DISCIPLINE:	SEMESTER: 2ND Sem	NAME OF THE TEACHING FACULTY: Mr.GANESH MAHARATHY		
SUBJECT: ENGINEERING MATHEMATICS II	**No of Days/Per week class allotted**: **5** Class P/W(75)	**Semester From Date:29/01/2024 To Date:14/05/2024 No. Of Weeks**: 15		
WEEK	**CLASS DAY**	**THEORY TOPICS** **PART-1 (VECTOR ALGEBRA)**	**REMARKS**	
1st	1st	Introduction	Date	Dean/Principal
	2nd	Types of vectors (null vector, parallel vector , collinear vectors) (in component form)		
	3rd	Types of vectors (null vector, parallel vector , collinear vectors) (in component form)		
	4th	Types of vectors (null vector, parallel vector , collinear vectors) (in component form)		
	5th	Representation of vector		
2nd	1st	Magnitude and direction of vectors		
	2nd	Addition and subtraction of vectors		
	3rd	Position vector		
	4th	Scalar product of two vectors		

	5th	Geometrical meaning of dot product		
3rd	1st	Angle between two vectors		
	2nd	Scalar and vector projection of two vectors		
	3rd	Scalar and vector projection of two vectors		
	4th	Vector product and geometrical meaning (Area of triangle and parallelogram)		
	5th	Vector product and geometrical meaning (Area of triangle and parallelogram)		
4th	1st	**PART 2) LIMITS AND CONTINUITY :** Definition of function, based on set theory		
	2nd	Types of functions		
	3rd	Constant function		
	4th	Identity function		
	5th	Absolute value function		
5th	1st	The Greatest integer function		
	2nd	Trigonometric function		
	3rd	Exponential function		

	4th	Logarithmic function		
	5th	Existence of limit		
6th	1st	Methods of evaluation of limit		
	2nd	Definition of continuity of a function at a point and problems based on it		
	3rd	**PART 3) DERIVATIVES:** Derivative of a function at a point		
	4th	Derivative of a function at a point		
	5th	Algebra of derivative		
7th	1st	Algebra of derivative		
	2nd	Algebra of derivative		
	3rd	Derivative of standard functions		
	4th	Derivative of standard functions		
	5th	Derivative of standard functions		
	1st	Derivative of composite function (Chain Rule)		
	2nd	Derivative of composite function (Chain Rule)		

8th	3rd	e) Methods of differentiation of i) Parametric function ii) Implicit function iii) Logarithmic function		
	4th	e) Methods of differentiation of i) Parametric function ii) Implicit function iii) Logarithmic function		
	5th	e) Methods of differentiation of i) Parametric function ii) Implicit function		
9th	1st	e) Methods of differentiation of i) Parametric function ii) Implicit function iii) Logarithmic function		
	2nd	iv) a function with respect to another function		
	3rd	iv) a function with respect to another function		
	4th	iv) a function with respect to another function		
	5th	f) Applications of Derivative i) Successive Differentiation (up to		
	1st	f) Applications of Derivative i) Successive Differentiation (up to		

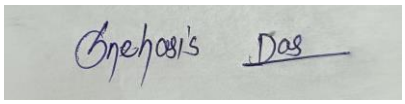
10th	2nd	f) Applications of Derivative i) Successive Differentiation (up to second order)		
	3rd	f) Applications of Derivative i) Successive Differentiation (up to		
	4th	**PART 4) INTEGRATION :** Definition of integration as inverse of differentiation		
	5th	Definition of integration as inverse of differentiation		
11th	1st	Integrals of standard functions		
	2nd	Integrals of standard functions		
	3rd	Integrals of standard functions		
	4th	c) Methods of integration i) Integration by substitution ii) Integration by parts		
	5th	c) Methods of integration i) Integration by substitution ii) Integration by parts		

12th	1st	c) Methods of integration i) Integration by substitution ii) Integration by parts		
	2nd	Integration of some special functions.		
	3rd	Integration of some special functions.		
	4th	Integration of some special functions.		
	5th	Definite integral, properties of definite integrals		
13th	1st	Definite integral, properties of definite integrals		
	2nd	Application of integration i) Area enclosed by a curve and X – axis ii) Area of a circle with centre at origin		
	3rd	Application of integration i) Area enclosed by a curve and X – axis ii) Area of a circle with centre at origin		
	4th	**PART 5) DIFFERENTIAL EQUATION** : Order and degree of a differential equation		
	5th	Order and degree of a differential equation		

14th	1st	Solution of differential equation i) 1st order and 1st degree equation by the method of separation of variables ii) Linear equation dy/dx + py= Q , where P,Q are functions of x		
	2nd	Solution of differential equation i) 1st order and 1st degree equation by the method of separation of variables ii) Linear equation dy/dx + py= Q , where P,Q are functions of x		
	3rd	Solution of differential equation i) 1st order and 1st degree equation by the		
	4th	Solution of differential equation i) 1st order and 1st degree equation by the method of separation of variables ii) Linear equation dy/dx + py= Q , where P,Q are functions of x		

	5th	Solution of differential equation i) 1st order and 1st degree equation by the method of separation of variables ii) Linear equation dy/dx + py= Q , where P,Q are functions of x		
	1st	Solution of differential equation i) 1st order and 1st degree equation by the		
	2nd	Solution of differential equation i) 1st order and 1st degree equation by the method of separation of variables ii) Linear equation dy/dx + py= Q , where P,Q are functions of x		
15th	3rd	Solution of differential equation i) 1st order and 1st degree equation by the method of separation of variables ii) Linear equation dy/dx + py= Q , where P,Q are functions of x		

	4th	Solution of differential equation i) 1st order and 1st degree equation by the method of separation of variables ii) Linear equation dy/dx + py= Q , where P,Q are functions of x		
	5th	Solution of differential equation i) 1st order and 1st degree equation by the method of separation of variables ii) Linear equation dy/dx + py= Q , where P,Q are functions of x		



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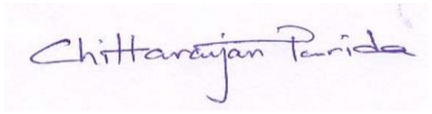

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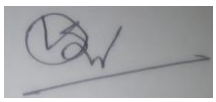

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