Lecture Plan - APPLIED MATHS II					
Text Book	Elementary Engineering Mathematics by BS Grewal, Khanna Publishers, New Delhi				
	Engineering Mathematics Vol. I & II by S Kohli, IPH, Jalandhar				
Course	DIPLOMA	Branch	CIVIL/ME		2nd Semester
Paper code:				Name of the Subject:	APPLIED MATHEMATICS – II

Lecture No.	Topics to be covered	Learning Objective	Books	Mode of Teaching
1	Definition of function; Concept of limits (Introduction only) and problems related to four standard limits only.	The student will learn about Definition of function; Concept of limits (Introduction only) and problems related to four standard limits only.	Text Books	White Board/PPT
2	Definition of function; Concept of limits (Introduction only) and problems related to four standard limits only.	The student will learn about Definition of function; Concept of limits (Introduction only) and problems related to four standard limits only.	Text Books	White Board/PPT
3	Definition of function; Concept of limits (Introduction only) and problems related to four standard limits only.	The student will learn about Definition of function; Concept of limits (Introduction only) and problems related to four standard limits only.	Text Books	White Board/PPT
4	Differentiation of xn , sin x, cos x, tan x, ex by first principle.	The student will learn about Differentiation of xn , sin x, cos x, tan x, ex by first principle.	Text Books	White Board/PPT
5	Differentiation of xn , sin x, cos x, tan x, ex by first principle.	The student will learn about Differentiation of xn , sin x, cos x, tan x, ex by first principle.	Text Books	White Board/PPT
6	Differentiation of xn , sin x, cos x, tan x, ex by first principle.	The student will learn about Differentiation of xn , sin x, cos x, tan x, ex by first principle.	Text Books	White Board/PPT
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8	Differentiation of xn , sin x, cos x, tan x, ex by first principle.	The student will learn about Differentiation of xn , sin x, cos x, tan x, ex by first principle.	Text Books	White Board/PPT
9	Differentiation of xn , sin x, cos x, tan x, ex by first principle.	The student will learn about Differentiation of xn , sin x, cos x, tan x, ex by first principle.	Text Books	White Board/PPT
10	Differentiation of sum, product and quotient of functions	The student will learn about Differentiation of sum, product and quotient of functions	Text Books	White Board/PPT
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17	Differentiation of sum, product and quotient of functions	The student will learn about Differentiation of sum, product and quotient of functions	Text Books	White Board/PPT
18	Differentiation of trigonometric functions, inverse trigonometric functions. logarithmic differentiation, successive differentiation (upto 2nd order)	The student will learn about Differentiation of trigonometric functions, inverse trigonometric functions. logarithmic differentiation, successive differentiation (upto 2nd order)	Text Books	White Board/PPT
19	Differentiation of trigonometric functions, inverse trigonometric functions. logarithmic differentiation, successive differentiation (upto 2nd order)	The student will learn about Differentiation of trigonometric functions, inverse trigonometric functions. logarithmic differentiation, successive differentiation (upto 2nd order)	Text Books	White Board/PPT
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33	Application of differential calculus in: (a) Rate measures (b) Maxima and minima	The student will learn about Application of differential calculus in: (a) Rate measures (b) Maxima and minima	Text Books	White Board/PPT
34	Application of differential calculus in: (a) Rate measures (b) Maxima and minima	The student will learn about Application of differential calculus in: (a) Rate measures (b) Maxima and minima	Text Books	White Board/PPT

