| Faculty Name | Course Name and Section | Paper Name | Month | Topics/Units | Course Planned % | Course Completed % | ICT Tools Used |
|---|---|---|---|---|---|---|---|
| Dr. Babita Gupta | B.Sc. (H) Mathematics IV A | Multivariate Calculus | January | Unit 1: Functions of Several Variables, level curve, surfaces | 10% | 5% | Projector, Computer |
| | | | February | Limit, Continuity, Differentiation, Maximal, Normal Property | 30% | 30% | |
| | | | march | Unit 2,3: Externa, Double and Triple Integration | 30% | 30% | |
| | | | April | Unit 4: Line Integral, Surface Integarl, Stokes & Divergence Theorem | 25% | 30% | |
| | | | May | Jacobian | 5% | 5% | |
| Dr. Neetu Rani | B.Sc. (H) Mathematics IV B | Numerical Analysis | January | Unit-I: Rate and order of convergence, Bisection Method, Method of False Position | 10% | 10% | Projector & Computer |
| | | | February | Unit-I: Fixed point iteration method, Newton's Method, Secant method, Their order of convergence and convergence analysis; Unit-II: LU decomposition and its applications. | 25% | 25% | |
| | | | March | Unit-II: Iterative methods: Gauss-Jacobi, Gauss-Seidel methods, Lagrange and Newton interpolation, Piecewise linear interpolation. | 25% | 25% | |
| | | | April | Unit-III: First and higher order approximation for the first derivative, Approximation for the second derivative, Numerical integration by closed Newton-Cotes formulae: Trapezoidal rule, Simpson's rule and its error analysis. | 35% | 35% | |
| | | | May | Unit-III: Modified Euler method, Runge-Kutta method (fourth-order). | 5% | 5% | |
| Prof. Surbhi Madan | B.Sc. (H) Mathematics IV A | Sequences and Series of Functions | January | Unit 1:Pointwise and uniform convergence of sequence of functions, The uniform norm, Cauchy criterion for uniform convergence. | 25% | 25% | Projector |
| | | | February | Unit 1:Continuity of the limit function of a sequence of functions, Interchange of the limit and derivative, limit and integral of a sequence of functions, Bounded convergence theorem. | 20% | 20% | |
| | | | March | Unit 2:Pointwise and uniform convergence of series of functions, continuity, differentiability and integrability of the sum function of a series of functions, Cauchy criterion, Weierstrass M-test | 20% | 20% | |

| Faculty Name | Course Name and Section | Paper Name | Month | Topics/Units | Course Planned % | Course Completed % | ICT Tools Used |
|---|---|---|---|---|---|---|---|
| | | | April | Unit 3 Definition of a power series, Radius of convergence, Absolute convergence (Cauchy- Hadamard theorem). | 20% | 20% | |
| | | | May | Unit 3:Weierstrass's approximation theorem; The exponential, logarithmic and trigonometric functions | 15% | 15% | |
| | | | January | Fundamental operations and properties of vectors in R(n), Linear combinations of vectors, Dot product and their properties, Cauchy-Schwarz and triangle inequality | 10% | 10% | Chalk & Board |
| | | | February | Orthogonal and parallel vectors; Solving system of linear equations using Gaussian elimination, and Gauss-Jordan row reduction, Reduced row echelon form; Equivalent systems, Rank and row space of a matrix; Eigenvalues, eigenvectors and characteristic polynomial of a square matrix; Diagonalization | 27% | 27% | Chalk & Board |
| Ashesh Kumar Jharwal | GE-2 | Introduction to Linear Algebra | March | Definition, examples and some elementary properties of vector spaces; Subspaces, Span, Linear independence and dependence | 18% | 18% | Chalk & Board |
| | | | May | The dimension theorem; | 10% | 10% | Chalk & Board |
| | | | April | Basis and dimension of a vector space; Diagonalization and bases, Definition, examples and elementary properties of linear transformations; The matrix of a linear transformation; Kernel and range of a linear transformation, one-to-one and onto linear transformations. | 35% | 35% | Chalk & Board |
| | | | January | Fundamental operations with vectors in Euclidean space R(n)[R], Linear combinations of vectors, Dot product and their properties, Cauchy-Schwarz inequality, Triangle inequality | 10% | 10% | Chalk & Board |
| | | | February | Solving system of linear equations using Gaussian elimination, Application: Curve Fitting, Gauss Jordan row reduction, Reduced row echelon form, Application: Solving several systems simultaneously, Equivalent systems, Rank and row space of a matrix; Eigenvalues, Eigenvectors, Eigenspace, Diagonalization, Characteristic polynomial of a matrix | 30% | 30% | Chalk & Board |
| Ashesh Kumar Jharwal | B.Sc. Physical Science with Computer Science , Sem-II | Elementary Linear Algebra | March | Definition, Examples and some elementary properties of vector spaces, Subspaces, Span, Linear independence and linear dependence of vectors, Basis and dimension of a vector space | 15% | 15% | Chalk & Board |
| | | | April | Maximal linearly independent sets, Minimal spanning sets, Linear transformations: Definition, Examples and elementary properties, The matrix of a linear transformation, Kernel and range of a linear transformation, The dimension theorem, one-to-one and onto linear transformations | 35% | 35% | Chalk & Board |
| | | | May | Invertible linear transformations, Isomorphic vector spaces. | 10% | 10% | Chalk & Board |

