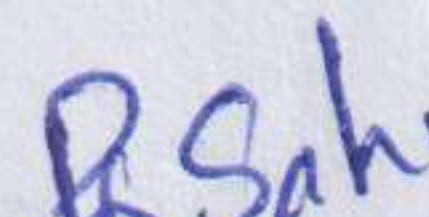
(10 Marks)

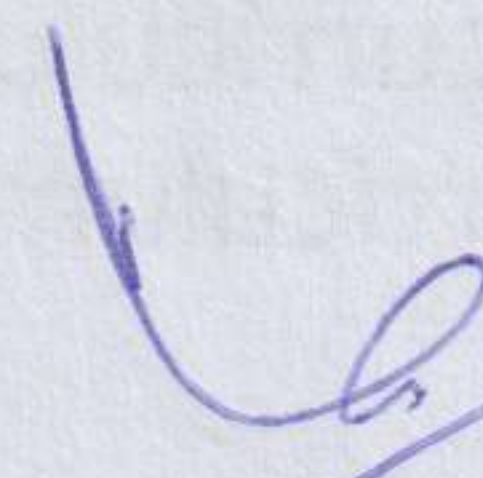
- I. Basic computer literacy skills for use of ICT in classrooms
- II. Concepts, terminology and operations relating to general computer usage
- III. Basic hardware of computer
- IV. Common applications
- V. Networking and internet
- VI. Social networking
- VII. Digital citizenship



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★ **Child development, Learning, Curriculum & Assessment**

(20 Marks)

Unit – 1 : Understanding Child Development

- Concept, principles and stages of child development
- Characteristics of physical, cognitive, social, emotional and moral development in childhood and early adolescence
- Significance of heredity and environment in understanding the child
- Factors influencing child development – home, school, peer-group and society
- Understanding the developmental needs of children (age-specific)
- Learning and developmental tasks, developmental delays, helping children to grow

Unit – 2 : Understanding Learning Process

- Learning – concept and nature, individual differences in learning
- Understanding how child learns – learning through observation, imitation, trial and error, experimentation and experience
- Learning as meaning – making
- Basic conditions of learning – maturation, fatigue, reinforcement, materials, tasks, organization of materials
- Promoting learning - motivating learners, facilitating classroom learning environment, teacher behaviour

Unit – 3 : Learner in Inclusive Context

- Meaning of inclusive education; distinction from integrated education and special education
- Implementation of inclusive education
- Education of CWSN – types, identification, learning needs, teaching strategies and curriculum adaptation
- Education of girl child – issues and strategies to address, initiatives taken so far
- Education of socio-culturally disadvantaged children

Unit – 4 :

- Right to Education (RTE)
- Child Right & Child Abuse

Unit – 5 : Curriculum

- Concept and Types – subject centered, child centered, experience centered, local –specific
- Core Curriculum – meaning and features
- Principles of curriculum construction
- Process of curriculum development at the elementary school level

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Unit – 6 : Process of Curriculum Transaction

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- Guiding principles for curricular transaction :NCF - 2005
- Specifying objectives of curriculum in the learners context
- Selection and organization of learning activities and experiences
- Skills for classroom transaction – questioning skills, communication skills, blackboard writing skills, providing reinforcement, classroom movement

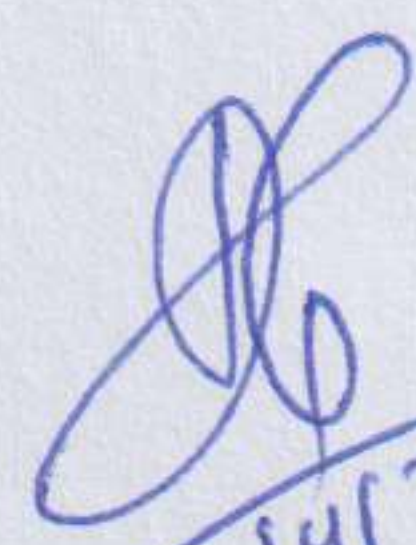
Unit – 7 : Approaches to Learning and Teaching

- Teacher centred, learner centred and learning centred approaches
- Competency based approach
- Activity based approach
 - Activity and its elements
 - Characteristics of activity
 - Varieties of activity (curricular and other-curricular)
- Constructivist approach to learning
- Major issues associated with each approach

