

Lesson plan

Name - Ms. Neeru
 Discipline- common
 semester- 2nd
 Subject - App. maths II

week	Lecture day	Topic
1	1	Definition of function ; concept of limits.
	2	four standard limits
	3	differentiation by definition of $x^n, \sin x, \cos x, e^x, \log_a x$ only
	4	Differentiation of sum, product and quotient of functions, differentiation of function of a function.
	5	Problems based on above topics.
2	1	Differentiation of inverse trigonometrically functions, logarithmic differentiation
	2	logarithmic differentiation
	3	exponential differentiation
	4	successive differentiation(up to third order only)
	5	Successive differentiation, parametric function.
3	1	Problem based on above topics.
	2	Applications (a) maxima and minima
	3	(b) equation of tangent and normal to a curve
	4	Problems based on above topics.
	5	Assignment on unit-1
4	1	class test on unit 1
	2	integration as inverse operation of differentiation
	3	integration as inverse operation of differentiation
	4	simple standard integrals and related problems
	5	Problems based on above topics.
5	1	simple standard integrals and related problems
	2	simple integration of substitution
	3	integration of substitution
	4	integration by parts
	5	integration by parts
6	1	Problems based on above topics.
	2	integration by partial fractions
	3	integration by partial fractions
	4	Problems based on above topics.
	5	evaluation of definite integrals
7	1	evaluation of definite integrals
	2	evaluation of definite integrals
	3	problems based on above topics.
	4	problems based on above topics.
	5	Numerical integration by Simpson's rule
8	1	problems based on Simpson's rule
	2	Numerical integration by Trapezoidal rule
	3	problems based on Trapezoidal rule

	4	problems based on indefinite integral
	5	problems based on definite integral and Assignment based on unit ii
9	1	class test on unit ii
	2	introduction of differential equations
	3	Definition ,order, degree of differential equation
	4	linear and non-linear differential equations
	5	linear and non-linear differential equations
10	1	Problems based on above topics.
	2	formation of differential equations (up to 2 order)
	3	formation of differential equations
	4	Problems based on above topics.
	5	solution of first order diff. equations
11	1	solution of first order diff. equations(problems)
	2	Assignment on unit-iii
	3	class test of unit - iii
	4	class test will be discussed
	5	introduction of statistics
12	1	measures of central tendency - ; mean
	2	problems on mean will be discussed
	3	median
	4	mode
	5	Problems based on above topics.
13	1	measures of Dispersion ;mean deviation
	2	mean deviation
	3	standard deviation
	4	standard deviation
	5	Problems based on above topics.
14	1	co-efficient of rank correlation
	2	co-efficient of rank correlation
	3	Problems based on above topics.
	4	Revision of iv unit
	5	Assignment on unit 4
15	1	class test of unit - iv
	2	Revision of Unit 1
	3	Revision of unit 2
	4	Revision of unit 3
	5	Revision of unit 4

Lesson plan

Name - Ms Bhawna Chaudhary

Discipl. - common

Sem. - II

subject - Applied Physics II

Theory			Practical	
Week	Lecture day	Topic	Practical day	Experiment
1	1	Wave motion , Transverse and longitudinal	1	1. To find the time period of a simple
	2	terms used in wave motion		
	3	Rel [^] among wave velocity , frequency and wave length		
	4	S.H.M		
2	1	Cantilever, free, forced and resonant vibrations	2	2. To find and verify the time period of cantilevers
	2	Acoustics of building		
	3	Acoustics of building		
	4	LII transonic		
3	1	Applications of Ultrasonic	3	Reserved for completing expt 1 and expt 2
	2	Assignment based on unit-1		
	3	class test on unit-1		
	4	optics- reflection and refraction		
4	1	Refractive index, lens formula	4	3. To verify laws of reflection of light using mirror
	2	power of lens		
	3	Total internal reflection		
	4	Microscope and telescope		
5	1	Assignment based on unit-2	5	4. To identify components like resistance capacitor, diode
	2	class test on unit-2		
	3	Electrostatics - coulomb's law		
	4	unit charge, electric field, electric potential		
6	1	electric field due to point charge	6	Reserved for completing expt 3 and expt 4
	2	Gauss law		
	3	capacitor and capacitance		
	4	series and parallel combination of capacitors		
7	1	Numerical problems	7	5. To study color coding scheme of resistance
	2	Assignment based on unit -3		
	3	discussion of on difficult topics		
	4	test on unit -3		
8	1	current electricity - DC and AC	8	6. To verify ohm's law
	2	Resistance, specific resistance		