| Faculty Name | Course Name and Section | Paper Name | Month | Topics/Units | Course Planned % | Course Completed % | ICT Tools Used |
|---|---|---|---|---|---|---|---|
| Ashesh Kumar Jharwal | B.Sc., Physical Science with Chemistry , Sem-II | Elementary Linear Algebra | January | Fundamental operations with vectors in Euclidean space R(n)(I), Linear combinations of vectors, Dot product and their properties | 8% | 8% | Chalk & Board |
| | | | February | Cauchy-Schwarz inequality, Triangle inequality, Solving system of linear equations using Gaussian elimination, Application, Curve Fitting, Gauss Jordan row reduction, Reduced row echelon form, Application: Solving several systems simultaneously, Equivalent systems, Rank and row space of a matrix, Eigenvalues, Eigenvectors, Eigenspace, Diagonalization, Characteristic polynomial of a matrix | 35% | 35% | Chalk & Board |
| | | | March | Definition, Examples and some elementary properties of vector spaces, Subspaces, Span, Linear independence and linear dependence of vectors | 17% | 17% | Chalk & Board |
| | | | April | Basis and dimension of a vector space, Maximal linearly independent sets, Minimal spanning sets, Linear transformations: Definition, Examples and elementary properties, The matrix of a linear transformation, Kernel and range of a linear transformation, The dimension theorem, one-to-one linear transformations | 30% | 30% | Chalk & Board |
| | | | May | Onto linear transformations, Invertibl. linear transformations, Isomorphic vector spaces | 10% | 10% | Chalk & Board |
| Sunita | B.Sc. Physical Science with Chemistry | Abstract Algebra | February | Modular arithmetic: Definition. , examples of groups, Elementary properties of groups,Order of a group and order of an element of a group. | 10% | 10% | |
| | | | March | Subgroups and its examples, Subgroup Subgroup tests: Center of a group and centralizer of an element of a group | 30% | 25% | |
| | | | | cyclic group and its properties, Generators of a cyclic group.Group of symmetries: Permutation groups. | | | |
| | | | April | Cyclic decomposition of permutations and its properties, Even and odd permutations and the alternating group. | 30% | 35% | NA |
| | | | | Cosets and Lagrange's theorem; Definition and examples of normal subgroups, Quotient groups. | | | |
| | | | May | Group homomorphisms and properties,Definition, examples and properties of rings, subrings, integral domains, fields. | 30% | 30% | |
| | | | | Characteristic of a ring, Ideals and factor rings; Ring homomorphisms and properties. | | | |