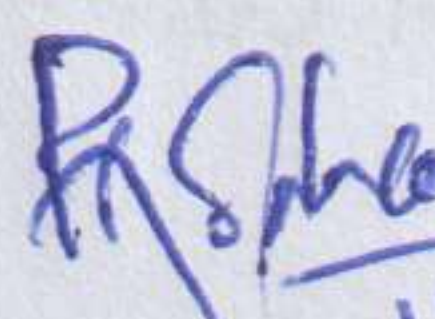
Unit – 8 : Learning Assessment

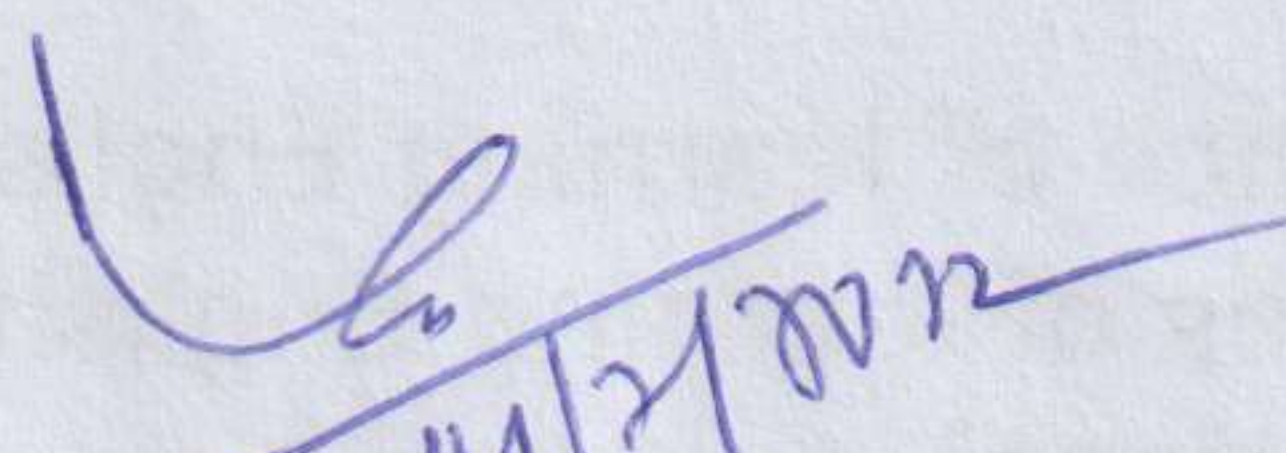
- Concept of measurement, evaluation and assessment
- Continuous and comprehensive assessment
- Tools and techniques of assessment –achievement test, observation, interview, rating scale, check list, case study, questionnaire, project
- Preparation of different types of test items
- Portfolio assessment
- Preparation of unit test
- Recording, reporting and sharing of assessment results
- Use of assessment outcomes for improving learning

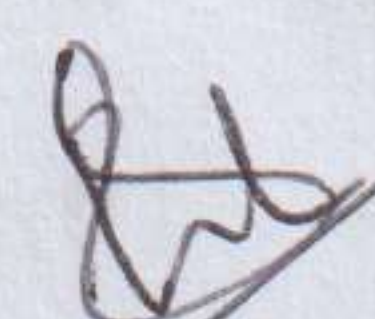

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Part – II

(Total Marks - 80)

LANGUAGE (ODIA/URDU/HINDI/TELUGU/BENGALI) (20 marks)

(PEDAGOGY – 07 marks)

Unit – 1 : Learning Odia/Urdu/Hindi/Telugu/Bengali at elementary level

- Aims and objectives of teaching Odia/Urdu/Hindi/Telugu/Bengali as mother tongue
- Principles of language teaching
- Acquisition of four-fold language skills in Odia/Urdu/Hindi/Telugu/Bengali viz., listening, speaking, reading and writing
- Interdependence of four language skills
- Objectives and strategies of transacting integrated text for the beginners

Unit – 2 : Teaching, Reading and Writing Skills

- Techniques of developing intensive and extensive reading skills
- Teaching – learning composition and creative writing
- Critical perspective on the role of grammar in learning language for communicating ideas in written form
- Challenges of teaching language in a diverse classroom, language difficulties and errors

(CONTENTS – 13 marks)

Unit – 3 : Language items

- Part of speech – Noun, Pronoun, Verb, Adverb, Adjective, Conjunction
- Formation of word – using prefix and suffix
- Synonym and antonym
- Phrase and idiom

LANGUAGE (ENGLISH)

(20 marks)

(PEDAGOGY – 08 marks)

Unit – 1 : Learning English at Elementary Level

- Importance of learning English
- Objectives of learning English (in terms of content and competence specifications)

Unit – 2 : Language Learning

- Principles of language teaching
- Challenges of teaching language in a diverse classroom

Unit – 3 : Skills in learning English

- Four – fold basic skills of learning viz., listening, speaking, reading and writing : interdependence of skills

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- Techniques and activities for developing listening and speaking skills - recitation, storytelling, dialogue
 - Development of reading skills: reading for comprehension, techniques and strategies for teaching reading - phonic, alphabet, word, sentence and story
 - Development of writing skills - teaching composition

(CONTENTS-12 marks)

Unit – 4 : Language items

- Noun, Adverb, Verb, Tense and Time, Preposition, Article, Adjective, Preposition, Punctuation

MATHEMATICS

(20 marks)

(PEDAGOGY-07 marks)

Unit – 1 : Mathematics Education in Schools

- Nature of Mathematics (exactness, systematic, patterns, preciseness)
- Aims and objectives of teaching Mathematics
- Specific objectives of teaching Mathematics

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

- Methods : Inductive, deductive, analysis, synthesis, play-way
- Approaches : Constructivist and Activity -based

(CONTENTS – 13 marks)

Unit – 3 : Number systems and Operation in Numbers

- Number system - natural, whole, rational, real
- Fundamental operation on numbers
- Fractional operation on numbers
- Fractional numbers and decimals – operations in fractional numbers and decimals
- Factors and multiples – HCF and LCM
- Percentage and its application

Unit – 4 : Measurement

- Measurement of length, weight, capacity
- Measurement of area and perimeter of rectangle and square
- Measurement of time - concept of a.m., p.m. and time interval

Unit – 5 : Shapes and Spatial Relationship

- Basic geometrical concepts - point, line segment, ray, straight line, angles
- Geometry of triangles, quadrilaterals and circles
- Symmetry
- Geometrical solids -cube, cuboid, sphere, cylinder, cone

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Unit – 6 : Data Handling and Patterns

- Pictography, bar graph, histogram, pie chart
- Interpretation of these graphs
- Patterns in numbers and figures

ENVIRONMENTAL STUDIES (EVS)

(20 marks)

(PEDAGOGY-08 marks)

Unit – 1 : Concept

- Concept and significance
- Integration of science and social science
- Aims and objectives of teaching and learning EVS

Unit – 2 : Methods and Approaches

- Basic principles of teaching EVS
- Methods : survey, practical work, discussion, observation, project
- Approaches : activity -based, theme -based

(CONTENTS-12 marks)

Unit – 3 : Governance

- Local-self, Government-State and Central
- Judiciary

Unit – 4 : Physical Features of Odisha and India

- Landscape
- Climate
- Natural resources
- Agriculture and industry
- Disaster management

Unit – 5 : History of Freedom Struggle in India and Odisha

Unit – 6 : Health and Diseases

- Nutritional elements and balanced diet
- Nutritional deficiency and diseases
- Waste materials and disposal
- First-aid
- Air and water pollution

