Month	Week	Name of Chapter	Subtopics of Chapter	Period	Learning Outcome
June	2nd, 3rd,4th &5th	Chapter-1 Progressions	● Elementary Idea of A.P, G.P and H.P. ● Properties of A.P, G.P and H.P.	20	After these lessons, student will be able to:- ● Understand different progression and their definitions ● Develop the skill of calculating terms and sum of terms of different progressions ● Develop the knowledge of progression and also understand their uses in real life problems ● Solve real life problems associated to progressions.
July	1st,2nd,3rd,4th ,5th &6th (1+6+5+6+5+1)	Chapter-2 Permutation And Combination	● Elementary Idea of Permutation ● To find the Number of Permutations of n different things taken r at the time ● Elementary Idea of Combination ● To find the Number of Combinations of n different things taken r at the time.	12+12	● Understand the concept of permutation and combination ● Develop the knowledge of solving the problems associated to permutation and combination ● Use permutation and combination in real life situation.

August	1st, 2nd &3rd (5+5+4)	Chapter-3 Determinants	● Introduction, Expansion And Properties of Determinants ● Uses of Determinants.	14	● find area of triangle ● understand properties ● simplify determinant ● solve system of equations using matrices.
August	4th &5th(6+3)	Chapter-4 Matrices	● Definition and Kinds of Matrices ● Laws of Matrix Algebra ● Laws of Matrix Multiplication Division.	9	● Use the method of gaus Jordan elimination to find the solution of system of of simultaneous linear equations ● Solve their system of linear equations by row-reducing its augmented form ● Determine whether or not a given matrix is invertible and if it is, find its inverse ● Perform the matrix operations of addition, multiplication and transposition and express a system of simultaneous linear equations in matrix form ● Evaluate the determinant of a 2×2 or 3×3 matrix and use the determinant to determine whether or not the given 2×2 matrix is invertible.

September	1st , 2nd & 3rd(2+5+4)	Chapter-5 Sets	● Definition, Notation and Kinds of sets	11	● Describe membership of sets including the empty set using proper notation and decide whether given items are members and determine the cardinality of a given set
			● Set Relations, Proper Sub-set		● Describe the relations between states regarding membership quality subset and proper subset using proper notation
			● Venn Diagrams and Power Set.		● Perform the operations of union intersection complement and difference on sets using proper notation
					● Draw and interpret Venn diagram of set relations and operations and use Venn diagrams to solve problems
					● Recognise when set theory is applicable to real life situations solve real life problems and communicate real life problems and solutions to others.
September	4th &5th(4+5)	Chapter-6 Differentiation	● Introduction, Increment, Differential Coefficients	9	● Understand the concept of differentiation
					● Connect differentiation to some problems of physics and geometry
October	1st & 2nd (5+6)		● General Rules of Differentiation.	11	● Develop the skill of solve the problems related to differentiation
					● Use the concept of differentiation in real life situation.

October	3rd ,4th &5th (5+3+2)	Chapter-7 Integration	● Introduction, Constant of Integration, Indefinite Integrals ● Basic Rules of Integration.	10	● Understand the concept of integration ● Learn the basic rules of integration ● Develop the skill of solving problems regarding integration ● Use the concept of integration in real life situation.
November	1st ,2nd ,3rd, 4th & 5th (4+6+2+4+3	Chapter-8 Measures of Central Tendency	● Mean ● Median ● Mode	19	● Understand the purpose of measures of Central tendency ● Calculate and interpret measures of Central tendency (mean, median, mode) for a set of data ● Identify the mode from a frequency distribution table or figure ● Understand the differences between statistics and parameters ● Understand the strengths and weaknesses of the mean median and mode as measures of Central tendency and when you might use one rather than the others.

| December | 1st &2nd (2+6) | Chapter-9 Geometric Mean and Harmonic Mean | ● Geometric Mean and Harmonic Mean | 8 | ● The central tendency summarises the most likely value of a variable and the average is the common name for the calculation of the mean

● The arithmetic mean is appropriate if the values have the same units whereas the geometric mean is appropriate if the values have differing units

● The harmonic may is appropriate if the data values are ratios of two variables with different measures are called rates. |

December	3rd & 4th (5+6)	Chapter-10 Time Series	● Trend or secular trend	11	● Understand and apply the concept and methods underlying the analysis of univariate time series and the context for interpretation of results
			● Seasonal variation		
			● Cyclical variation		● Decompose ho time series into trend seasonal and irregular components
			● Irregular movements		
			● Analysis of time series		● Understand the theoretical basis of different methods of time series analysis including decomposition
			● Mathematical models for time series		● Determine how and when to apply different methods of time series analysis and how to test for goodness of fit using the software package x12
			● Measurement of secular trend:- (a) freehand curve method (b) method of averages –Selected Point method, semi-average method, moving average method ● (c) Method of least squires:- Arithmetic Straight Line, Logarithmic Straight Line, Parabolic curve ● Seasonal Variation; Measurement of Cyclical Variation.		

Month	Week	Chapter	Topics	Periods	Learning Outcomes
January	1st , 2nd, 3rd & 4th (6+6+4+5)	Chapter-11 theory of probability	● Basic concepts random experiment sample space discrete events complementary events exhaustive event equal likely events ● Meaning and definition of probability theorems buys theorem permutation and combination in the theory of probability Bernoulli trials	21	● Calculate probabilities by applying probability loss and theoretical results ● Identify an appropriate probability distribution for a given discrete or continuous random variable and use its properties to calculate probabilities ● Derive probability distributions of functions of random variables ● Calculate probabilities for joint distributions including marginal and conditional probabilities ● Apply results from large sample theory and the central limit theorem to approximate a sampling distribution ● Implement basic simulation methods using statistical software to investigate sampling distributions.
February	1st, 2nd & 3rd (3+6+4)	Chapter-12 interpolation and extrapolation	● Meaning,importance, assumption, method of interpolation- graphical; algebraic; binomial expansion; Parabolic; Newton's method of finite; Newton's forwards and backward;Lagrange's; Newton-Gauss forward; backward;sterling's and Newton's divided difference methods.	13	● Understand the concept of interpolation and extrapolation ● Assume data using interpolation and extrapolation ● Develop the skill of solving problems regarding interpolation and extrapolation ● Use interpolation and extrapolation in real life situation.
February	4th & 5th (5+4)	Revision		9	