Pimpri Chinchwad Education Trust's

S.B.Patil College Of Science and Commerce

Sr. no. 110, Gate No 1, Ravet, Pune- 412101

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UDISE NO: 27252001412 College Index No : J.11.16.066

Teaching Plan (TP)

	Std :- 12 th	**Subject - Mathematics**		subject-code-40	
	stream : Science	**Division:B division**		**Faculty Name ;-**	Bittu kumar

Sr.No.	Lesson No.	Name Of The Topic	Planned date of commencing	Planned date of completion	PPT,White board
1	**Derivative**	1.Derivative of composite functionEx-1.1	1,2/6/22	1,2/6/22	PPT,White board
		2.Derivative of Inverse function Ex-1.2	3,6/6/22	3,6/22	PPT,White board
		3.Logarithmic Function ,Derivative of Implicit Function Ex – 1.3	8,9/6/22	8,9/6/22	PPT,White board
		4.Derivative of Parametric Function and derivative of one function with respect to another With respect to another Ex – 1.4	10,13/6/22	10,13/6/22	PPT,White board
		5. Higher order Derivative Ex-1.5	15,16/6/22	15,16/6/22	PPT,White board
2	**Application of Derivative**	1.Application of derivative in geometry, Derivative of rate measure, velocity,Accn and Jerk .Ex-2.1	17,20/6/22	17,20/6/22	PPT,White board
		2.Approximation Ex-2.2	22,23/6/22	22,23/6/22	PPT,White board
		3. Rolle's Theorem and LMVT Ex – 2.3	24,27/6/22	24,27/6/22	PPT,White board
		4. Increasing and decreasing function, Maxima and Minima. Ex – 2.4	29,30/6/22	29,30/6/22	PPT,White board
3	**Trigonometric function**	1.Solution of Trigonometric function, Principal solution, General soln.Ex-3.1	1,4/7/22	1,4/7/22	PPT,White board
		2.Solution of triangle	6,7,8/7/22	6,7,8/7/22	PPT,White board
		,Sine rule, cosine rule, projection rule			PPT,White board
		Half angle formula ,Napier's Analogy Ex -3.2	11,13/7/22	11,13/7/22	PPT,White board
		3. Inverse tri. Function, Principal value of Inve. Tri. Function. Ex – 3.3	14,15/7/22	14,15/7/22	PPT,White board
4	**Indefinite Integration**	1.Elementary integration formulae,	18,20/7/22	18,20/7/22	PPT,White board
		Rules or theorem of integration Ex-3.1			
		2. Methods of Integration	21,22/7/22	21,22/7/22	PPT,White board
		Substitution Ex – 3.2 (A)	25,27/7/22	25,27/7/22	PPT,White board
		3.Some special Integral Ex-3.2 (B)	28,29/7/22	28,29/7/22	PPT,White board
		4.Different Types of integral Ex-3.2 (c)	1,8/8/22	1,8/8/22	PPT,White board
		5.Integration by parts Ex- 3.3	10,12/8/22	10,12/8/22	PPT,White board
		6.Integration by partial fraction Ex-3.4	16,17/8/22	16,17/8/22	PPT,White board
5	**Definite Integration**	1.Fundamental theorem of integral calculus	18,19/8/22	18,19/8/22	PPT,White board
		2. Properties of definite integral with proof.Ex -4.2	22,24/8/22	22,24/8/22	PPT,White board
					PPT,White board
6	**Application of definite integral**	1.Area under the curve Ex-5.1	25,26/8/22	25,26/8/22	PPT,White board

