|  | KERALA PUBLIC SCHOOL |
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| ACADEMIC YEAR 2020-2021 |  |
| REVISED PORTION FOR MID TERM |  |
| STD:9 |  |
| SUBJECT | MID TERM |
| ENGLISH | Literature <br> Beehive(Prose) <br> - The Fun They Had <br> - The Sound Of Music <br> - The Little Girl <br> - A Truly Beautiful Mind <br> - My Childhood |
|  | Beehive (Poem) <br> - The Road Not Taken <br> - Wind <br> - Rain On The Roof <br> - A Legend Of The Northland <br> - No Men Are Foreign |
|  | Moments (Prose) <br> - The Lost Child <br> - The Adventures Of Toto |
|  | Language |
|  | Reading Skills |
|  | Writing Skills |
|  | - Diary Writing |
|  | Grammar |
|  | - Edit the Text <br> - Re-arrange the Sentences <br> - Gap-Filling(Tenses, Modals, Subject-Verb concord, Determiners |



## Ch-1 Number System

1. Review of representation of natural numbers, integers, and rational numbers on the number line. Rational numbers as recurring/ terminating decimals. Operations on real numbers.
2. Examples of non-recurring/non-terminating decimals. Existence of non-rational numbers (irrational numbers) such as , and their representation on the number line.
3. Rationalization (with precise meaning) of real numbers of the type and (and their combinations) where x and y are natural number and a and b are integers.
4. Recall of laws of exponents with integral powers. Rational exponents with positive real bases (to be done by particular cases, allowing learner to arrive at the general laws.)

## Ch-2 Polynomials

Definition of a polynomial in one variable, with examples and counter examples. Coefficients of a polynomial, terms of a polynomial and zero polynomial. Degree of a polynomial. Constant, linear, quadratic and cubic polynomials. Monomials, binomials, trinomials. Factors and multiples. Zeros of a polynomial. Factorization of $a x 2+b x+c, a \neq 0$ where $\mathrm{a}, \mathrm{b}$ and c are real numbers, and of cubic polynomials using the Factor Theorem.

## Ch-3 Co-ordinate Geometry

The Cartesian plane, coordinates of a point, names and terms associated with the coordinate plane, notations, plotting points in the plane.

## Ch-4 Linear Equation in two variables

Recall of linear equations in one variable. Introduction to the equation in two variables.
Focus on linear equations of the type $\mathrm{ax}+\mathrm{by}+\mathrm{c}=0$. Explain that a linear equation in two variables has infinitely many solutions and justify their being written as ordered pairs of real numbers, plotting them and showing that they lie on a line. Graph of linear equations in two variables. Examples, problems from real life with algebraic and graphical solutions being done simultaneously.
Ch-6 Lines and Angles

1. (Motivate) If a ray stands on a line, then the sum of the two adjacent angles so formed is $180^{\circ}$ and the converse.
2. (Prove) If two lines intersect, vertically opposite angles are equal.
3. (Motivate) Results on corresponding angles, alternate angles, interior angles when a transversal intersects two parallel lines.
4. (Motivate) Lines which are parallel to a given line are parallel.
5. (Prove) The sum of the angles of a triangle is $180^{\circ}$. 6. (Motivate) If a side of a triangle is produced, the exterior angle so formed is equal to the sum of the two interior opposite angles.

## Ch-7 Triangles( Congruence of Triangles )

1 .(Motivate) Two triangles are congruent if any two sides and the included angle of one triangle is equal to any two sides and the included angle of the other triangle (SAS Congruence).
2. (Motivate) Two triangles are congruent if the three sides of one triangle are equal to three sides of the other triangle (SSS Congruence).
3. (Motivate) Two right triangles are congruent if the hypotenuse and a side of one triangle are equal (respectively) to the hypotenuse and a side of the other triangle. (RHS Congruence)
4. (Prove) The angles opposite to equal sides of a triangle are equal.
5. (Motivate) The sides opposite to equal angles of a triangle are equal.

## Ch-8 Quadrilaterals

1. (Prove) The diagonal divides a parallelogram into two congruent triangles.
2. (Motivate) In a parallelogram opposite sides are equal, and conversely.
3. (Motivate) In a parallelogram opposite angles are equal, and conversely.
4. (Motivate) A quadrilateral is a parallelogram if a pair of its opposite sides is parallel and equal.
5. (Motivate) In a parallelogram, the diagonals bisect each other and conversely.
6. (Motivate) In a triangle, the line segment joining the mid points of any two sides is parallel to the third side and in half of it and (motivate) its converse.
Ch-11 Constructions of different angles, perpendicular bisectors, angle bisector(Ex- 11.1)
Construction of bisectors of line segments and angles of measure $60^{\circ}$, $90^{\circ}, 45^{\circ}$ etc., equilateral triangles.