| Faculty Name | Course Name and Section | Paper Name | Month | Topics/Units | Course Planned % | Course Completed % | ICT Tools Used |
|---|---|---|---|---|---|---|---|
| Sunita | B. Sc. Physical Science with Computer Science | Abstract Algebra | February | Modular arithmetic. Definition , examples of groups. Elementary properties of groups. Order of a group and order of an element of a group. | 10% | 10% | |
| | | | March | Subgroups and its examples, Subgroup Subgroup tests. Center of a group and cen*alizer of an element of a group | 30% | 25% | |
| | | | | cyclic group and its properties. Generators of a cyclic group.Group of symmetries. Permutation groups | | | |
| | | | April | Cyclic decomposition of permutations and its properties. Even and odd permutations and the alternating group. | 30% | 35% | |
| | | | | Cosets and Lagrange's theorem: Definition and examples of normal subgroups. Quotient groups. | | | |
| | | | May | Group homomorphisms and properties.Definition, examples and properties of rings. subrings. integral domains, fields. | 30% | 30% | Yes |
| | | | | Characteristic of a ring, Ideals and factor rings: Ring homomorphisms and properties. | | | |
| Sunita | Value Addition Course | Vedic Mathematics-1 | February | Unit-I: High Speed Addition and Subtraction | 25% | 22% | |
| | | | March | Unit-II: Miracle Multiplication and Excellent Division | 25% | 28% | |
| | | | April | Unit-III: Lightening Squares and Rapid Cubes | 35% | 33% | |
| | | | May | Unit-IV: Enlighten Algebra and Geometry, Characteristic of a ring, Ideals and factor rings: Ring homomorphisms and properties. | 15% | 17% | |
| Ankush Kumar | BSc (H) Mathematics VI A and B | Linear Programming and Applications | January | Unit-1 Introduction to Linear Programming :(Standard, Cononical and Matrix forms, Graphical Solutions, Convex Sets and their applications,Basic solutions and Basic Feasible Solutions. | 30% | 25% | |
| | | | February | Unit 1 & 2 Reduction of F.S to B.F.S Correspondence betwe... b.F.s and extreme points. Methods of Solving Linear Programming Problem: Simplex Method. | 25% | 20% | |
| | | | march | Unit-2 &3 Two Phase method,Big-M method. Duality Theory of Linear Programming. Motivation and formulation of dual problem , Primal- Dual relationships. | 25% | 25% | |
| | | | April | Unit-3 &4 Fundamental theory of duality, complimentary slackness condition. Transportation problem, Assignment Problem. | 30% | 25% | |

| Faculty Name | Course Name and Section | Paper Name | Month | Topics/Units | Course Planned % | Course Completed % | ICT Tools Used |
|---|---|---|---|---|---|---|---|
| Dr. Subedar Ram | BSc (H) Mathematics Sem-II Section A and P | Linear Algebra | May | Unit-4 Game theory | 5% | 5% | |
| | | | February | Fundamental operations with vectors in Euclidean space, Linear combinations of vectors, Dot product and their properties, Cauchy-Schwarz inequality, Triangle inequality. | 16% | 16% | |
| | | | March | Solving linear systems using Gaussian elimination, Gauss-Jordan row reduction, Reduced row echelon form, Equivalent systems. | 12% | 12% | |
| | | | April | Rank and row space, Eigenvalues, Eigenvectors, Eigenspace, Diagonalization, Characteristic polynomial of a matrix, Cayley-Hamilton theorem. | 12% | 12% | |
| | | | May | Application: Computer Graphics-Fundamental movements in a plane, homogenous coordinates, composition of movements. | 14% | 14% | |
| Dr. Subedar Ram | GENERIC ELECTIVES (GE-4) | Elements of Real Analysis | February | Unit-I: Field and order properties of , basic properties and inequalities of the absolute value of a real number; bounded above and bounded below sets, Suprema and infima, The completeness axiom and the Archimedean property of R . | 27% | 27% | |
| | | | March | Unit-II: Convergence of a real sequence, Algebra of limits, The squeeze principle and applications, Monotone sequences, Monotone convergence theorem and applications. | 25% | 25% | |
| | | | April | Cauchy sequences, Cauchy criterion for convergence and applications,Convergence and divergence of infinite series of real numbers, Necessary condition for convergence, Cauchy criterion for convergence of series. | 25% | 25% | |
| | | | May | Tests for convergence of positive term series, Applications of the integral test,Comparison tests, D'Alembert's ratio test, Cauchy's nth root test, Raabe's test, Alternating series, Leibniz alternating series test, Absolute and conditional convergence. | 23% | 23% | |
| Dr. Subedar Ram | Skill Enhancement Courses (SEC) | IT SKILL AND DATA ANALYSIS-II | February | Definition and graphical representation of a function, vertical line test | 5% | 5% | |
| | | | March | Polynomial functions: linear, quadratic and cubic functions,Polynomial functions: linear, quadratic and cubic functions, Concept of slope of a function through graphical representation | 35% | 35% | |
| | | | April | Scatter diagrams, Correlation analysis : measure and interpretation of correlation coefficient and coefficient of determination, Hypotheses, model specification and testing, Bi-variate regression analysis: method of least squares, curve of best fit as a modelfor prediction, Multiple Linear Regression. | 35% | 35% | |
| | | | May | Project Presentations and Viva | 25% | 25% | |

