MATHEMATICS
LESSON PLAN

2025

LESSON PLAN

10TH STANDARD

Prepared by:

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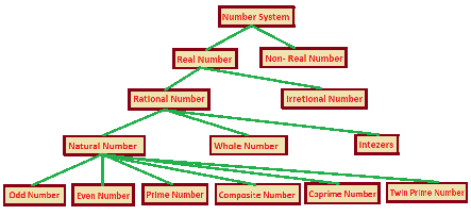
Unit: 01 **Methodology: Demonstration cum lecture method Unit name: Real numbers**
Date: From to

Objectives:

1. Definition of natural, whole, rational, irrational numbers, integers, real, even, odd, prime, composite numbers.
2. Different types of decimals.
3. Rational and irrational decimals.
4. To find HCF & LCM by using FTA.
5. Methods of proving the numbers as irrational numbers.

Steps	Activities To Favourable For Learning	TLM	Evaluation Tools & Techniques	Teachers Introspection	TIME
Engage	Start the session by proving historical and biological details about Euclid. Explain about him to students.	Chart of numbers, Photos	Discussion & group discussion.	Will try to answers	
Explore	First of all teacher give the complete knowledge of number system. Along with the numbers explain about decimal system.	Chart Calendar	Questionnaire	Answering for supplementary questions.	
					
Explain	**Euclid's Division lemma:** For given two positive integers a & b there exist a unique integers q & r such that a=bq+r where 0<r<b. **HCF By Using EDL:** Explain the method of finding the HCF by using Euclid's division lemma taking different examples. **Fundamental theorem of arithmetic**: now teacher will introduce F.T.A with the following. HCFXLCM= Product of two numbers. Explain the method of contradict to prove irrational numbers. Also explain the terminating and non-terminating decimals.	Ppt, Chart Board	Discussion & group activities		
Elaborate	Teacher will give some problems to students and he should guide them to solve.	Exercise problems	Activity	Discussion with students	
Evaluate	Teacher will assign some problems to do by using textbook.	Textbook	Evaluation	Try to do all problems	

				in textbook.	

Unit: 02 Methodology: Demonstration cum lecture method Unit name: Polynomials
Date: From to

Objectives:

1. Understand the degree of the polynomials
2. Zeros of the polynomials
3. To understand the coefficient of the polynomials
4. To know the quadratic polynomial have 2 zeros and cubic polynomial have 3 zeros.
5. To find the solutions of the quadratic polynomials whose sum and products are given.

Steps	Activities To Favourable For Learning	TLM	Evaluation Tools & Techniques	Teachers Introspection	TIME
Engage	Start the session by checking their previous knowledge asking different questions like monomial, binomials, trinomial, degree ect.	Chart of numbers, Photos	Discussion & group discussion.	Will try to answers	
Explore	Teacher will start the session by giving many examples of algebraic expressions. Now teacher will introduce the topic polynomials with examples. Ex: $5x^2$, $2x^3+5x^2+5$, -2y-5y, 8z.	Chart Worksheet Oral test	Questionnaire	Answering for supplementary questions.	
Explain	**Zeroes of the polynomials:** Teacher will explain about zeroes the polynomials. Graph of quadratic polynomial is always parabolic. **Zeroes of quadratic polynomials: :** Teacher will explain about zeroes the quadratic polynomials by taking different examples.	Ppt, Chart Board Class test	Discussion & group activities		
Elaborate	Students will be able to explain the relationship between zeroes and coefficients. They also able to factorize the quadratic, cubic polynomials with the exercise problems.	Exercise problems	Activity	Discussion with students	
Evaluate	Teacher will assign some problems on zeroes and coefficients, quadratic, cubic polynomials with the exercise problems.	Textbook	Evaluation	Try to do all problems in textbook.	

Subject teacher **Head master or mistress/Principal**

Unit: 03 **Methodology: Demonstration & project method Unit name: Pair of linear equations in two variables**

Date: From to

Objectives:

1. Knowledge of linear equations in two variables.
2. To know about construction of ax+by+c=0.
3. To draw how the pair of linear equations in two variables form in graph.
4. Discuss the nature of solution, types of graphs, consistency or inconsistency in pair of equations.
5. Elimination method solving the equations.