Unit – 7 : Internal Systems of Human Body

- Respiratory, circulatory, digestive and excretory system –structure and parts of plant –structure and function

Unit – 8 : Matter, Force and Energy

- Matter and its properties
- Earth and Sky, effect of rotation and revolution of Earth
- Work and Energy

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Syllabus / Scheme for CBT for Recruitment of Junior Teachers (Upper Primary)

Class – VI to VIII

Test	Subjects	No. of Question	Total Marks	Time
Part - I	General English	10	10	150 minutes
	General Odia	10	10	
	General Knowledge & Current Affairs	10	10	
	Reasoning Ability	10	10	
	Computer Literacy	10	10	
	Child Development, Learning & Curriculum	20	20	
	Total	70	70	
Part – II	Subject Contents	50	50	
	Pedagogy	30	30	
	Total	80	80	
	Grand Total	150	150	

Note :

- Part-I is compulsory for both the streams i.e.; Science and Arts.
- Part-II contains the syllabus for both Science and Arts streams separately. Candidates have to opt for either of the Streams.
- All the questions will be of MCQ type carrying one mark each.
- The contents of Arts Stream include Language-I (Odia/Urdu/Hindi/Telugu/Bengali), Language-II (English), History & Civics and Geography.
- The contents of the Science Stream include Mathematics, Physical Science and Life Science.
- Except Language-I and II, questions of other subjects will be of bilingual (Odia and English) in nature
- The questions will be up to +2 level and as per the enclosed prescribed syllabus.

• **For Arts Stream**

In Part – II

- Odia (15 marks from Content +10 marks from Pedagogy)
- English (15 marks from Content+ 10 marks from Pedagogy)
- History & Civics and Geography (20 marks from Content+ 10 marks from Pedagogy)

• **For Science Stream**

In Part – II

- Math (20 marks from Content+ 10 marks from Pedagogy)
- Physical Science (15 marks from Content + 10 marks from Pedagogy)
- Life Science (15 marks from Content + 10 marks from Pedagogy)

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Part – I

(Total Marks - 70)

[General English, Odia, General Knowledge and Current Affairs, Reasoning Ability, Computer Literacy, Child development, Learning and Curriculum]

★ General English

1. Questions on comprehension , inference & grammar from one unseen Passage (05 Marks)
2. Questions on comprehension, appreciation from a Poem (05 Marks)

★ General Odia

1. Questions on comprehension, inference & grammar from one unseen Passage (05 Marks)
2. Questions on comprehension, appreciation from a Poem (05 Marks)

★ General Knowledge and Current Affairs

(10 Marks)

- I. Current events of state (Odisha), national and international importance
- II. History of Odisha/India
- III. Indian and World Geography
- IV. Indian Polity
- V. Economic and Social Development
- VI. Everyday Science

★ Reasoning Ability


(10 Marks)

- I. General mental ability
- II. Logical reasoning and analytic ability
- III. Basic numeracy
- IV. Decision making & Problem solving

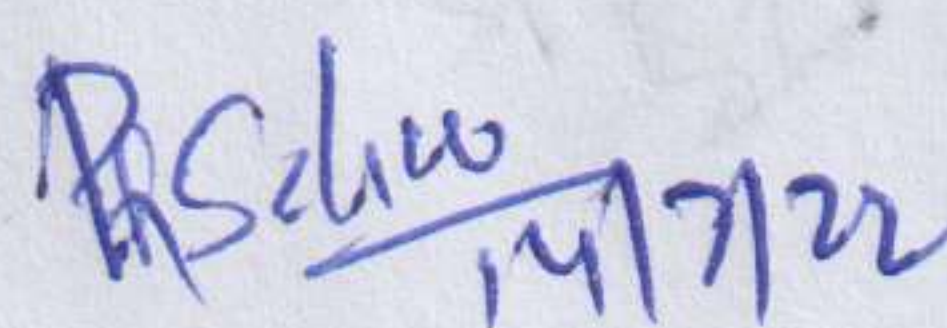
★ Computer Literacy

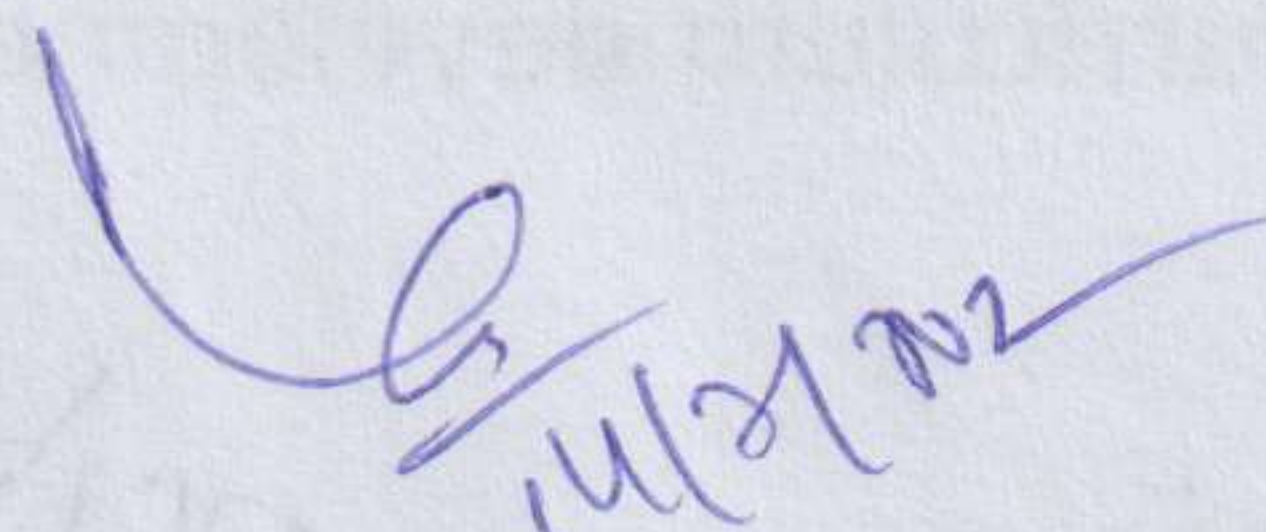
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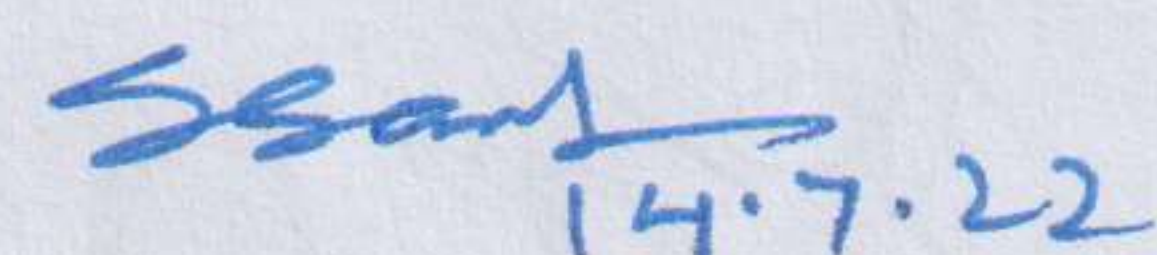
- I. Basic computer literacy skills for use of ICT in classrooms
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- III. Basic hardware of computer
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- VII. Digital citizenship

