

Kanya Mahavidyalaya, Kharkhoda (Sonepat)

Lesson Plan Session 2020-21

Name of the Assistant/Associate Professor:	Dr. Sushma
Class and Section:	B.A. 1 st Year
Subject:	Mathematics
Paper:	Vector Calculus
Year/Semester:	1 st Year/2 nd Semester

16 March 2021 to 15 April 2021

Month/Week	Topic
March(Week-3)	Scalar and Vector Product of three Vectors
March(Week-4)	Scalar and Vector Product of four Vectors and Reciprocal Vectors
April (Week-1)	Revision and Tests
April (Week-2)	Differentiation of Vectors

16 April 2021 to 15 May 2021

Month/Week	Topic
April (Week-3)	Gradient of Vectors
April (Week-4)	Divergence of Vectors
May(Week-1)	Curl of Vectors and Laplace of Vectors
May (Week-2)	Revision and Tests

16 May 2021 to 15 June. 2021

Month/Week	Topic
May (Week-3)	Curvilinear coordinates
May (Week-4)	Vector Integration : Line Integral
June (Week-1)	Vector Integration: Surface Integral and Volume Integral
June (Week-2)	Revision and Tests

16 June 2021 to 06 July 2021

Month/Week	Topic
June (Week-3)	Gauss Theorem
June (Week-4)	Stokes' and Green's Theorem
July (Week-1)	Revision and Tests

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Lesson Plan Session 2020-21

Name of the Assistant/Associate Professor:	Mrs. Shalini
Class and Section:	B.A. 1st Year
Subject:	Mathematics
Paper:	Number Theory and Trigonometry
Year/Semester:	1st Year/ 2nd Semester

16 March 2021 to 15 April 2021

Month/Week	Topic
March(Week-3)	Divisibility
March(Week-4)	Congruences
April (Week-1)	Fermet's, Willson's and Chinese Remainder Theorem
April (Week-2)	Revision and Tests

16 April 2021 to 15 May 2021

Month/Week	Topic
April (Week-3)	Euler's Function and Residue System
April (Week-4)	Some functions of Number Theory
May(Week-1)	Quadratic Residue and Reciprocity Law
May (Week-2)	Revision and Tests

16 May 2021 to 15 June. 2021

Month/Week	Topic
May (Week-3)	De-Moiver's Theorem and related Examples
May (Week-4)	Applications of De-Moiver's Theorem
June (Week-1)	Circular and Hyperbolic Functions of a complex variables
June (Week-2)	Revision and Tests

16 June 2021 to 06 July 2021

Month/Week	Topic
June (Week-3)	Logarithm of a Complex Quantity, Inverse Circular and Inverse Hyperbolic Functions
June (Week-4)	Summation of Series
July (Week-1)	Revision and Tests

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Lesson Plan Session 2020-21

Name of the Assistant/Associate Professor:	Dr. Sushma
Class and Section:	B.A. 1 st Year
Subject:	Mathematics
Paper:	Ordinary Differential Equations
Year/Semester:	1 st Year/2 nd Semester

16 March 2021 to 15 April 2021

Month/Week	Topic
March(Week-3)	Exact Differential Equations
March(Week-4)	Equations of first order but not first degree: Lagrange's equation
April (Week-1)	Equations of first order but not first degree: Clairaut's equation and singular solution
April (Week-2)	Revision and Tests

16 April 2021 to 15 May 2021

Month/Week	Topic
April (Week-3)	Orthogonal Trajectories
April (Week-4)	Linear Differential equations with constant coefficients
May(Week-1)	Linear Differential equations with constant coefficients- continued
May (Week-2)	Homogeneous linear equations

16 May 2021 to 15 June. 2021

Month/Week	Topic
May (Week-3)	Revision and Tests
May (Week-4)	Linear differential equations of second degree
June (Week-1)	Linear differential equations of second degree- continued
June (Week-2)	Revision and Tests

16 June 2021 to 06 July 2021

Month/Week	Topic
June (Week-3)	Ordinary simultaneous differential equations
June (Week-4)	Total differential equations
July (Week-1)	Revision and Tests

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Lesson Plan Session 2020-21

Name of the Assistant/Associate Professor:	Dr. Sushma Devi
Class and Section:	B.A. 1st Semester
Subject:	Mathematics
Paper:	Algebra
Year/Semester:	1st year/ 1st semester

06 Oct. 2020 to 05 Nov. 2020

Month/Week	Topic
October (Week-2)	<ul style="list-style-type: none">• Matrices
October (Week-3)	<ul style="list-style-type: none">• Linear dependence and independence of rows and columns of Matrices.• Orthogonal and unitary matrix
October (Week-4)	<ul style="list-style-type: none">• Rank of a matrix
November (Week-1)	<ul style="list-style-type: none">• Revision and Tests

06 Nov. 2020 to 05 Dec. 2020

Month/Week	Topic
November (Week-2)	<ul style="list-style-type: none">• Characteristic equation of a matrix
November (Week-3)	<ul style="list-style-type: none">• Minimal Polynomial of a Matrices• Cayley-Hamilton Theorem
November (Week-4)	<ul style="list-style-type: none">• Applications of matrices to a system of linear equations
December (Week-1)	<ul style="list-style-type: none">• Revision and Tests