Steps	Activities To Favourable For Learning	TLM	Evaluation Tools & Techniques	Teachers Introspection	TIME
Engage	Start the session by checking the previous knowledge, by asking the questions linear equations in two variables.	Chart board.	Discussion & group discussion.	Will try to answers	
Explore	Teachers asks to students like 1. What is the cost of one pen and two pencils cost? 2. Two bats and three balls cost. ect.	Chart Board, some puzzles	Questionnaire	Answering for supplementary questions.	
Explain	Introduce the chapter to pupils, how it forms the pair of linear equations in two variables by giving some examples in every day situations. Explaining about how to form Linear pair of equations come and solving them. **Graphical method of solutions for solving linear pair of equations:** Solving the problems of linear equations in two variables by graphical method by taking 2-3 examples. **Algebraic pair of linear equations in two variables:** Explain How to solve the linear pair of equations by algebraic method by taking different examples. **Elimination method:**	Board, Graph, Ppt, Geogebra, Flash cards	Discussion & group activities Oral test Introspection n Writing test		

	Explain How to solve the linear pair of equations by elimination method by taking different examples.				
Elaborate	Teacher given some problems to students for solving individually. By taking different examples in exercise, teacher will summarize the lesson.	Exercise problems In textbook	Activity	Discussion with students	
Evaluate	Now teacher will assign some word problems based on our daily life situations and help the students in the implementation of the above formulas in this problems.	Textbook	Evaluation	Try to do all problems in textbook.	

Subject teacher **Head master or mistress/Principal**

Unit: 04 Methodology: Demonstration cum lecture method Unit name: Quadratic Equations
Date: From to

Objectives:

1. To know about equations and quadratic equations
2. To understand how to form a quadratic equations.
3. To understand the roots of the quadratic equations equating the zero.
4. To solve the quadratic equations by factorization method.
5. To know about a nature of the roots of the quadratic equation.

Steps	Activities To Favourable For Learning	TLM	Evaluation Tools & Techniques	Teachers Introspection	TIME
Engage	Start the session by checking their previous knowledge, asking different questions like quadratic polynomials, its general form, degrees and zeroes ect.	Black board, graph ect	Discussion & group discussion.	Will try to answers	
Explore	Teacher should write the quadratic equation on the board, then explain. General form of Q.equation is $ax^2+bx+c=0$. Now introduce the concept quadratic equation.	Chart Oral test	Questionnaire	Answering for supplementary questions.	

Explain	**Roots of the quadratic equation:** now explain the relationship between roots and coefficients of quadratic equations. x^2-Ax+B=0, where A is sum of roots & B is product of roots. **Methods of finding the roots:** now explain how to find the roots by using different methods like factor method. **Discriminant and nature of roots:** introduce this concept and explain with some examples. **The Discriminant** $\Delta = b^2 - 4ac$ The discriminant tells us whether the roots are rational or irrational $\Delta > 0$: two different real roots (cuts the x axis twice) $\Delta = 0$: two equal real roots (touches the x axis once) $\Delta < 0$: no real roots (never touches the x axis) Δ is a perfect square : roots are rational **Applications:** teacher will explain the problems.	Ppt, Chart Board Class test	Discussion & group activities		
Elaborate	Students will be able to explain the relationship between zeroes and coefficients. They also able to find the roots of the quadratic equations with the exercise problems.	Exercise problems	Activity	Discussion with students	
Evaluate	Students will review the questions given by teacher, they will solve problems in textbook with the help of teacher.	Textbook	Evaluation	Try to do all problems in textbook.	

Subject teacher **Head master or mistress/Principal**

Unit: 05 Methodology: Demonstration cum problem solving method Unit name: Arithmetic Progression
Date: From to

Objectives:

1. Knowledge of sequence and series
2. Motivation for studying arithmetic progression (A.P).
3. Deviation of nth term of an A.P
4. Deviation of formula to find the nth term from the end of the sequence.
5. Deviation of sum to n terms of an A.P.
6. Application of the formulas of A.P to solve the daily life problems.