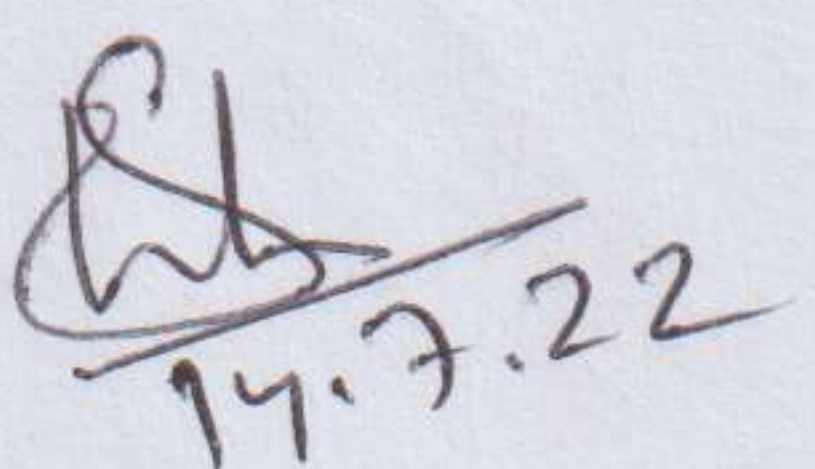

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★ Child development, Learning & Curriculum

(20 Marks)

Unit – 1 : Understanding Child Development

- Concept, principles and stages of child development
- Characteristics of physical, cognitive, social, emotional and moral development in childhood and early adolescence
- Significance of heredity and environment in understanding the child
- Factors influencing child development – home, school, peer-group and society
- Understanding the developmental needs of children (age-specific)
- Learning and developmental tasks, developmental delays, helping children to grow

Unit – 2 : Understanding Learning Process

- Learning – concept and nature, individual differences in learning
- Understanding how child learns – learning through observation, imitation, trial and error, experimentation and experience
- Learning as meaning – making
- Basic conditions of learning – maturation, fatigue, reinforcement, materials, tasks, organization of materials
- Promoting learning - motivating learners, facilitating classroom learning environment, teacher behaviour