| Faculty Name | Course Name and Section | Paper Name | Month | Topics/Units | Course Planned % | Course Completed % | ICT Tools Used |
|---|---|---|---|---|---|---|---|
| Dr. Chandra Prakash | B.Sc. (H) Mathematics Sem-IV Section A | Numerical Analysis | February | Unit-I: Rate and order of convergence, Bisection Method, Method of False Position | 15% | 15% | Projector & Computer |
| | | | March | Unit-II: Fixed point iteration method, Newton's Method, Secant method, Their order of convergence and convergence analysis, LU decomposition and its applications. | 25% | 25% | |
| | | | April | Unit-III: Iterative methods: Gauss-Jacobi, Gauss-Seidel methods, Lagrange and Newton interpolation, Piecewise linear interpolation. | 25% | 25% | |
| | | | May | Unit-IV: First and higher order approximation for the first derivative, Approximation for the second derivative, Numerical integration by closed Newton-Cotes formulae: Trapezoidal rule, Simpson's rule and its error analysis. Unit-V: Modified Euler method, Runge-Kutta method (fourth-order). | 35% | 35% | |
| Dr. Chandra Prakash | B. Sc. (H) Mathematics Sem- IV Section B | Multivariate Calculus | February | Unit 1 : Functions of Several Variables, level curve, surfaces | 20% | 20% | Projector, Computer |
| | | | March | Limit, Continuity, Differentiation, Maximal, Normal Property | 25% | 25% | |
| | | | April | Unit 2,3: Externa, Double and Triple Integration | 20% | 20% | |
| | | | May | Unit 4: Line Integral, Surface Integarl, Stokes & Divergence Theorem, Jacobian | 35% | 35% | |
| Dr. Chandra Prakash | Value Addition Course | Vedic Mathematics-II | February | Unit-I: Contribution of Indian Mathematicians (Varahmihir, Brahmagupta, Srinivasa Ramanujan, Neelkanth Somayya, Bharti Krishna Tirth) | 30% | 30% | Computer, Projector |
| | | | March | Unit-II: Easy Solution of linear equations (Introduction of simple equation, Solutions of Simple equations, Solutions of Linear equations in two variables, Practical application of linear equations in two variables) | 25% | 25% | |
| | | | April | Unit- III: High Speed Matrix Algebra (Introduction and history of Matrices and Determinant, Matrices and Determinants of third order, Inverse of Matrices) | 15% | 15% | |
| | | | May | Unit-IV: Vedic Geometry | 30% | 30% | |

| Faculty Name | Course Name and Section | Paper Name | Month | Topics/Units | Course Planned % | Course Completed % | ICT Tools Used |
|---|---|---|---|---|---|---|---|
| Mr. Nitesh Kumar | B.Sc. (H) Mathematics, VI-A | Mathematical Finance | February | Unit-I Interest Rates | 25% | 25% | |
| | | | March | Unit-II: Mechanics and Properties of options | 25% | 25% | |
| | | | April | Unit-III: Stochastics Analysis of Stock Prices and Black-Scholes Model | 25% | 25% | |
| | | | May | Unit-IV: Hedging Parameters, Trading strategies and Swaps | 25% | 25% | |
| Dr. Uttam Kumar Sinha | B.Sc. (H) Mathematics, VI-A | Complex Analysis Including Practicals | January | Unit 1: Analytic Functions and Cauchy-Riemann Equations | 10% | 10% | |
| | | | February | Unit 1: Analytic Functions and Cauchy-Riemann Equations (Continued) | 15% | 15% | |
| | | | March | Unit 2: Elementary Functions and Integrals | 25% | 25% | |
| | | | April | Unit 3: Cauchy's Theorems and Fundamental Theorem of Algebra | 25% | 25% | |
| | | | May | Unit 4: Series and Residues | 25% | 25% | |
| Dr. Uttam Kumar Sinha | B.Sc.,(H) Mathematics, VI-B | Ring Theory & Linear Algebra-II | January | Unit 1: Polynomial Rings and Unique Factorization Domain (UFD) | 10% | 10% | |
| | | | February | Unit 1: Polynomial Rings and Unique Factorization Domain (UFD) Continued | 15% | 15% | |
| | | | March | Unit 2: Dual Spaces and Diagonalizable Operators | 25% | 25% | |
| | | | April | Unit 3: Inner Product Spaces | 25% | 25% | |
| | | | May | Unit 4: Adjoint Operators and Their Properties | 25% | 25% | |