Steps	Activities To Favourable For Learning	TLM	Evaluation Tools & Techniques	Teachers Introspection	TIME
Engage	Start the session by checking the previous knowledge, by asking the questions of number system like natural numbers, whole numbers, odd numbers	Chart of numbe	Discussion & group discussion.	Will try to answers	

	& even numbers, multiplies of 7, 5 ect.	rs, board.			
Explore	Teachers asks to students for identifying the next four terms in the sequence 1. 5, 10, 15, 20…….. 2. 1, 7, 13…….	Chart Calendar	Questionnaire	Answering for supplementary questions.	
Explain	Arithmetic progression : introduction Now teacher may introduce the concept of A.P by writing some examples on board. **General form of A.P: an=a+(n-1)d** Explaining about arithmetic progression and nth term of an A.P. Finding first term, last term and common difference **Sum of First *n* Terms of an AP:** **$S_n=\frac{n}{2}(2a+(n-1)d$** Finding the sum of nth term of an A.P, derive the formula to find the nth term. Solving different problems on sum of nth term of an A.P using formula, find the value of a, d and nth term also**.**	Board	Discussion & group activities		
Elaborate	Teacher given some problems to students for solving individually. By taking different examples in exercise, teacher will summarize the lesson.	Exercise problems In textbook	Activity	Discussion with students	
Evaluate	Now teacher will assign some word problems based on our daily life situations and help the students in the implementation of the above formulas in this problems.	Textbook	Evaluation	Try to do all problems in textbook.	

Subject teacher **Head master or mistress/Principal**

Unit: 06 Methodology: Demonstration & synthetic method. Unit name: Triangles
Date: From to

Objectives:

1. Identifying types of triangles & similarity
2. Constructing triangles on the bases of similarity and congruent.
3. Proving the theorems on the basis of similarity and congruent.
4. Solving the problems on the basis of triangles in day to day life.

Steps	Activities To Favourable For Learning	TLM	Evaluation Tools & Techniques	Teachers Introspection	TIME

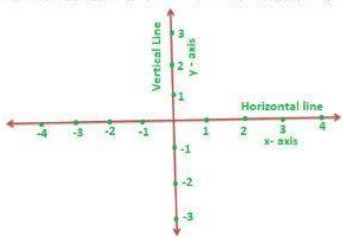
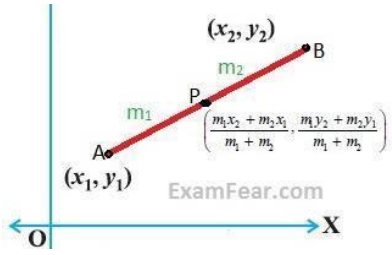
Engage	Start the session by checking the previous knowledge, by asking the question on congruence of triangles and its conditions.	Chart, Modals, board ect.	Discussion & group discussion.	Will try to answers	
Explore	Teachers asks to students for identifying congruence and similarities in different modals. 1. All circles are similar to each other. 2. All squares are similar to each other. Ect.	Chart, modals & plane figures	Questionnaire	Answering for supplementary questions.	
Explain	Now teacher will explain the difference between the similarity and congruency of the plane figures bring examples and counter examples. **<u>Basic Proportionality Theorem:</u>** Now teacher will write the statement of Basic Proportionality Theorem	Board	Discussion & group activities		
	the board and explain the meaning of this statement by drawing the figure. After this teacher will explain the proof of the theorem which include the **components:** Given,To Prove,Construction, Proof. After the complete explanation of the BPT teacher will motivate thestudents for the converse of Basic Proportionality theorem and also give its complete proof. Now teacher will explain the procedure of implementing these theorems in different problems. Teacher may also provide sufficient number of problems to the students so that the students will completely understand the theorem. **Similarity Conditions** Now teacher will define all similarity conditions (SSS, SAS, AAA, AA) to the students. Teacher will also motivate the students for the proof of these theorems.				
Elaborate	Teacher given some problems to students for solving individually. By taking different examples in exercise, teacher will summarize the lesson.	Exercise problems In textbook	Activity	Discussion with students	
Evaluate	Now teacher will assign some problems to the students to learn the implementation of this theorems.	Textbook	Evaluation	Try to do all problems in textbook.	