06 Dec. 2020 to 05 Jan. 2021

Month/Week	Topic
December (Week-2)	<ul style="list-style-type: none">• Bilinear and Quadratic forms
December (Week-3)	<ul style="list-style-type: none">• Relation between the roots and coefficients of an equation
December (Week-4)	<ul style="list-style-type: none">• Relation between the roots and coefficients of an equation
January (Week-1)	<ul style="list-style-type: none">• Revision and Tests

05 Jan. 2021 to 06 Feb. 2021

Month/Week	Topic
January (Week-2)	<ul style="list-style-type: none">• Transformation of equations
January (Week-3)	<ul style="list-style-type: none">• Solution of cubic Equation
January (Week-4)	<ul style="list-style-type: none">• Solution of bi-quadratic equations
February (Week-1)	<ul style="list-style-type: none">• Revision and Tests

06 Feb. 2021 to 25 Feb. 2021

Month/Week	Topic
February (Week-2)	<ul style="list-style-type: none">• Descarte's Rule of signs
February (Week-3)	<ul style="list-style-type: none">• Revision and Tests
February (Week-4)	<ul style="list-style-type: none">• Revision and Tests

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Lesson Plan Session 2020-21

Name of the Assistant/Associate Professor:	Mrs. Shalini
Class and Section:	B.A. 1st Semester
Subject:	Mathematics
Paper:	Calculus
Year/Semester:	1st year/ 1st semester

06 Oct. 2020 to 05 Nov. 2020

Month/Week	Topic
October (Week-2)	<ul style="list-style-type: none">• Limit and Continuity
October (Week-3)	<ul style="list-style-type: none">• Derivability
October (Week-4)	<ul style="list-style-type: none">• Successive Derivative
November (Week-1)	<ul style="list-style-type: none">• Revision and Tests

06 Nov. 2020 to 05 Dec. 2020

Month/Week	Topic
November (Week-2)	<ul style="list-style-type: none">• Leibnitz Theorem and Examples
November (Week-3)	<ul style="list-style-type: none">• Taylors Theorem and Maclaurin Theorem with examples
November (Week-4)	<ul style="list-style-type: none">• Expansion with differential equations
December (Week-1)	<ul style="list-style-type: none">• Revision and Tests

06 Dec. 2020 to 05 Jan. 2021

Month/Week	Topic
December (Week-2)	<ul style="list-style-type: none">• Asymptotes
December (Week-3)	<ul style="list-style-type: none">• Curvature
December (Week-4)	<ul style="list-style-type: none">• Singular Points
January (Week-1)	<ul style="list-style-type: none">• Revision and Tests

05 Jan. 2021 to 06 Feb. 2021

Month/Week	Topic
January (Week-2)	<ul style="list-style-type: none">• Curve Tracing
January (Week-3)	<ul style="list-style-type: none">• Reduction formula
January (Week-4)	<ul style="list-style-type: none">• Rectification
February (Week-1)	<ul style="list-style-type: none">• Revision and Tests

06 Feb. 2021 to 25 Feb. 2021

Month/Week	Topic
February (Week-2)	<ul style="list-style-type: none">• Quadrature
February (Week-3)	<ul style="list-style-type: none">• Volume and Surface of Solids of Revolution
February (Week-4)	<ul style="list-style-type: none">• Revision and Tests

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Lesson Plan Session 2020-21

Name of the Assistant/Associate Professor:	Dr. Sushma Devi
Class and Section:	B.A. 1st Semester
Subject:	Mathematics
Paper:	Solid Geometry
Year/Semester:	1st year/ 1st semester

06 Oct. 2020 to 05 Nov. 2020

Month/Week	Topic
October (Week-2)	<ul style="list-style-type: none">• General Equations of Second Degree
October (Week-3)	<ul style="list-style-type: none">• Tracing of the Conic
October (Week-4)	<ul style="list-style-type: none">• System of Conics
November (Week-1)	<ul style="list-style-type: none">• Revision and Tests

06 Nov. 2020 to 05 Dec. 2020

Month/Week	Topic
November (Week-2)	<ul style="list-style-type: none">• Confocal Conics
November (Week-3)	<ul style="list-style-type: none">• Polar Equation of Conics
November (Week-4)	<ul style="list-style-type: none">• Sphere
December (Week-1)	<ul style="list-style-type: none">• Radical Plane and Co-axal system of Spheres

06 Dec. 2020 to 05 Jan. 2021

Month/Week	Topic
December (Week-2)	<ul style="list-style-type: none">• Revision and Tests
December (Week-3)	<ul style="list-style-type: none">• Cone
December (Week-4)	<ul style="list-style-type: none">• Cylinder
January (Week-1)	<ul style="list-style-type: none">• Revision and Tests

05 Jan. 2021 to 06 Feb. 2021

Month/Week	Topic
January (Week-2)	<ul style="list-style-type: none">• Conicoid
January (Week-3)	<ul style="list-style-type: none">• Plane Section of Conicoid
January (Week-4)	<ul style="list-style-type: none">• Generating lines and Confocal Conicoids
February (Week-1)	<ul style="list-style-type: none">• Revision and Tests

06 Feb. 2021 to 25 Feb. 2021

Month/Week	Topic
February (Week-2)	<ul style="list-style-type: none">• Reduction of Second Degree Equation
February (Week-3)	<ul style="list-style-type: none">• Revision and Tests
February (Week-4)	<ul style="list-style-type: none">• Revision and Tests