	3	combination of resistance		
	4	[HOLIDAY DUE TO HOLI]		
9	1	ohm's law	9	Reserved for completing expt 5 and expt 6
	2	super conductivity, electric power		
	3	electrical energy units		
	4	Heating effect of current Igrdtioff's laws		
10	1	Assignment based on unit -4	10	7. to verify laws of series combination of resistances
	2	class test on unit 4		
	3	electromagnetism - introduction		
	4	types of magnetic materials		
11	1	magnetic field , magnetic flux	11	8. To verify laws of parallel combination of resistances
	2	electromagnetic induction		
	3	Assignment based on unit 5		
	4	Class test on unit 5		
12	1	semi conductor physics - energy bank	12	Reserved for completing expt 7 and expt 8
	2	extrinsic and intrinsic semi conductor		
	3	p -n function diode , v- I characteristics		
	4	diode as rectifier , transistor (introduction)		
13	1	Assignment based on unit 6	13	Practicing by redoing experiments
	2	modern physics - Laser		
	3	Application of lasers		
	4	fiber optics , applications		
14	1	introduction to nanotechnology	14	Practicing by redoing experiments
	2	Assignment based on unit 7		
	3	revision of unit 1		
	4	revision of unit 2 and 3		
15	1	revision of unit 4 and 5	15	test for practical examination
	2	revision of unit 6 and 7		
	3	solving previous years question paper		
	4	solving previous years question paper		

Lesson Plan

Name of Faculty: Yogesh Kundu

Discipline : Mechanical A & B, Civil, Electronics,

Year : 1st

Subject : English Language

Lesson Plan Duration: 18/10/2021-30/06/2022

Work load: (Lecture /Practical) per week (in hours): Lectures—02, Practical—02

Week	Theory		Practical	
	Lecture Day	Topic (Including Assignment/ Test)	Practical Day	Topic
1 st	1	Communication- General introduction.	1	Listening Exercises
	2	Definition and process of communication		
2 nd	3	Definition and process of communication	2	Listening Exercises
	4	Noun and Pronoun		
3 rd	5	Noun and Pronoun	3	Self and Peer Introduction
	6	Class Test		
4 th	7	Correspondence – Business and Official	4	Self and Peer Introduction
	8	Correspondence – Business and Official		
5 th	9	Correspondence – Business and Official	5	Debate
	10	Correspondence – Business and Official		
6 th	11	Correspondence – Business and Official	6	Debate
	12	Correspondence – Business and Official		

7 th	13	Correspondence – Business and Official	7	Debaté
	14	Correspondence – Business and Official		
8 th	15	Assignment & Value added Lecture	8	Offering - Responding to offers
	16	Class Test		
9 th	17	Analysis of Test & its solution	9	Offering - Responding to offers
	18	Punctuation		
10 th	19	Punctuation	10	Requesting – Responding to requests
	20	Assignment of Punctuation		
11 th	21	Notice, including Press Releases	11	Requesting – Responding to requests
	22	Notice, including Press Releases		
12 th	23	Notice, including Press Releases	12	Congratulating
	24	Class Test		
13 th	25	Memos	13	Expressing sympathy and condolence
	26	Memos		
14 th	27	Memos	14	Expressing sympathy and condolence
	28	Memos		
15 th	29	Assignment & Value added Lecture	15	Apologizing and Forgiving
	30	Assignment evaluation and Viva-voce		
16 th	31	Class Test	16	Apologizing and Forgiving
	32	Types of communication		
17 th	33	Types of communication	17	Complaining
	34	Revision of Types of communication		

18 th	35	Preposition	18	Warning
	36	Preposition		
19 th	37	Conjunction	19	Asking and giving information
	38	Conjunction		
20 th	39	Tenses	20	Getting and giving permission
	40	Class Test		
21 st	41	Tenses	21	Asking for and giving opinions
	42	Tenses		
22 nd	43	Reading skills Unseen passage for comprehension	22	Talking about likes and dislikes
	44	Reading skills Unseen passage for comprehension		
23 rd	45	Reading skills Unseen passage for comprehension	23	Just a Minute Sessions – Extempore
	46	Class Test		
24 th	47	Circular	24	Just a Minute Sessions – Extempore
	48	Circular		
25 th	49	Basics of Report Writing	25	Group Discussion
	50	Basics of Report Writing		
26 th	51	Resume Writing	26	Group Discussion
	52	Resume Writing		

27 th	53	Writing E-mail	27	Newspaper Reading
	54	Paragraph Writing		
28 th	55	Picture Composition	28	Newspaper Reading
	56	Class Test		
29 th	57	Picture Composition	29	Mock Interviews: Telephonic and Personal
	58	Assignment & Value added Lecture		
30 th	59	Assignment evaluation and Viva-voce	30	Mock Interviews: Telephonic and Personal
	60	Analysis of Test & its solution		