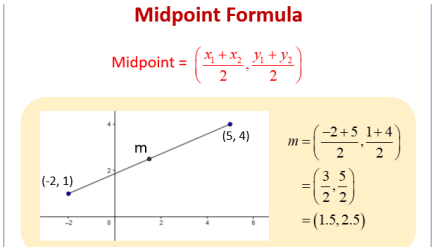
Subject teacher **Head master or mistress/Principal**

Unit: 07 **Methodology: Demonstration cum lecture method Unit name: Coordinate Geometry.**
Date: From to

Objectives:

1. Concept & introduction of coordinate geometry.
2. Graphs of linear equations & methods of representing the order pair on the graph.
3. Distance formula and its applications in different problems.
4. Section formula and mid-point formula & related problems.
5. Area of triangle and method of proving the three points are collinear.

Steps	Activities To Favourable For Learning	TLM	Evaluation Tools & Techniques	Teachers Introspection	TIME
Engage	Start the session by checking the previous knowledge, by asking the questions related to the Cartesian coordinate system and the method of representing them on the graphs.	Chart Board Ppt Oral test	Discussion & group discussion.	Will try to answers	
Explore	Now teacher will introduce the topic coordinate geometry, it is the combination algebra & geometry. Here teacher will explain horizontal line, vertical line, coordinates abscissa, origin ect.	Chart Class test Board	Questionnaire	Answering for supplementary questions.	
Explain	**Distance formula:** plot the two points on the graph, and derive the formula by applying Pythagoras formula. $d=\sqrt{(x2-x1)^2+(y2-y1)^2}$. **Section formula:** Explaining how to use this section formula to find the coordinates by using formula, derivation and some problems.  	Geometry kit ppt, chart Board	Discussion & group activities		

	Mid-point formula: now teacher will introduce this, will do some problems on it.  				
Elaborate	Students will learn the formulas of finding the distance, section and area of triangles. Also they are learn how to solve the problems on it using textbook.	Exercise problems In textbook	Activity	Discussion with students	
Evaluate	Now teacher will assign some problems to students to workout. Solve assignment given by teacher.	Textbook	Evaluation	Try to do all problems in textbook.	

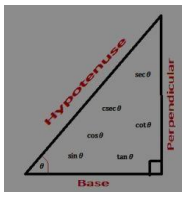
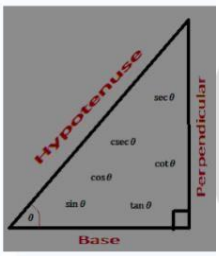
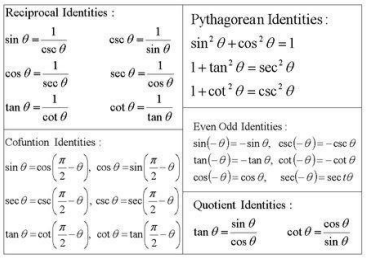
Subject teacher **Head master or mistress/Principal**

Unit: 08 **Methodology: demonstration cum lecture method Unit name: Introduction to trigonometry**
Date: From to

Objectives:

1. Introduction and basic formulas of trigonometry.
2. Problems based on basic formulas.
3. Values of trigonometric ratios on standard angles 0^0, 30^0,45^0, 60^0, 90^0.
4. Trigonometric transformation on first quadrant.

Steps	Activities To Favourable For Learning	TLM	Evaluation Tools & Techniques	Teachers Introspection	TIME
Engage	Start the session by checking their previous knowledge, asking different questions related to right angled triangle and Pythagoras theorem, & algebraic identities ect.	Black board, sheet ect	Discussion & group discussion.	Will try to answers	