7	**Differential Equation**	1.Defn. of differential Equation , order and Degree of Differential equation Ex-6.1	29,30/8/22	29,30/8/22	PPT,White board
		2. Formation of Differential equation Ex-6.2	1,2/9/22	1,2/9/22	PPT,White board
		3. Solution of differential equation Ex-6.3	5,7/9/22	5,7/9/22	PPT,White board
		4. Homogeneous Differential equation Ex-6.4	8,12/9/22	8,12/9/22	PPT,White board
		5. Linear Differential Eqn Ex-6.5	14,15/9/22	14,15/9/22	PPT,White board
7	**Differential Equation**	6.Application of differential equation			
		a) Population Growth and growth of bacteria			
		b) Radio active decay			
		c) Newton's Law of cooling ,			
		Surface Area Ex-6.5	16,19/9/22	16,19/9/22	PPT,White board
8	**Logic**	1.Statement ,Truth value of Statement ,			PPT,White board
		Logical connectives ,simple and compound statement Ex-1.1	21/9/22	21/9/22	PPT,White board
		2. Statement pattern, logical equivalence ,Tautology, Contradiction ,Contingency Ex-1.2	22,23/9/22	22,23/9/22	PPT,White board
		3.Quantifiers,Quantified statement ,Duals,			
		Negation of compound statement,converse.inverse and contrapositive	26,28/9/22	26,28/9/22	PPT,White board
		Of implication. Ex-1.3			PPT,White board
		4.Algebra of statement Ex-1.4	29,30/9/22	29,30/9/22	PPT,White board
		5. Application of logic to switching circuit.Ex-1.5	3/10/2022	3/10/2022	PPT,White board
9	**Matrices**	1.Elementary Transformation , Inverse of matrix Ex-2.1	4/10/2022	4/10/2022	PPT,White board
		a) Inverse of a nonsingular matrix by elementary transformation	6,7/10/22	6,7/10/22	PPT,White board
		b)Inverse of a square matrix by adjoint method Ex-2.2	31/10/22	31/10/22	PPT,White board
		2. Application of matrices	2,3/11/22	2,3/11/22	PPT,White board
		a) Method of inversion	4,7/11/22	4,7/11/22	PPT,White board
		b) Method of Reduction Ex-2 .3	9/11/2022	9/11/2022	PPT,White board
10	**Pair of straight line**	1.combined equation of pair of lines ,			
		Homogeneous equation of degree 2 Ex-4.1	10,11/11/22	10,11/11/22	PPT,White board
		2. Angle between lines represented by ax2+2hxy +by2=0 Ex-4.2	14/11/22	14/11/22	PPT,White board
		3. General second Degree Equation in x and y			
		Ex-4.3	16/11/22	16/11/22	PPT,White board
11	**Vectors**	1.Representation of Vector , Magnitude of	17/11/22	17/11/22	PPT,White board
		Vector , Types of Vector , Algebra of Vector ,	18/11/22	18/11/22	PPT,White board
		Vector in 2D, Three dimensional co-ordinate system, component of vector ,position vector of a point in a space Ex-5.1	21/11/22	21/11/22	PPT,White board
		2.Section Formula ,midpoint formula ,theorems, Ex-5.2	23/11/22	23/11/22	PPT,White board
		3. Product of Vectors, Angle between two vectors, projection ,Direction angles and Direction cosines Ex-5.3	24,25/11/22	24,25/11/22	PPT,White board
		4. Vector Product of two vectors Ex-5.4	28/11/22	28/11/22	PPT,White board
		5. Scalar Triple product ,vector Triple Product Ex-5.5	29,30/11/22	29,30/11/22	PPT,White board

12	**Line and Plane**	1.Vector and Cartesian equation of a line ,equation of a line passing through a given point and parallel to given vector ,equation of a line passing through given two point Ex-6.1	1,2/12/22	1,2/12/22	PPT,White board
		2. Distance of a point from a line, Distance between skew lines , Distance between parallel lines Ex-6.2	5/12/22	5/12/22	PPT,White board
		4. Equations of Plane , Equation of plane passing through a point and perpendicular to a vector , Cartesian form Ex-6.3	7,8,9/12/22	7,8,9/12/22	PPT,White board
		5. Angle between planes Ex-6.4	12/12/22	12/12/22	PPT,White board
13	**Linear Programming**				
		1.Convex Set Ex-7.1	14/12/22	14/12/22	PPT,White board
		2. Graphical Solution Ex-7.2	15/12/22	15/12/22	PPT,White board
		3. Meaning of LPP , Formulation Ex – 7.3	16/12/22	16/12/22	PPT,White board
		4.Solution of LPP ,Corner point method Ex-7.4	19/12/22	19/12/22	PPT,White board
14	**Probability Distribution**	1.Random Variable , Types of random variable a) Discrete b) Continuous , Probability Distribution of discrete Randon Variable, Prbability mass Function , cumulative distribution function , Expected value and variance of a random variable Ex-7.1	21,22,23/12/22	21,22,23/12/22	PPT,White board
		2. Probability Distribution of continuous random variable , Probability density function , cumulative Distribution function . Ex-7.2	26,28/12/22	26,28/12/22	PPT,White board
15	**Binomial Distribution**	1.Bernoulli Trial , Binomial distribution	29/12/22	29/12/22	PPT,White board
		2. Mean and variance of Binomial Distribution	30/12/22	30/12/22	PPT,White board
		Ex-8.1			PPT,White board

	Mr.Bittu kumar	Mrs.Kalyani Bhondve		Mr.S.N Patile
	Subject Teacher	Academic Co-ordinator		principal