Lesson Plan

Name : Permal Singh
Discipline : Common for all branches
Year : 1st
Subject : Applied Mathematics
Code : 180012
Duration : 16-10-21 To 30-06-2021
Work Load : 3 Lectures and 1 Tutorial per week

Week	Theory	
	Lecture/ Tutorial day	Topics
1 st	1 st	Law of Indices and basics
	2 nd	Formula of Factorisation and expansion with some solved problems (L-1)
	3 rd	Tutorial/Revision
	4 th	Partial fraction:- Definition of Polynomial fraction proper & improper fractions and definition of partial fractions with examples.
2 nd	1 st	To resolve proper fraction into partial fraction with denominator containing non-repeated linear factors, only. (L-1)
	2 nd	Complex numbers: definition of complex number, real and imaginary parts of a complex number.
	3 rd	Tutorial/Revision
3 rd	1 st	Addition, subtraction and multiplication of complex numbers.
	2 nd	Division of complex numbers. Conjugate of a complex number, modulus and amplitude of complex numbers.
	3 rd	Tutorial/Revision
	4 th	Polar and Cartesian Form and their inter conversion.
4 th	1 st	Logarithms and its basic properties.
	2 nd	Definition of Matrix and its types with examples. Addition and subtraction of Matrices.
	3 rd	Class Test
	4 th	Multiplication of Matrices(upto 2 nd order).
5 th	1 st	Determinants: Evaluation of determinants (up to 3 order) by Laplace method.
	2 nd	Solution of equations (upto 3 unknowns) by Cramer's Rule.
	3 rd	Tutorial/Revision
	4 th	Permutation and value of ${}^n P_r$ with solved examples.
6 th	1 st	Combination and value of ${}^n C_r$ with solved examples.
	2 nd	Binomial theorem for positive integral index with simple problems.
	3 rd	Tutorial/Revision
	4 th	General term from binomial expansion and related problems.
	5 th	Tutorial/Revision
7 th	1 st	Some solved problems on Binomial theorem. Some solved problems on Binomial theorem.
	2 nd	Concept of angle: measurement of angle in degrees, grades, radians. Conversions of angles.
	3 rd	Tutorial/Revision
	4 th	T-Ratios of standard angle (0°, 30°, 45° etc.) and fundamental Identities.
8 th	1 st	Allied angles (without proof) Sum, Difference formulae and their applications (without proof). (L-1) Allied angles (without proof) Sum, Difference formulae and their applications (without proof). (L-2)
	2 nd	Product formulae (Transformation of product to sum, difference and vice versa). (L-1) Product formulae (Transformation of product to sum, difference and vice versa). (L-2)
	3 rd	Tutorial/Revision
	4 th	Applications of Trigonometric terms in engineering problems such as to find an angle of elevation, height, distance etc. (L-1)
9 th	1 st	Sessional test as mentioned in Academic Calander/Revision
	2 nd	Sessional test as mentioned in Academic Calander/Revision
	3 rd	Sessional test as mentioned in Academic Calander/Revision
	4 th	Sessional test as mentioned in Academic Calander/Revision
	5 th	Sessional test as mentioned in Academic Calander/Revision