## Ch-12 Herons Formula

Area of a triangle using Heron's formula (without proof)

## PHYSICS

UNIT 3
Chapter-8-Motion
Distance \& displacement, uniform and non-uniform motion along a straight line
Acceleration (numericals)
Graphical representation of motion. Distance -time graphs
Velocity-time graphs (uniform motion and uniformly accelerated motion)
PHYSICS
Derivation of equation of motion by graphical method.
Uniform circular motion
Chapter-9-Force and laws of motion
Force, types of force, Action and reaction forces
Newton's first law, Application of 1st law.
Inertia of a body, Inertia and mass, Momentum, Force and Acceleration Newton's second law
Mathematical formulation of 2nd law, Application of 2nd law.
Newton's third law, Application of 3rd law
Conservation of momentum, proof of law of conservation of momentum

| BIOLOGY | BIOLOGY <br> UNIT 2 <br> CH 5- FUNDAMENTAL UNIT OF LIFE <br> Cell - basic unit of life, Prokaryotic cell and Eukaryotic cell, Multicellular organism, Plasma membrane, Cell membrane, cell Wall and Nucleus <br> Cell Organelles - chloroplast, mitochondria, vacuoles, endoplasmic reticulum, golgi bodies <br> Cell division - Chromosomes, basic structure, number <br> CH-6 -TISSUES <br> Structure and functions of plant and animal tissue <br> *Plant Tissue - MeristematicTissue, Permanent tissue (structure and function) <br> Animal tissue - Epithelial tissue, Connective Tissue, Muscular Tissue, Nervous Tissue (structure and function) <br> *Difference in animal and plant tissue |
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| CHEMISTRY | CHEMISTRY <br> UNIT 1 <br> CH-1 Matter in our surrounding <br> Elements, compounds and mixtures <br> Meaning of pure substance and Impure substance <br> Mixture: Heterogeneous and Homogeneous mixtures <br> Meaning with examples. <br> Solutions: Examples and properties <br> Colloids and Suspension- Example and properties of suspension <br> Colloidal solution Examples and properties, Tyndall effect, examples of <br> Tyndall effect- <br> Studying difference between true solution, colloidal solution and suspension. <br> Ch-2 Is matter around us pure <br> Atoms and molecules, Law of constant proportions <br> Atomic and molecular masses, Mole concept - Relationship of mole to mass of the particles and numbers. |
| COMPUTER | UNIT 1: BASICS OF INFORMATION TECHNOLOGY <br> CH 1. BASIC ELEMENTS OF COMPUTER SYSTEM <br> CH 2. COMPUTER HARDWARE AND SOFTWARE <br> CH3. BASICS OF OPERATING SYSTEM <br> CH4. COMMUNICATION AND NETWORKING <br> UNIT 2: CYBER SAFETY <br> CH 5.CYBER SAFETY <br> ssUNIT 3: OFFICE TOOLS <br> CH 6. WORD PROCESSING TOOL: MS WORD2013 |

## HISTORY

Ch-1 The French Revolution
Ch-2 Socialism in Europe and the Russian Revolution

## GEOGRAPHY

Ch-1 India Size and Location
Ch-2 Physical features of India
Ch-3 Drainage (map work only)
CIVICS
Ch-2 What is Democracy? Why Democracy?
Ch-3 Constitutional Design.(except constitution South Africa)
Economics
Ch-1The Story of Village Palampur
Ch-2 People as Resource
LIST OF MAP ITEMS
HISTORY
CH-1 The French Revolution
Outline map of France (for locating and labelling/identification)

1. Bordeaux
2. Nantes
3. Paris
4. Marseilles

Ch-2 Socialism in Europe and the Russian Revolution
Outline map of world (for locating and labelling/identification)

1. Major countries of First World War

Central powers-Germany, Austria-Hungary, Turkey (Ottoman Empire)
Allied powers- France, England, Russia, U.S.A.
GEOGRAPHY (Outline Political map of India)
Ch-1 India Size and Location

- India- States with Capitals, Tropic of Cancer, Standard meridian
- ( location and labelling)

Ch-2 Physical features of India

- Mountain Ranges: The Karakoram, The Zaskar, The Shivalik, The Aravali,
The Vindhya, The Satpura, Western and Eastern ghats
- Mountain peaks- K2, KanchanJunga, AnaiMudi
- Plateau- Deccan plateau, Chotta Nagpur plateau, Malwa plateau
- Coastal Plains- Konkan, Malabar, Coromandal\& Northern Circar (location \&labelling)
Ch-3 Drainage
- Rivers: (identification only)
- The Himalayan River Systems- The Indus, The Ganges and The Satluj
- The Peninsular Rivers- The Narmada, The Tapi, The Kaveri, the Krishna
- The Godavari, The Mahanadi
- Lakes: Wular, Pulicat, Sambhar, Chilika


## Dr. Rachana Nair <br> Director Academics.

