1. DEVELOPMENT OF CHILD
- Development, Growth & Maturation - Concept & Nature
- Principles of Development & their educational implications
- Factors influencing Development - Biological, Psychological, Sociological
- Understanding Development - Piaget, Kohlberg, Chomsky, Carl Rogers and Erikson
- Individual differences - Intra & Inter Individual differences in the areas of Attitudes, Aptitude, Interest, Habits, Thinking (Divergent & Convergent), Intelligence and their Assessment
- Development of Personality - Concept, Factors effecting development of Personality, Child Rearing Practices, Self-Concept
- Adjustment, Behavioral problems, Defense Mechanisms, Mental Health
- Methods and Approaches of Child Development – Introspection, Observation, Interview, Case study, Experimental, Rating Scales, Anecdotal Records, Questionnaire, Cross sectional and Longitudinal
- Developmental tasks and Hazards

2. UNDERSTANDING LEARNING
- Concept, Nature of Learning - Input - Process - Outcome
- Factors of Learning - Personal and Environmental
- Approaches to Learning and their applicability - Behaviorism (Skinner, Pavlov, Thorndike), Constructivism (Piaget, Vygotsky), Gestalt (Kohler, Koffka) and Observational (Bandura)
- Dimensions of Learning - Cognitive, Affective and Performance
- Motivation and Sustenance -its role in learning.
- Memory & Forgetting
- Transfer of Learning

3. PEDAGOGICAL CONCERNS
- Teaching and its relationship with learning and learner
- Learners in Contexts: Situating learner in the socio-political and cultural context
- Children from diverse contexts - Children With Special Needs (CWSN), Inclusive Education
- Understanding of Pedagogic methods - Enquiry based learning, Project based learning, Survey, Observation and Activity based learning, Co-operative & Collaborative learning
- Individual and Group learning: Issues and concerns with respect to organizing learning in class room like Study habits, Self learning and Learning to learn skills
- Organizing learning in heterogeneous class room groups - Socio-economic background, Abilities and Interest
- Paradigms of organizing Learning - Teacher centric, Subject centric and Learner centric
- Theory of Instruction - Bruner
- Teaching as Planned activity - Elements of Planning
- Phases of Teaching - Pre active, Interactive and Post active
- General and Subject related skills, competencies required in teaching and attributes of good facilitator
- Learning resources - Self, Home, School, Play, Community, Technology
- Distinction between Assessment for Learning & Assessment of Learning, School based Assessment, Continuous & Comprehensive Evaluation : Perspective & Practice
II LANGUAGE-I GUJRATHI (Marks 30)

(A) Content

I. (A) અધિકાર ગુજરાતી :-
(B) અધિકાર મુદ્રા :-

II. ગુજરાતી વિભાગ :- સાચું અને સૌશ્ચતિ વાનગ્રાણી
અને સંદર્ભિય વિવિધ શૈલી

III. ગુજરાતી સંક્ષેપક શાસ્ત્ર, વેપ, પ્રાણ, ચાલ, ચેરવલી,
જીવન એવા ગોળામી, માદજી,
પાત્ર સહિત વિવિધ વાસ્તુ.

IV. ગુજરાતી, જાનકારી ગુજરાતી, પાણી, ચીજો, અભિષેક,
જીવનના વાસ્તુ, પામુક, જીવનજીવની ગુજરાતી,
સમર્થ અને આદી અને મોટી ગુજરાતી, શૈલી,
સંદર્ભિય, હોફારી,

(C) Methodology

Marks-06

I. શાસ્ત્ર :- શાસ્ત્ર ગુજરાતી, જીવનજીવની ગુજરાતી,
અનુસારી બાળકડાકલ, ક્રિયા, તારખી શાસ્ત્ર.

II. અનુસારક :- અનુસારક મુદ્રા, દ્રષ્ટિકોણ,
વાસ્તુ શાસ્ત્ર.

III. અનુસારક વિશેષ :- અનુસારક, પાણી, પાણી, પાણી, પાણી,
અનુસારક મુદ્રા શાસ્ત્ર, અનુસારક મુદ્રા

IV. ગુજરાતી સંક્ષેપક :- ગુજરાતી, અનુસારક,
જીવન એવા ગોળામી, માદજી,

V. ગુજરાતી અંદભ :- ગુજરાતી આંદોલ્ન, પામ અંદોલ:-
ડુકાન, નાસૂઝ.

VI. ગુજરાતી આંદોલ :- ગુજરાતી આંદોલ આંદોલ.

VII. બુધવાર :-
III. LANGUAGE - II (ENGLISH) (Marks: 30)

CONTENT (Marks: 24)


PEDAGOGY (Marks: 06)


IV. MATHEMATICS (Marks: 30)

CONTENT (Marks: 24)