10 th	1 st	Applications of Trigonometric terms in engineering problems (L-2) Applications of Trigonometric terms in engineering problems (L-3)
	2 nd	Point: Distance Formula, Mid Point Formula.
	3 rd	Tutorial/Revision
	4 th	Centroid of triangle and area of triangle
11 th	1 st	Straight line: Slope of a line, equation of straight line in various standards forms (without proof).
	2 nd	Examples based on slope intercept form, intercept form and one-point form of straight line.
	3 rd	Tutorial/Revision
	4 th	Examples based on two-point form, normal form and general form of straight line. Angle between two straight lines.
12 th	1 st	Circle: General equation of a circle and identification of centre and radius of circle. (L-1)
	2 nd	Circle: General equation of a circle and identification of centre and radius of circle. (L-2)
	3 rd	Tutorial/Revision
	4 th	To find the equation of a circle when centre and radius are given and when coordinates of end points of a diameter are given.
13 th	1 st	Definition of function and some solved problems. Some solved problems on functions
	2 nd	Concept of limits (Introduction only) and some simple problems
	3 rd	Class Test
14 th	1 st	Standard limits and related problems. (L-1) Standard limits and related problems. (L-2)
	2 nd	. Standard limits and related problems. (L-3)
	3 rd	Tutorial/Revision
	4 th	Miscellaneous problems on Limits.
15 th	1 st	Differentiation of standard function (Only formulas).
	2 nd	Differentiation of sum and subtraction of functions and some simple problems.
	3 rd	Tutorial/Revision
	4 th	Differentiation of product of functions and some simple problems.
16 th	1 st	Differentiation of quotient of functions and some simple problems.
	2 nd	Differentiation of Algebraic functions. (L-1) Differentiation of Algebraic functions. (L-2)
	3 rd	Tutorial/Revision
	4 th	Differentiation of Trigonometric functions. (L-1)
17 th	1 st	Differentiation of Trigonometric functions. (L-2) Differentiation of Trigonometric functions. (L-3)
	2 nd	Differentiation of Exponential function. (L-1) Differentiation of Exponential function. (L-2)
	3 rd	Class Test
	4 th	Differentiation of Logarithmic function. (L-1)
18 th	1 st	Differentiation of Logarithmic function. (L-2) Differentiation of Logarithmic function. (L-3)
	2 nd	Successive differentiation (up to 2nd order). (L-1) Successive differentiation (up to 2nd order). (L-2)
	3 rd	Tutorial/Revision
	4 th	Successive differentiation (up to 2nd order). (L-3)
19 th	1 st	Application of differential calculus in: Rate measures. (L-1)
	2 nd	Application of differential calculus in: Rate measures. (L-2) Application of differential calculus in: Rate measures. (L-3)
	3 rd	Tutorial/Revision
	4 th	Application of differential calculus in: Maxima and minima. (L-1)
20 th	1 st	Application of differential calculus in: Maxima and minima. (L-2)
	2 nd	Integration as inverse operation of differentiation i.e. Indefinite Integral with simple examples. (L-1) Indefinite Integral. (L-2)
	3 rd	Indefinite Integral. (L-3) Indefinite Integral. (L-4)
	4 th	2nd Sessional Test as per academic calendar/ Revision
	5 th	2nd Sessional Test as per academic calendar/ Revision
21 st	1 st	2nd Sessional Test as per academic calendar/ Revision
	2 nd	2nd Sessional Test as per academic calendar/ Revision
22 nd	1 st	Simple standard integrals and related Simple problems. (L-1) Simple standard integrals and related Simple problems. (L-2)
	2 nd	Tutorial/Revision
23 rd	1 st	Integrations by parts and related Simple problems. (L-1)

		Integrations by parts and related Simple problems. (L-2)
	2 nd	Integrations by parts and related Simple problems. (L-3)
	3 rd	Tutorial/Revision
	4 th	Evaluation of definite integrals with given limits. (L-1) Evaluation of definite integrals with given limits. (L-2)
24 th	1 st	Evaluation of $\int_0^{\frac{\pi}{2}} \sin^m x dx$ and $\int_0^{\frac{\pi}{2}} \cos^m x dx$ and related problems.
	2 nd	Evaluation of $\int_0^{\frac{\pi}{2}} \sin^m x \cos^n x dx$ and related problems
	3 rd	Tutorial/Revision
	4 th	Applications of integration: for evaluation of area under a curve and axes. (L-1) Applications of integration: for evaluation of area under a curve and axes. (L-2) Applications of integration: for evaluation of area under a curve and axes. (L-3)
25 th	1 st	Numerical integration by Trapezoidal Rule existing mathematical models. (L-1) Numerical integration by Trapezoidal Rule existing mathematical models. (L-2)
	2 nd	Numerical integration by Simpson's 1/3 rd existing mathematical models. (L-1) Numerical integration by Simpson's 1/3 rd existing mathematical models. (L-2)
	3 rd	Tutorial/Revision
	4 th	Class Test
26 th	1 st	Definition, order, degree and linearity of an ordinary differential equation.
	2 nd	Solution of I st order and I st degree differential equation by variable separable method. (L-1)
	3 rd	Tutorial/Revision
	4 th	Solution of I st order and I st degree differential equation by variable separable method. (L-2)
27 th	1 st	Measures of Central Tendency: Mean and related problems. Measures of Central Tendency: Median and related problems.
	2 nd	Measures of Central Tendency: Mode and related problems. Measures of Dispersion: Mean deviation from mean. (L-1)
	3 rd	Tutorial/Revision
	4 th	Measures of Dispersion: Mean deviation from mean. (L-2) Measures of Dispersion: Standard deviation. (L-1) Measures of Dispersion: Standard deviation. (L-2)
28 th	1 st	Correlation coefficient and Coefficient of rank correlation. (L-1) Correlation coefficient and Coefficient of rank correlation. (L-2)
	2 nd	Revision
	3 rd	Tutorial/Revision
	4 th	Revision