| Faculty Name | Course Name and Section | Paper Name | Month | Topics/Units | Course Planned % | Course Completed % | ICT Tools Used |
|---|---|---|---|---|---|---|---|
| Manish Kumar Meena | B.Sc., (H) Mathematics Sem-II | Ordinary Differential Equations | January | UNIT – I: First-Order Differential Equations | 15% | 15% | |
| | | | February | UNIT – I: First-Order Differential Equations Continued, UNIT - II: Second and Higher-Order Differential Equations | 20% | 20% | |
| | | | March | UNIT - II: Second and Higher-Order Differential Equations Continued | 25% | 25% | |
| | | | April | UNIT – III: Formulation and Analysis of Mathematical Models | 30% | 30% | |
| | | | May | UNIT – III: Formulation and Analysis of Mathematical Models Continued | 10% | 10% | |
| Dr Jeetendra Aggarwal | B.Sc., (H) Mathematics Sem VI B | Complex Analysis | January | Unit 1: Analytic Functions and Cauchy–Riemann Equations | 25% | 25% | |
| | | | February | Unit 2: Elementary Functions and Integrals | 25% | 25% | |
| | | | March | Unit 3 :Cauchy's Theorems and Fundamental Theorem of Algebra | 20% | 20% | NA |
| | | | April | Unit 4: Series and Residues | 25% | 25% | |
| | | | May | Unit 4: Series and Residues (Continued) | 5% | 5% | |
| Dr Jeetendra Aggarwal | B.Sc., (H) Mathematics Sem VI | Complex Analysis Practicals | January | Practical no. 1,2,3,4 and 5 | 25% | 25% | |
| | | | February | Practical no. 6, 7, 8 and 9 | 25% | 25% | Mathematica Software, Projector and Computer |
| | | | March | Practical no. 10,11, 12 | 20% | 20% | |
| | | | April | Practical no. 13,14, 15, 16 and 17 | 30% | 30% | |

| Faculty Name | Course Name and Section | Paper Name | Month | Topics/Units | Course Planned % | Course Completed % | ICT Tools Used |
|---|---|---|---|---|---|---|---|
| Dr. Aparna Jain | B.Sc. (H) Mathematics Sem VI | Ring Theory and Linear Algebra 2 | January | Unit 1- Polynomial rings | 20% | 20% | |
| | | | February | Unit 1 and Unit 2- Unique factorization domain, Dual space | 25% | 20% | |
| | | | March | Unit 2, 3- Diagonalizable operators, Inner product spaces | 25% | 20% | |
| | | | April | Unit 3- Inner product space | 25% | 20% | |
| | | | May | Unit 4- Adjoint operators and their properties | 5% | 20% | |
| Dr Rashmi Agrawal | B.Sc. (H) Mathematics VI - B | Mathematical Finance | February | Unit-I: Interest Rates | 25% | 15% | |
| | | | March | Unit-II: Mechanics and Properties of options | 25% | 30% | NA |
| | | | April | Unit-III: Stochastics Analysis of Stock Prices and Black-Scholes Model | 25% | 25% | |
| | | | May | Unit-IV: Hedging Parameters, Trading strategies and Swaps | 25% | 30% | |
| Dr Rashmi Agrawal | Value Addition Course (VAC) | Vedic Mathematics - I | February | Unit-I: High Speed Addition and Subtraction | 30% | 25% | |
| | | | March | Unit-II: Miracle Multiplication and Excellent Division | 30% | 30% | NA |
| | | | April | Unit-III: Lightening Squares and Rapid Cubes | 25% | 30% | |
| | | | May | Unit-IV: Enlighten Algebra and Geometry | 15% | 15% | |