Unit – 3 : Learner in Inclusive Context


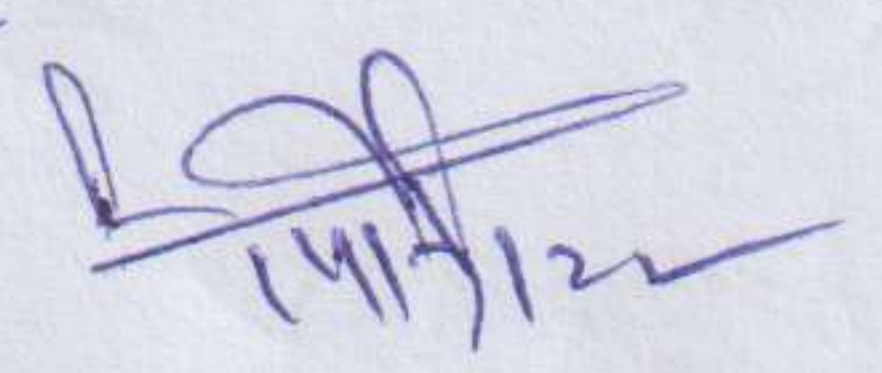
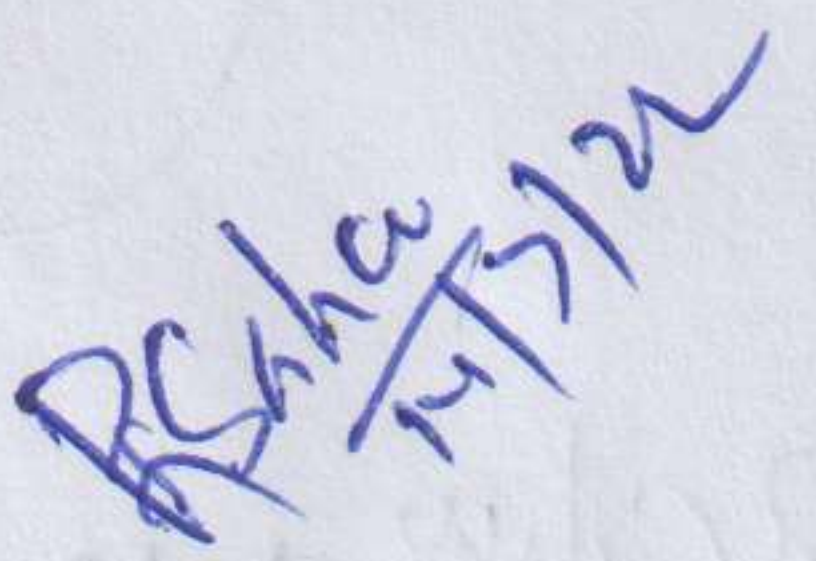
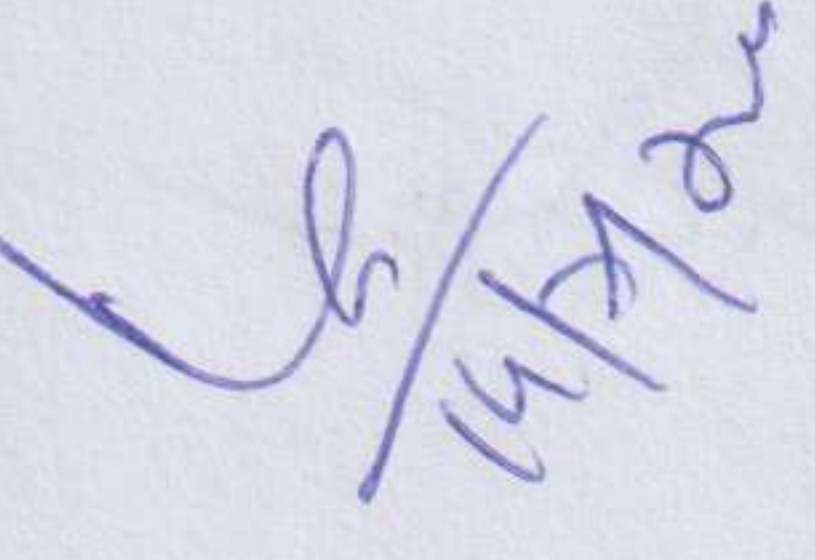
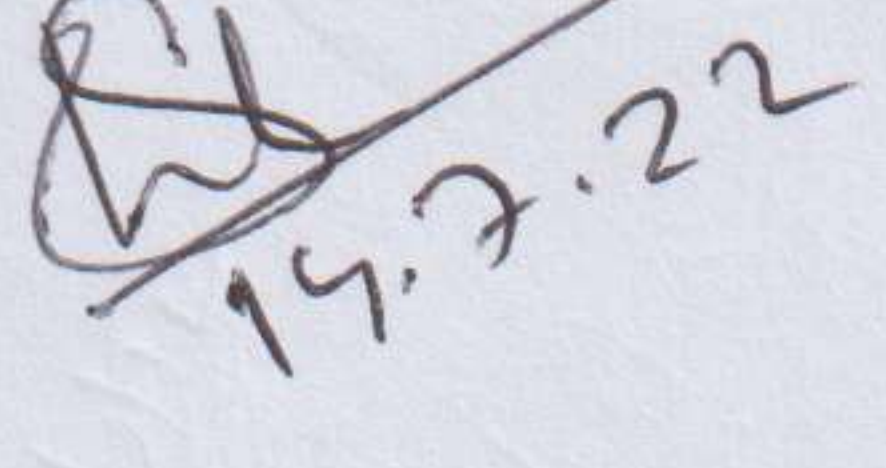
- Meaning of inclusive education; distinction from integrated education and special education
- Implementation of inclusive education
- Education of CWSN – types, identification, learning needs, teaching strategies and curriculum adaptation
- Education of girl child – issues and strategies to address, initiatives taken so far
- Education of socio-culturally disadvantaged children

Unit – 4 :

- Right to Education (RTE)
- Child Right & Child Abuse

Unit – 5 : Curriculum

- Concept and Types – subject centered, child centered, experience centered, local –specific
- Core Curriculum – meaning and features
- Principles of curriculum construction
- Process of curriculum development at the elementary school level

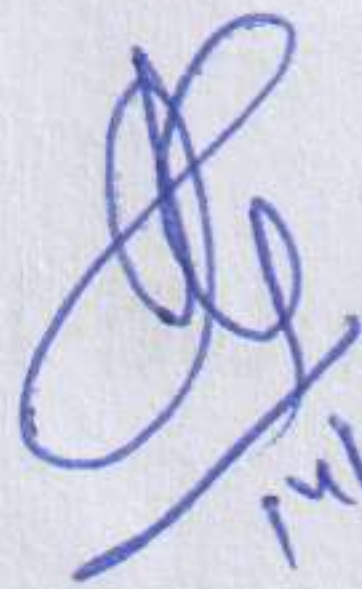
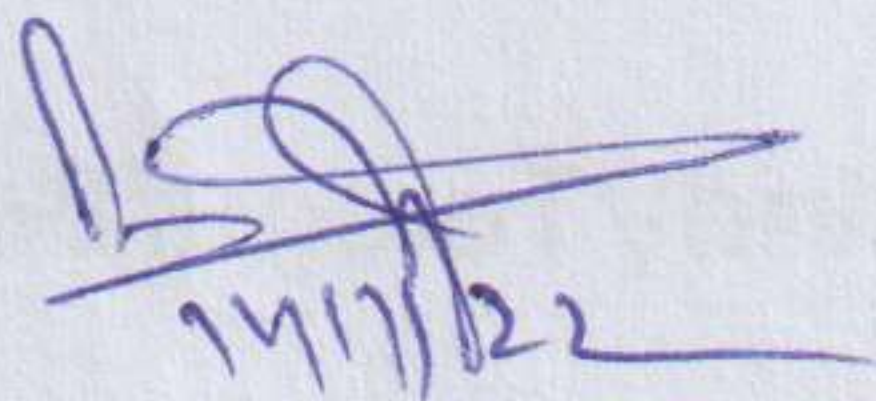
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Unit – 6 : Process of Curriculum Transaction

