

Discipline: MATHEMATICS & SCIENCE		Semester: 2nd Semester	Name of the Teaching Faculty: DEEPAK KUMAR SAHOO & DHARASHREE PUTHAL		
Subject:ENGINEERING MATHEMATICS-II Sub code: Th-03		No of days /week class allotted:06	Semester from Date:14.03.2022 to 18.06.2022		
Month	week	Class Day	Theory topics	%covered	Remark
MARCH	1 <sup>st</sup>	1 <sup>st</sup>	Definition of function by set theory		
		2 <sup>nd</sup>	Types of functions		
		3 <sup>rd</sup>	Types of functions		
		4 <sup>th</sup>	Introduction to limit		
		5 <sup>th</sup>	Problems		
		6 <sup>th</sup>	Existence of limit		
	2 <sup>nd</sup>	1 <sup>st</sup>	Evaluation of Limit (Direct Substitution, Factorization, Rationalization Method)		
		2 <sup>nd</sup>	Evaluation of limits by limit formulas		
		3 <sup>rd</sup>	Evaluation of limits by limit formulas		
		4 <sup>th</sup>	Evaluation of limits by limit formulas		
		5 <sup>th</sup>	Evaluation of limits by limit formulas		
		6 <sup>th</sup>	Continuity of a function and Problems		
	3 <sup>rd</sup>	1 <sup>st</sup>	Introduction to Derivatives		
		2 <sup>nd</sup>	Derivative of a function at a point		
		3 <sup>rd</sup>	Algebra of Derivatives		
		4 <sup>th</sup>	Derivative of standard functions		
		5 <sup>th</sup>	Problems		
		6 <sup>th</sup>	Derivatives using Chain Rule		
APRIL	1 <sup>st</sup>	1 <sup>st</sup>	Problems		
		2 <sup>nd</sup>	Derivative of a function by substitutions		
		3 <sup>rd</sup>	Problems		
		4 <sup>th</sup>	Derivative of Implicit functions		
		5 <sup>th</sup>	Problems		
		6 <sup>th</sup>	Derivative of logarithm functions		
	2 <sup>nd</sup>	1 <sup>st</sup>	Problems		
		2 <sup>nd</sup>	Derivative of Parametric function		
		3 <sup>rd</sup>	Problems		
		4 <sup>th</sup>	Derivative of a function w.r.t. another function		
		5 <sup>th</sup>	Problems		
		6 <sup>th</sup>	Mixed Problems		
	3 <sup>rd</sup>	1 <sup>st</sup>	Successive Differentiation		
		2 <sup>nd</sup>	Partial Differentiation		
		3 <sup>rd</sup>	Problems		
		4 <sup>th</sup>	Introduction to Integration		
		5 <sup>th</sup>	Integral of standard functions		
		6 <sup>th</sup>	Integral by substitutions		
	4 <sup>th</sup>	1 <sup>st</sup>	Problems		
		2 <sup>nd</sup>	Integration by parts		
		3 <sup>rd</sup>	Problems		
		4 <sup>th</sup>	Integration of Standard forms		
		5 <sup>th</sup>	Problems		
		6 <sup>th</sup>	Mixed Problems		

MAY	1 <sup>st</sup>	1 <sup>st</sup>	Definite Integrals		
		2 <sup>nd</sup>	Properties		
		3 <sup>rd</sup>	Problems		
		4 <sup>th</sup>	Area Under the Curve		
		5 <sup>th</sup>	Area of a circle with centre at origin		
		6 <sup>th</sup>	Problems		
	2 <sup>nd</sup>	1 <sup>st</sup>	Introduction to Differential Equations		
		2 <sup>nd</sup>	Order and Degree of a D.E.		
		3 <sup>rd</sup>	Formation of a Differential Equation		
		4 <sup>th</sup>	Solution of a Differential Equation		
		5 <sup>th</sup>	Problems		
		6 <sup>th</sup>	Method of separation of variables		
	3 <sup>rd</sup>	1 <sup>st</sup>	Problems		
		2 <sup>nd</sup>	Linear Differential Equations		
		3 <sup>rd</sup>	Problems		
		4 <sup>th</sup>	Differential Equation reducible to Linear Form		
		5 <sup>th</sup>	Problems		
		6 <sup>th</sup>	Mixed Problems		
	4 <sup>th</sup>	1 <sup>st</sup>	Introduction to vector		
		2 <sup>nd</sup>	Types of vector		
		3 <sup>rd</sup>	Representation of a vector		
		4 <sup>th</sup>	Magnitude and Direction of a vector		
		5 <sup>th</sup>	Addition and Subtraction of a vector		
		6 <sup>th</sup>	Position Vector		
JUNE	1 <sup>st</sup>	1 <sup>st</sup>	Scalar Product or Dot Product		
		2 <sup>nd</sup>	Geometrical Meaning		
		3 <sup>rd</sup>	Angle Between two vectors		
		4 <sup>th</sup>	Problems		
		5 <sup>th</sup>	Scalar projection		
		6 <sup>th</sup>	Vector projection		
	2 <sup>nd</sup>	1 <sup>st</sup>	Vector Product		
		2 <sup>nd</sup>	Geometrical Representation		
		3 <sup>rd</sup>	Angle Between two vectors by cross product		
		4 <sup>th</sup>	Area of Triangle and Parallelogram		
		5 <sup>th</sup>	Problems		
		6 <sup>th</sup>	Problems		
	3 <sup>rd</sup>	1 <sup>st</sup>	Revision of Limit and Continuity		
		2 <sup>nd</sup>	Revision of Derrivatives		
		3 <sup>rd</sup>	Revision of Integration(Indefinite)		
		4 <sup>th</sup>	Revision of integration(Definite)		
		5 <sup>th</sup>	Revision of Differential Equations		
		6 <sup>th</sup>	Revision of Vector Algebra		

Dr. Deepak  
12.03.21  
Lect in Math

Sharashree Ruthel  
PTGF in Math  
OSME, Keanjhar