Explore	Teacher will ask some questions about different types of triangles, then explain the properties of right angled triangle & Pythagoras theorem. 	Chart modals Oral test	Questionnaire	Answering for supplementary questions.	
Explain	**Trigonometric ratios:** teacher will explain the 6 trigonometric functions, angles and sides of right angled triangle. $sin\theta = \frac{Perpendicular}{Hypotenuse} = \frac{P}{H}$ $Cos\theta = \frac{Base}{Hypotenuse} = \frac{B}{H}$ $Tan\theta = \frac{Perpendicular}{Base} = \frac{P}{B}$ $Cot\theta = \frac{Base}{Perpendicular} = \frac{B}{P}$ $Sec\theta = \frac{Hypotenuse}{Base} = \frac{H}{B}$ $Cosec\theta = \frac{Hypotenuse}{Perpendicular} = \frac{H}{P}$  **Trigonometric functions with standard angles:** teacher will provide sufficient problems to the students for practice. Transformations of trigonometric functions: ○ sin (- θ) = - sin θ ; cos (- θ) = cos θ ○ sin (90° - θ) = cos θ ; cos (90° - θ) = sin θ ○ sin (90° + θ) = cos θ ; cos (90° + θ) = - sin θ ○ sin (180° - θ) = sin θ ; cos (180° - θ) = - cos θ ○ sin (180° + θ) = - sin θ ; cos (180° + θ) = - cos θ ○ sin (270° - θ) = - cos θ ; cos (270° - θ) = - sin θ ○ sin (270° + θ) = - cos θ ; cos (270° + θ) = sin θ ○ tan (90° - θ) = cot θ ; cot (90° - θ) = tan θ	Ppt, Chart modals Board Class test	Discussion & group activities		
	Trigonometric identities: now teacher will introduce this concept explains some identities and work some problems on it. 				
Elaborate	Teacher will explain the different situations in which trigonometry can be implemented.	Exercise problems	Activity	Discussion with students	

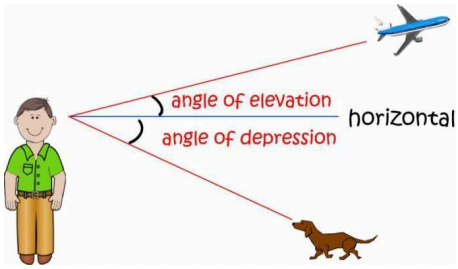
Evaluate	Students will review the questions given by teacher, they will solve problems in textbook with the help of teacher.	Textbook	Evaluation	Try to do all problems in textbook.	

Subject teacher **Head master or mistress/Principal**

Unit: 09 **Methodology: demonstration cum lecture method Unit name: Applications of trigonometry**
Date: From to

Objectives:

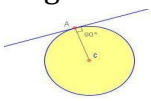
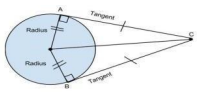
1. To know about the line of sight is the line drawn from the eye of an observer to the point in the object viewed by the observer.
2. To understand the definition angle of elevation and angle of depression.
3. To solve the applied problems on angle of elevation and angle of depression.
4. The height or length of an object or the distance between two distant objects can be determined with the help of trigonometric ratios.

Steps	Activities To Favourable For Learning	TLM	Evaluation Tools & Techniques	Teachers Introspection	TIME
Engage	Start the session by checking their previous knowledge, asking different questions on trigonometric ratios, identities, functions.	Black board, chart ect	Discussion & group discussion.	Will try to answers	
Explore	Explaining about how trigonometric ratios will help to find the height and distance in the daily life. Then introduce the topic applications of trigonometry.	Chart Oral test	Questionnaire	Answering for supplementary questions.	
Explain	**Heights and distance:** teacher will explain about this then introduce the concept angle of elevation and depression.  Explain the applications of trigonometry in the problems like heights and distances or on complex daily life problems.	Ppt, Chart Board Class test	Discussion & group activities		
Elaborate	Students will be able to find the height and distance in different situations. He may guide them to find the height of their home.	Exercise problems	Activity	Discussion with students	
Evaluate	Students will be solve all problems in the textbook with the help of teacher.	Textbook	Evaluation	Try to do all problems in textbook.	

Unit: 10 **Methodology: Demonstration cum lecture method Unit name: Circles**
Date: From to

Objectives:

1. Definition of circle, and terms related to the circle like center, radius, diameter, chord, segment & sector of the circle.
2. Tangent to the circle at the point of contact, secant of the circle.
3. Proof of Tangent to the circle is perpendicular to the point of contact.
4. Proof of the length of the tangent drawn from an external point to the circle are equal.