- Guiding principles for curricular transaction :NCF - 2005
- Specifying objectives of curriculum in the learners context
- Selection and organization of learning activities and experiences
- Skills for classroom transaction – questioning skills, communication skills, blackboard writing skills, providing reinforcement, classroom movement

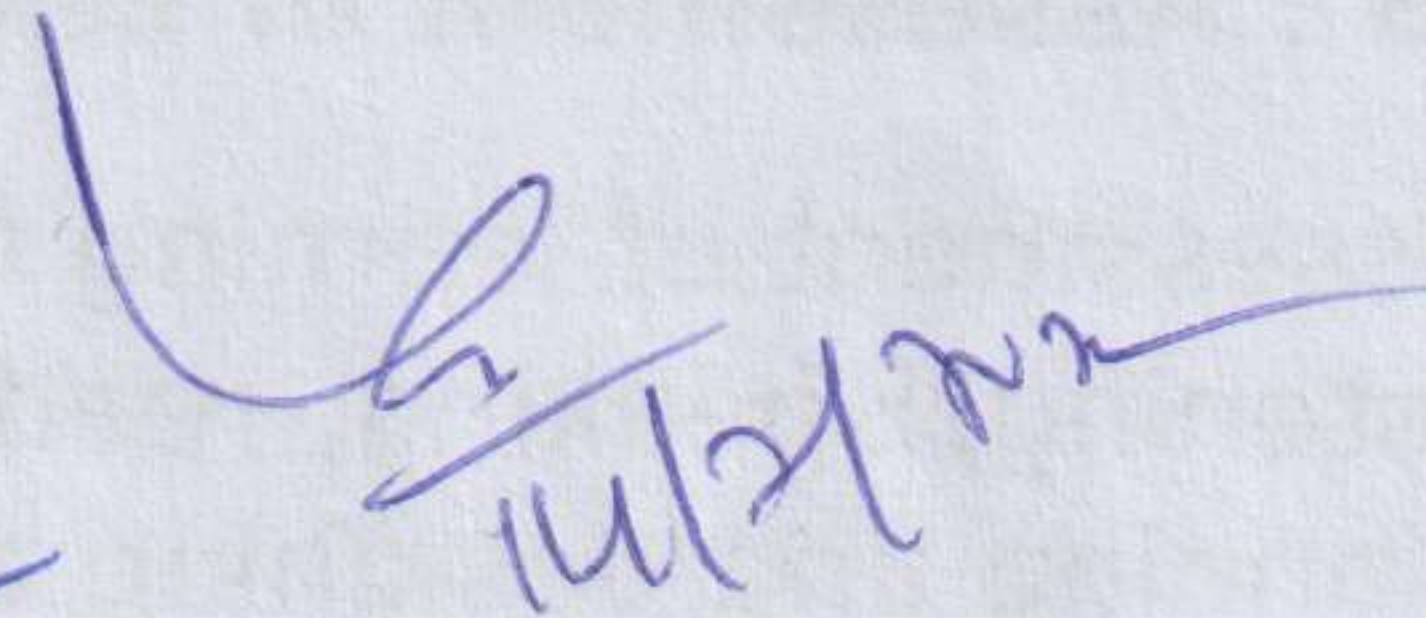
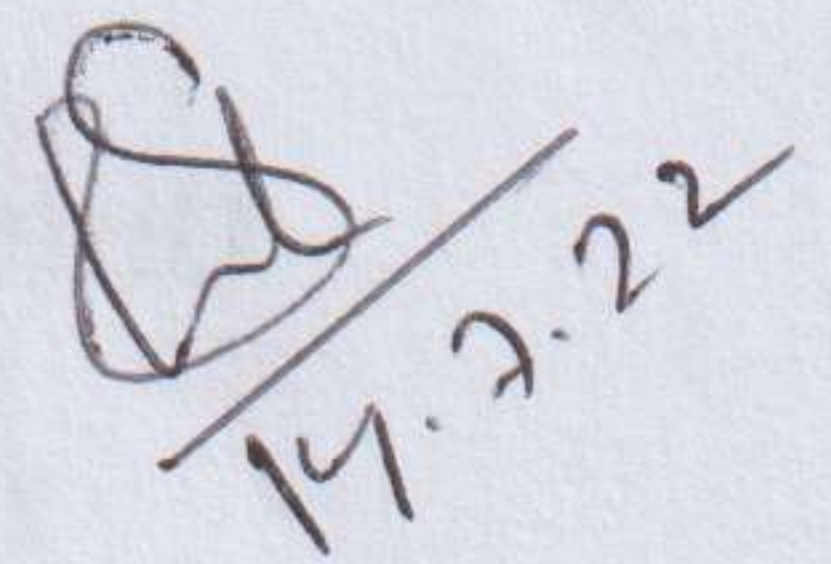
Unit – 7 : Approaches to Learning and Teaching

- Teacher centred, learner centred and learning centred approaches
- Competency based approach
- Activity based approach
 - Activity and its elements
 - Characteristics of activity
 - Varieties of activity (curricular and other-curricular)
- Constructivist approach to learning
- Major issues associated with each approach


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Part – II

(Total Marks - 80)

ARTS STREAM

LANGUAGE – I (ODIA/URDU/HINDI/TELUGU/BENGALI)

(25 marks)

(PEDAGOGY-10 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 language – listening, speaking, reading and writing
- Planning and designing achievement tests and other tools for assessment

(CONTENTS-15 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 - pre-fix 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

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- Urdu – Altaf Hussain Hali, Niaz Fatepuri, Ali Sardar Jafri, Amir Khusroo, Majrooh Sultanpuri
 - Hindi – Bharatendu Harischandra, Mahavir Prasad Dwivedy, Prem Chand, Jayashankar Prasad, Surykanta Tripathy Nirala
 - Bengali – Rabindra Nath Tagore, Sarat Chandra Chhatopadhyay, Tarasankar Bandopadhyay, Kazi Nazrul Islam, Bibhuti Bhushan Bandopadhyay
 - Telugu – Srinanthadu, Gurajada Appa Rao, Kandukuri Veeresalingam, Arudra, C.Narayan Reddy

