

LESSON PLAN OF APPL. MATH.-I FOR THE ACADEMIC SESSION: 2025-26 (WIN-2025)

Discipline : COMMON Semester : 1ST			Name of the Teaching Faculty : Mrs MAMATA NAYAK,Sr.Lect.(Math) Mrs Smita Rani Barik,lect.math. THEORY	
Subject : APPL.MATH-I			From date: 06/08/2025 to 04/12/2025 No.of weeks:-15(excluding holidays)	
WEEK	No.of classes/week		THEORY	N0.OF PERIODS
1ST	1ST	TRIGONOMETRY UNIIT-1	Concept of angles(FUNDAMENTAL)	1
	2ND		Examples on above	1
	3RD		Degree measurement of angles in grades and radians and their conversions	1
2ND	1ST		T-Ratios of Allied angles (without proof),	1
	2ND		T-Ratios of Allied angles (without proof),problem discusson	1
	3RD		degrees Sum, difference formulae and their applications (without proof)	1
	4TH		degrees Sum, difference formulae and their applications (without proof) ,problem discusson	1
3RD	1ST		Examples on above	1
	2ND		Examples on above	1
	3RD		Product formulae	1
	4TH		Product formulae, problem discusson	1
4 TH	1ST		(Transformation of product to sum, difference and vice versa).	1
	2ND		(Transformation of product to sum, difference and vice versa).	1

	3RD		T- Ratios of multiple angles, sub-multiple angles (2A, 3A, A/2).	1
	4TH		Examples on above	1
5TH	1ST	UNIT-1	Examples on above	1
	2ND		Graphs of $\sin x$, $\cos x$, $\tan x$ and e^x .	1
	3RD		Discussion on above chapter	1
	4TH		CLASS TEST	1
6TH	1ST	DIFFERENTIAL CALCULUS UNIT-2	Definition of function, problem discusson	1
	2ND		Definition of function ,problem discusson	1
	3RD		Concept of limits, problem discusson	1
	4TH		Concept of limits, problem discusson	1
7TH	1ST		Four standard limits, problem discusson	1
	2ND		Four standard limits ,problem discusson	1
	3RD		Examples on above	1
	4TH		Examples on above	1
8TH	1ST		Differentiation by definition	1
	2ND		Examples on above	1
	3RD		Differentiation of sum, product and quotient of functions.	1
	4TH		Examples on above	1
9TH	1ST		Differentiation of function of a function.	1
	2ND		Examples on above	1
	3RD		Differentiation of trigonometric and inverse trigonometric functions	1
	4TH		Examples on above	1
10TH	1ST		.Logarithmic differentiation, Exponential functions.	1

	2ND		Examples on above	1
	3RD		Discussion of unit-II and doubt clearing class	1
	4TH		Class test	1
11TH	1ST	ALGEBRA UNIT-3	Complex Numbers: Definition, real and imaginary parts of a Complex number, polar and Cartesian, representation of a complex number and its conversion from one form to other	1
	2ND		conjugate of a complex number, modulus and amplitude of a complex number Addition, Subtraction, Multiplication and Division of a complex number.	1
	3RD		De-moivre's theorem, its application.	1
	4TH		Examples on above	1
			Examples on above	1
12TH	1ST		Examples on above	1
	2ND		Definition of polynomial fraction proper & improper fractions and definition of partial fractions. To resolve proper fraction into partial fraction with denominator containing non-repeated linear factors, repeated linear factors and irreducible non-repeated quadratic factors. To resolve improper fraction into partial	1
	3RD		Examples on above	1
	4TH		Examples on above	1
13TH	1ST		Examples on above	1
	2ND		Value of nPr and nCr	1
	3RD		Examples on above	1
	4TH		Examples on above	1
14TH	1ST		Examples on above	1
	2ND		Examples on above	1
	3RD		To resolve proper fraction into partial fraction with denominator containing non-repeated linear factors, repeated linear factors and	1

			irreducible non-repeated quadratic factors. To resolve improper fraction into partial fraction	
	4TH		Examples on above	1
15TH	1ST		Examples on above	1
	2ND		Examples on above	1
	3RD		Examples on above	1
	4TH		Examples on above	1
16th	1ST		Binomial theorem: Binomial theorem (without proof) for positive integral index (expansion and general form); binomial theorem for any index (expansion without proof)	1
	2ND		Examples on above	1
	3RD		Examples on above	1
	4TH		first and second binomial approximation with applications to engineering problems	1
17th	1ST		Revision of question bank	1
	2ND		Revision of question bank	1
	3RD		Revision of question bank	1
	4TH		Revision of question bank	1
18th	1ST	UNIT-1	DOUBT CLEARING CLASS, Previous year question discussion	1
	2ND	UNIT-2	DOUBT CLEARING CLASS , Previous year question discussion	1
	3RD	UNIT-3	DOUBT CLEARING CLASS, Previous year question discussion	1
	4TH		Mock test	1

Mrs. Mamata Nayak

Mrs.Smita rani Barik

Signature of Faculty