Steps	Activities To Favourable For Learning	TLM	Evaluation Tools & Techniques	Teachers Introspection	TIME
Engage	Start the session by checking the previous knowledge, by asking the questions related to the circle and terms associated with it. Also explain the difference between circle and sphere.	Chart, Modals, board.	Discussion & group discussion.	Will try to answers	
Explore	Teachers asks to students that are learnt in class 9^{th} in previous year like chord, diameter, radius ect.	Chart Geometry kit	Questionnaire	Answering for supplementary questions.	
Explain	**Tangent:** now teacher explain about the tangent with an examples.  Now teacher will taught Proof of 'Tangent to the circle is perpendicular to the point of contact'. Help the students by solving the problems based on above theorem. Now teacher explain the theorem 'length of the tangent drawn from an external point to the circle are equal'.  Help the students by solving the problems based on above theorem.	Class test Oral discussion worksheets Board	Discussion & group activities		

Elaborate	After studying this lesson students should know the circle and the different terms associated with circle. Students should know the proofs of the theorems and tangent to the circle. Students should be able to apply all the results in this problems.	Exercise problems In textbook	Activity	Discussion with students	
Evaluate	Review questions, students can prepare presentation on circle which include all important terms. Solve all the problems in textbook and do the assignment that teacher given.	Textbook	Evaluation	Try to do all problems in textbook.	

Subject teacher **Head master or mistress/Principal**

Unit: 11 Methodology: Demonstration, analytic & synthetic method Unit name: Areas related to circles.

Date: From to

Objectives:

1. Introduction and definitions related to circle, radius, diameter, chord, segment, sector, ect.
2. Circumference and perimeter of circle, semi-circle, quadrant and length of arc.
3. Area of circle, minor sector, major sector, minor and major segment.
4. Deviation of formula to find the nth term from the end of the sequence.
5. Calculating area of segment of a circle, problems should be restricted to 60^0, 90^0 & 120^0.
6. Area related to the other plane figures like triangles and quadrilaterals should be taken.
7. Problems based on the combinations of figure.

Steps	Activities To Favourable For Learning	TLM	Evaluation Tools & Techniques	Teachers Introspection	TIME
Engage	Start the session by checking the previous knowledge, by asking the questions related to the circle like radius, tangent, diameter ect.	Chart of circles, Modals, board.	Discussion & group discussion.	Will try to answers	
Explore	Teachers will explain different properties of circle to the students and explain the difference between circumference and perimeter of the circle.	Chart	Questionnaire	Answering for supplementary questions.	

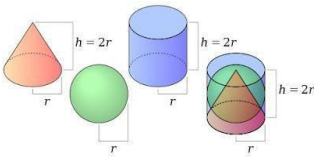
Explain	**Area of sector and segment:** Now teacher will explain the formula and method to find the area of circle, semi-circle, quadrant , minor & major segments and sectors with central angle is 60^0, 90^0 & 120^0. Area of circle= πr^2. Area of minor sector= $\frac{\theta}{360}\ \pi r^2$. Area of major sector= $\frac{360-\theta}{360}\pi r^2$. Area of minor segment= $\frac{\theta}{360}\pi r^2 - \frac{1}{2} r^2 \sin\theta$. Area of major segment= πr^2 - area of min segment. Area of quadrant= $\frac{1}{2}\pi r^2$. Now teacher will introduce the topic combination of different plane figures and explain the topic by taking different examples.	Board Class test Oral test Assignment ppt	Discussion & group activities		
Elaborate	Now students should know the circle and its components, method of solving the problems on combinations of plane figures.	Exercise problems In textbook	Activity	Discussion with students	
Evaluate	Now teacher will assign some word problems based plane figures, students can prepare the presentation on the formulas related to figures. Solve assignment given by the teacher.	Textbook	Evaluation	Try to do all problems in textbook.	

Unit: 12 Methodology: Demonstration & problem solving Unit name: Surface area & Volumes
Date: From to

Objectives:

1. Introduction of different types of solid figure and their comparison with the plane figures.
2. Curved surface area, total surface area and volumes of different solid figures.
3. Surface area and volumes of combinations of solid figures.
4. Method of converting one type of solid figures to another.
5. Other mixed problems.