LANGUAGE – II (ENGLISH)

(25 marks)

(PEDAGOGY-10 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

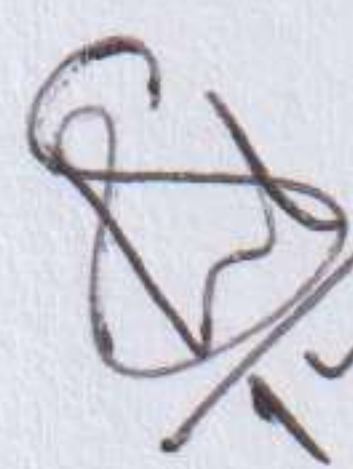
(CONTENTS-15 marks)

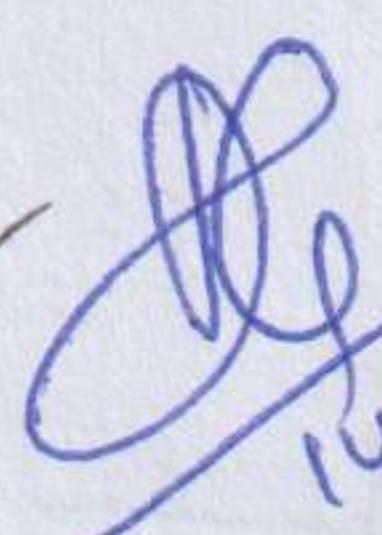
Unit – 4 : Comprehension

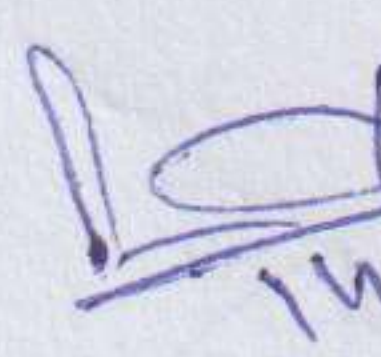
- Two unseen passages - one from prose/drama and another from poem with questions on comprehension, grammar

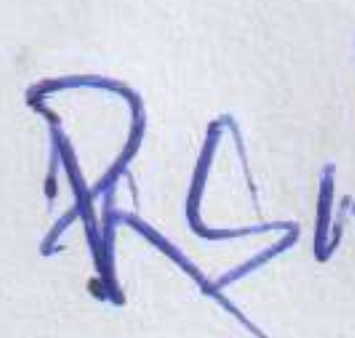
Unit – 5 : Language Items

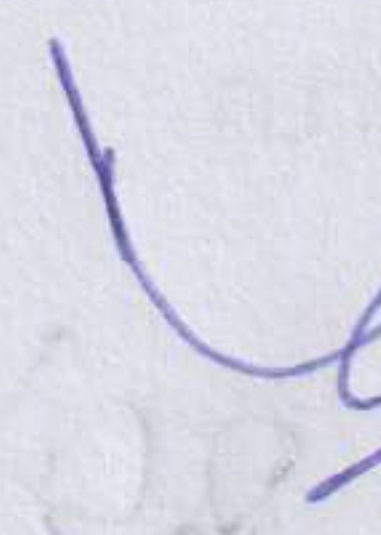
- Parts of speech, tense, voice change, change of narration, use of article & use of punctuation mark
- Vocabulary – meaning and spelling

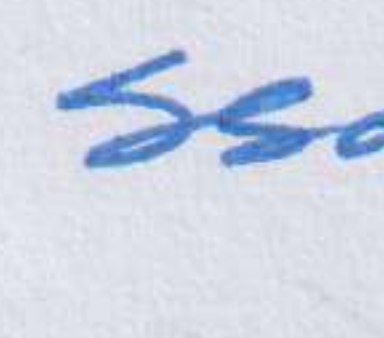
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SOCIAL STUDIES

(30 marks)

(PEDAGOGY-10 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-20 marks)

Unit – 4 : History and Political Science

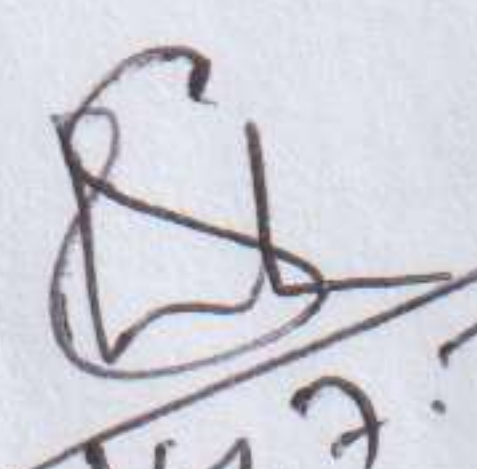
- Methods of historical studies, social, economic and political conditioned of Sultanate, Moghul and British period
- Slave, Khiligi, Tughlaq, Lodi Dynasty
- East India Company, British Crown, Impact of British rules, Ancient Period, Kharabela, Ashoka
- Soma, Ganga, Surya, fall of Odisha, Odisha under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

Unit – 5 : Political Science

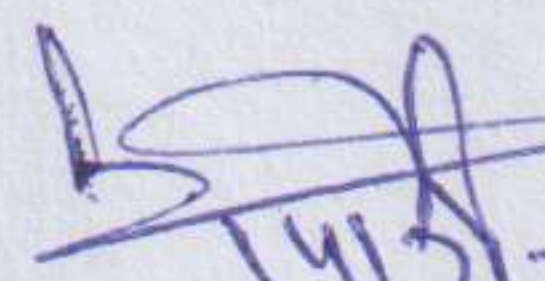
- Indian Constitution
- Human Rights
- Governance at Central, State and Local level
- Political Parties and Pressure group