| Faculty Name | Course Name and Section | Paper Name | Month | Topics/Units | Course Planned % | Course Completed % | ICT Tools Used |
|---|---|---|---|---|---|---|---|
| Dr Rashmi Agrawal | Skill Enhancement Courses (SEC) | IT SKILL AND DATA ANALYSIS-II | February | Definition and graphical representation of a function, vertical line test | 15% | 15% | Computer, Projector |
| | | | March | Polynomial functions: linear, quadratic and cubic functions.Polynomial functions: linear, quadratic and cubic functions, Concept of slope of a function through graphical representation | 30% | 30% | |
| | | | April | Scatter diagrams, Correlation analysis : measure and interpretation of correlation coefficient and coefficient of determination, Hypotheses, model specification and testing. Bi-variate regression analysis: method of least squares, curve of best fit as a modelfor prediction, Multiple Linear Regression,. | 30% | 30% | |
| | | | May | Project Presentations and Viva | 25% | 25% | |

| Faculty Name | Course Name and Section | Paper Name | Month | Topics/Units | Course Planned % | Course Completed % | ICT Tools Used |
|---|---|---|---|---|---|---|---|
| Jitendra Singh | B.Sc Physical Science with Chemistry , Sem-VI | Numerical Methods | January | Floating point representation and computer arithmetic, Significant digits, Errors: Roundoff error, Local truncation error, Global truncation error; Order of a method, Convergence and terminal conditions, | 10% | 10% | |
| | | | February | Bisection method, Secant method, Regula–Falsi method, Newton–Raphson method, Gaussian elimination method (with row pivoting), Gauss–Jordan method, Iterative methods: Jacobi method, Gauss–Seidel method; | 25% | 25% | |
| | | | March | Interpolation: Lagrange form, Newton form, Finite difference operators, Gregory–Newton forward and backward difference interpolations, Piecewise polynomial interpolation (Linear and quadratic) | 25% | 25% | |
| | | | April | Numerical differentiation: First and second order derivatives, Richardson extrapolation method, Numerical integration: Trapezoidal rule, Simpson's rule, | 30% | 30% | |
| | | | May | Ordinary differential equation: Euler's method, Modified Euler's methods (Heun's and midpoint) | 10% | 10% | Computer, Projector |
| Jitendra Singh | B.Sc Applied Physical Science with CS Sem-VI | Numerical Methods | January | Floating point representation and computer arithmetic, Significant digits, Errors: Roundoff error, Local truncation error, Global truncation error, Order of a method, Convergence and terminal conditions. | 10% | 10% | |
| | | | February | Bisection method, Secant method, Regula–Falsi method, Newton–Raphson method, Gaussian elimination method (with row pivoting), Gauss–Jordan method, Iterative methods: Jacobi method, Gauss–Seidel method. | 25% | 25% | |
| | | | March | Interpolation: Lagrange form, Newton form, Finite difference operators, Gregory–Newton forward and backward difference interpolations, Piecewise polynomial interpolation (Linear and quadratic) | 25% | 25% | |
| | | | April | Numerical differentiation: First and second order derivatives, Richardson extrapolation method, Numerical integration: Trapezoidal rule, Simpson's rule, | 30% | 30% | |
| | | | May | Ordinary differential equation: Euler's method, Modified Euler's methods (Heun's and midpoint) | 10% | 10% | |

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| Faculty Name | Course Name and Section | Paper Name | Month | Topics Covered | Course Planned | Course Completed | ICT Tools |
|---|---|---|---|---|---|---|---|
| Dr Deepti | B.Sc (H) Maths I Section A and B | Calculus | January+[ | Limits of functions (ε – δ and sequential approach), Algebra of limits, Squeeze theorem, One-sided limits, Infinite limits and limits at infinity,Continuous functions and its properties on closed and bounded intervals; Uniform continuity | 20 | 20 | Computer Projector |
| | | | February | Differentiability of a real-valued function, Algebra of differentiable functions, Chain rule, Relative extrema, Interior extremum theorem, | 20 | 20 | |
| | | | March | Rolle's theorem, Mean-value theorem and its applications, Intermediate value theorem for derivatives.Higher order derivatives and calculation of the nth derivative, Leibnitz's theorem; | 30 | 30 | |
| | | | April | Taylor's theorem, Taylor's series expansions of ex, sin x, cos x. Indeterminate forms, L'Hôpital's rule; Concavity and inflexion points; Singular points, Asymptotes, | 20 | 20 | |
| | | | May | Tracing graphs of rational functions and polar equations. | 10 | 10 | |