1. Number System:
   Natural Numbers, Whole Numbers, Integers, Rational Numbers & their fundamental operations (addition, subtraction, multiplication and division). Primes Composite Numbers, Co-Primes, Twin Primes, Relationship between LCM & GCD, Indian currency, Representation of Natural, Whole, integers and rational numbers on a number line. Terminating and Non-terminating decimals, Non-terminating but recurring decimals, square, square root, cube, cube roots of numbers, Pythagorean triplets. Applications on number system
2. Fractions:
   Concept of Fractions, Proper Fractions, Improper Fractions, Mixed Fractions, Decimal Fractions, Comparison, Fundamental operations on fractions (addition, subtraction, multiplication and division), Representation of a fraction in pictorial form and on a number line, reciprocal of fraction, uses of fractions in daily life
3. Arithmetic:
   Unitary method, percentages, profit and loss, ratio and proportion, direct proportion, discount, simple interest, compound interest, time and work, time and distance, tax (Vat).
4. **Geometry:**
   Basic idea of geometry (2D & 3D shapes), types of angles, construction and measurement of angles, types of angles, lines, triangles, types of triangles, quadrilaterals, types of quadrilaterals, congruence, property of congruencies of triangles (SAS, SSS, ASA, RHS), construction of triangles and quadrilaterals, patterns with geometrical shapes, representing 3D Shapes into 2D Shapes, Euler's relation, Properties of triangles, parallelogram, trapezium, Rhombus, Rectangle, Square and Kite, Concept of Circles, Symmetry.

5. **Measurements:**
   Length, Weight, Capacity, Time and their Standard Units, Surface Area and volume of a cube and a cuboids, perimeter and area of triangle, quadrilateral, parallelogram, rectangle, Rhombus, Square and Trapezium. Circumference of a circle, Area of Circle, Circular paths, other polygons and sector in a circle.

6. **Data Applications:**
   Introduction to Data, Data Presentation, Preparation of Frequency distribution table, Bar Graph, Pictograph, Histogram, Mean, Median and Mode of ungrouped data, determination of Mean by deviation method, Cumulative Frequency Distribution Table, Frequency Polygon, Frequency Curve and Cumulative Frequency Curves.

7. **Algebra:**
   Introduction to Algebra, Simple equations, solving linear equation in one variable, exponents and powers, Algebraic expressions, Addition, Subtraction, Multiplication, Division and Factorisation of algebraic expressions, algebraic identities.

**PEDAGOGY (Marks: 06)**

1. Definitions and Nature of Mathematics
2. Aims, values, instructional objectives of teaching Mathematics and Academic Standards
3. Methods of Teaching Mathematics
4. Instructional material in Mathematics - TLM in Mathematics
5. Instructional Planning
6. Continuous Comprehensive Evaluation (CCE) – Formative Assessment, Summative Assessment – Processes and procedures
7. Designing, Administration, Analysis of scholastic Achievement test (SAT)
8. Diagnostic and Remedial Teaching
9. The Mathematics Teacher
10. Resource Utilization
11. Curriculum and Text Book
V. ENVIRONMENTAL STUDIES (Marks: 30)

CONTENT (Marks: 24)

1. **My Family** - My Family - Family tree, migration, changing structures of family - nuclear and joint families, festivals.
2. **Work & Play** - Occupations, Child labor, Games - Local, National and International, Marshal Arts, Effects of games on respiration and breathing, fairs, Circus.
3. **Plants and Animals** - Plants & animals in our surroundings, Plant & Animal products, parts of a plant, photosynthesis, parts of a flower, pollination, fertilization, fruits, seeds. Wild & cultivated plants, wild & domestic animals their food, arrangement of teeth in animals.
4. **Our Food** - Different types of food, storage of grains and vegetables, storage of food, Food - animal husbandry, Nutrients of food, deficiency diseases.
5. **Shelter** - Need, different types of houses, electrical appliances - their use, social life in ants and honey bees, Animals shelter - variation.
6. **Air** - Importance of air, composition of air, atmospheric pressure, diseases spread through air and their prevention, air pollution - causes, its impact, and measures to prevent, Green House effect.
8. **Water** - Importance, water resources, tanks, aquatic flora and fauna, measurement of liquids, Water pollution - causes, impact, measures to prevent, purification of water, drought, floods.
9. **Our Body - Health - Cleanliness** - External, Internal parts of our body, Bones, Muscles, Sense organs, Digestion, Respiration, Nervous system, Excretory system, Circulatory system, First Aid.
10. **Mapping** - Direction, Mandal, District, State, India
11. **History and culture of India** - Evolution of Man, Pre-historic period, Indian culture and Heritage, Civilization, Medieval period culture, Ancient monuments, Religious movements: Jainism, Buddhism, Bhakti movement, Great personalities, Indian freedom movement, Modern India.
12. **Our country (India)** - Location, Area, Physical features, Climate, Natural resources, Continents and Oceans, Historical places in India, Population.
14. **Indian constitution** – Preamble, Major concepts, Fundamental rights, Fundamental duties, Child Rights
15. **Security** – Earth Quakes, Floods, Fire, First Aid, 108, 104 Vehicles

PEDAGOGY (Marks: 06)

1. Concept and scope of Environmental Studies (Science & Social Studies)
2. Aims & Objectives of teaching Environmental Studies (Science & Social Studies) Academic Standards of Teaching EVS
3. Relation to Science and Social Studies
4. Curriculum and its transaction
5. Learning Environment
6. CCE