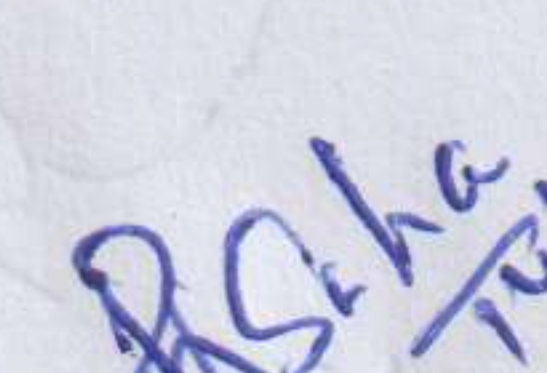
Unit – 6 : Geography

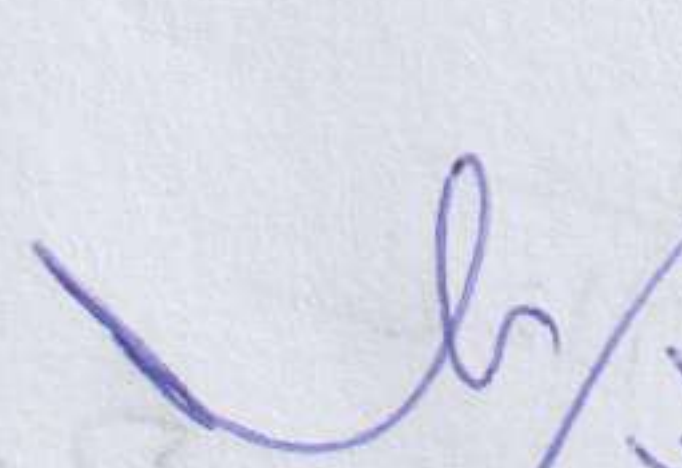
- Odisha Geography – physical features, climate, agriculture and industry
- Natural resources - land, water, forest & wild animals, minerals
- Atmosphere, biosphere and hydrosphere
- Earth – crust, internal structure, landscape - hills & mountains, plateau, plains, rivers
- Temperature zones of earth

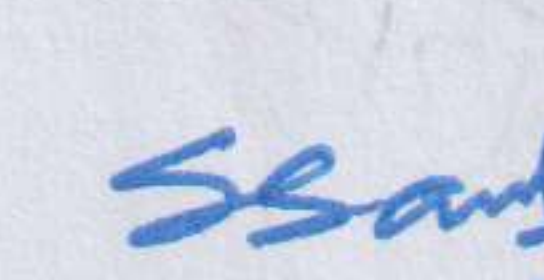

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SCIENCE STREAM

MATHEMATICS

(30 marks)

(PEDAGOGY-10 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-20 marks)

Unit – 4 : Number systems

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

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

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- Mensurations - area and circumference of circle, higher order problems relating to area of square, triangle, rectangle, parallelogram, trapezium, Pythagorean theorem

SCIENCE

(Physical Science-25 marks)

(PEDAGOGY - 10 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 approach, constructivists approach

Unit - 3 : Evaluation in Science

- Tools and techniques for assessing learning in Science

(CONTENTS - 15 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

SCIENCE

(Life Science-25 marks)

(PEDAGOGY - 10 marks)

Unit - 1 : Nature of Science

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

Unit - 2 : Methods and Approaches

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

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Unit – 3 : Evaluation in Science

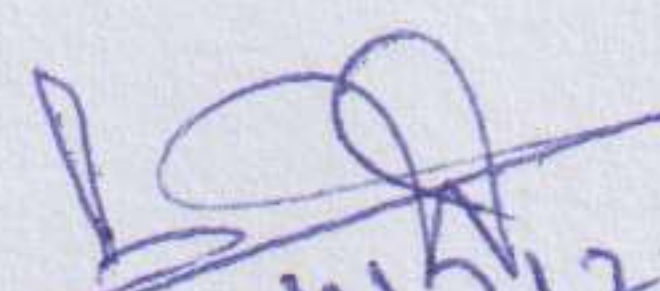
- Tools and techniques for assessing learning in Science

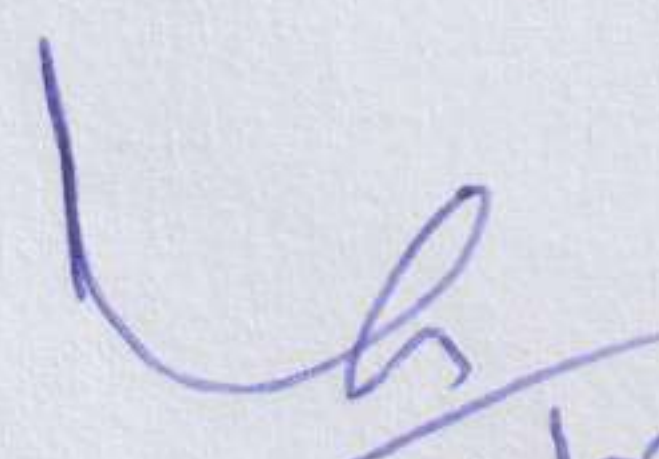
(CONTENTS-15 marks)

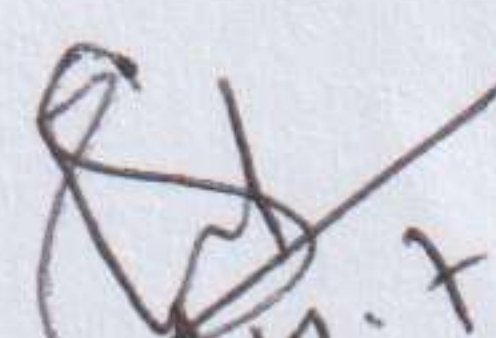
Unit – 4 : Life Science

- 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


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R.Chau
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