Steps	Activities To Favourable For Learning	TLM	Evaluation Tools & Techniques	Teachers Introspection	TIME
Engage	Start the session by checking their previous knowledge, asking questions related to the surface area and volumes of different solid figure.	Solid fugures Modals	Discussion & group discussion.	Will try to answers	

Explore	Detailed explanation of curved surface area, total surface area and volumes of different types of solid figures. Then introduce the chapter.	Modals Figures Board	Questionnaire	Answering for supplementary questions.	
Explain	**Surface area of solid figures:** Explain how to find the surface area of solid figures by taking different examples.  **Volumes of solid figures:**Explain how to find the volumes of solid figures by taking different exp. **Combinations of solid figures:** Explain how to find their surface area and volumes of combined solid figures by taking different examples. 	Ppt, Solid fugures Modals	Discussion & group activities		
Elaborate	Students should know all formulas and all important concepts in this chapter.	Exercise problems	Activity	Discussion with students	
Evaluate	Review this questions given by the teacher. Students should prepare presentation on the combinations of solid figures. They will solve all the problems in textbook.	Textbook	Evaluation	Try to do all problems in textbook.	

Subject teacher **Head master or mistress/Principal**

Unit: 13 **Methodology: Demonstration cum lecture method Unit name: Statistics**
Date: From **to**

Objectives:

1. Introduction, method of finding mean of grouped frequency with three methods.
2. Method of finding mode of grouped frequency.
3. Method of finding median of grouped frequency.

Steps	Activities To Favourable For Learning	TLM	Evaluation Tools & Techniques	Teachers Introspection	TIME
Engage	Start the session by checking their previous knowledge, asking different	Black board,	Discussion & group	Will try to answers	

	questions related to mean, median and mode.	chart ppt ect	discussion.		
Explore	Explaining about mean median and mode, ask some question related to them. Then introduce the chapter.	Chart Oral test	Questionnaire	Answering for supplementary questions.	
Explain	**Mean:** explain how to find the mean value by different methods by taking problems. • **Direct Method :** $\overline{X} = \frac{\sum fm}{N}$ • **Short cut method :** $\overline{X} = A + \frac{\sum fd}{N}$ • **Step deviation Method :** $\overline{X} = A + \frac{\sum fd}{N} \times i$ **Median:** explain how to find the median by using formula. $\text{Median} = l + \frac{\left(\frac{N}{2} - m\right)}{f} \times c$ **Mode:** explain how to find the median by using formula. $M_o = l + \left(\frac{f_1 - f_0}{2f_1 - f_0 - f_2}\right) h$	Ppt, Chart Board Graph sheet worksheet Class test	Discussion & group activities		
Elaborate	Students will be able to find mean, median and mode by using different problems.	Exercise problems	Activity	Discussion with students	
Evaluate	Students will be solve all problems in the textbook with the help of teacher.	Textbook	Evaluation	Try to do all problems in textbook.	

Subject teacher **Head master or mistress/Principal**

Unit: 14 Methodology: Demonstration cum lecture method Unit name: Probability
Date: From to

Objectives:

1. Classical definition of probability.
2. Probability of sure event, impossible event and concept of equally likely events & range of probability.
3. Concept of probability of one die, two die, coins and their sample space.

4. Concept of probability of cards, simple problems on finding the probability of of an event.

Steps	Activities To Favourable For Learning	TLM	Evaluation Tools & Techniques	Teachers Introspection	TIME
Engage	Start the session by checking their previous knowledge, asking different questions like simple probability of an event.	Black board, chart,coins ppt ect	Discussion & group discussion.	Will try to answers	
Explore	Explaining about probability of an event introduce the chapter. Then classical definition of probability.	Chart Oral test	Questionnaire	Answering for supplementary questions.	
Explain	**Probability :** explain the concept of P(E)+ P(not E)=1. The probability of sure event is one. Range of probability 0<P<1. **Sample space:** Explain about this. When we thorough 1 coin, 2 coin & 3 coins at a time. Explain the terms associated with playing cards, that is possible outcomes. 	Ppt, Coins Cards Die Board	Discussion & group activities		
Elaborate	Students should know this possible outcomes, sure events, impossible events ect.	Exercise problems	Activity	Discussion with students	
Evaluate	Review this questions given by the teacher. Students should prepare presentation on the sample space of different number of coins and die. They will solve all the problems in textbook.	Textbook	Evaluation	Try to do all problems in textbook.	

Subject teacher **Head master or mistress/Principal**