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41	Integration as inverse operation of differentiation with simple examples.	The student will learn about Integration as inverse operation of differentiation with simple examples.	Text Books	White Board/PPT
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46	Simple standard integrals and related problems	The student will learn about Simple standard integrals and related problems	Text Books	White Board/PPT
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50	Simple standard integrals and related problems	The student will learn about Simple standard integrals and related problems	Text Books	White Board/PPT
51	Evaluation of definite integrals with given limits. $\pi/2$ π /2 $\pi/2$ Evaluation of $\int$ sinn x. dx, $\int$ cosn x dx , $\int$ sinm x cosn x dx 0 0 0 using formulae without proof (m and n being positive integers only)	The student will learn about Evaluation of definite integrals with given limits. $\pi/2$ π /2 $\pi/2$ Evaluation of $\int$ sinn x. dx, $\int$ cosn x dx , $\int$ sinm x cosn x dx 0 0 0 using formulae without proof (m and n being positive integers only) using pre-existing mathematical models.	Text Books	White Board/PPT
52	Evaluation of definite integrals with given limits. $\pi/2$ π /2 $\pi/2$ Evaluation of $\int$ sinn x. dx, $\int$ cosn x dx , $\int$ sinm x cosn x dx 0 0 0 using formulae without proof (m and n being positive integers only)	The student will learn about Evaluation of definite integrals with given limits. $\pi/2$ π /2 $\pi/2$ Evaluation of $\int$ sinn x. dx, $\int$ cosn x dx , $\int$ sinm x cosn x dx 0 0 0 using formulae without proof (m and n being positive integers only) using pre-existing mathematical models.	Text Books	White Board/PPT

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57	Applications of integration: for evaluation of area under a curve and axes (Simple problems).	The student will learn about Applications of integration: for evaluation of area under a curve and axes (Simple problems).	Text Books	White Board/PPT
58	Applications of integration: for evaluation of area under a curve and axes (Simple problems).	The student will learn about Applications of integration: for evaluation of area under a curve and axes (Simple problems).	Text Books	White Board/PPT
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61	Applications of integration: for evaluation of area under a curve and axes (Simple problems).	The student will learn about Applications of integration: for evaluation of area under a curve and axes (Simple problems).	Text Books	White Board/PPT
62	Numerical integration by Trapezoidal Rule and Simpson's 1/3rd Rule using pre-existing mathematical models	The student will learn about Numerical integration by Trapezoidal Rule and Simpson's 1/3rd Rule using pre-existing mathematical models	Text Books	White Board/PPT
63	Numerical integration by Trapezoidal Rule and Simpson's 1/3rd Rule using pre-existing mathematical models	The student will learn about Numerical integration by Trapezoidal Rule and Simpson's 1/3rd Rule using pre-existing mathematical models	Text Books	White Board/PPT
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67	Definition, order, degree and linearity, of an ordinary differential equation.	The student will learn about Definition, order, degree and linearity, of an ordinary differential equation.	Text Books	White Board/PPT
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70	Definition, order, degree and linearity, of an ordinary differential equation.	The student will learn about Definition, order, degree and linearity, of an ordinary differential equation.	Text Books	White Board/PPT

71	Measures of Central Tendency: Mean, Median, Mode	The student will learn about Measures of Central Tendency: Mean, Median, Mode	Text Books	White Board/PPT
72	Measures of Central Tendency: Mean, Median, Mode	The student will learn about Measures of Central Tendency: Mean, Median, Mode	Text Books	White Board/PPT
73	Measures of Central Tendency: Mean, Median, Mode	The student will learn about Measures of Central Tendency: Mean, Median, Mode	Text Books	White Board/PPT
74	Measures of Dispersion: Mean deviation, Standard deviation	The student will learn about Measures of Dispersion: Mean deviation, Standard deviation	Text Books	White Board/PPT
75	Measures of Dispersion: Mean deviation, Standard deviation	The student will learn about Measures of Dispersion: Mean deviation, Standard deviation	Text Books	White Board/PPT
76	Measures of Dispersion: Mean deviation, Standard deviation	The student will learn about Measures of Dispersion: Mean deviation, Standard deviation	Text Books	White Board/PPT
77	Co-efficient of rank correlation	The student will learn about Co-efficient of rank correlation	Text Books	White Board/PPT
78	Co-efficient of rank correlation	The student will learn about Co-efficient of rank correlation	Text Books	White Board/PPT
79	Co-efficient of rank correlation	The student will learn about Co-efficient of rank correlation	Text Books	White Board/PPT
80	Co-efficient of rank correlation	The student will learn about Co-efficient of rank correlation	Text Books	White Board/PPT

Note for Faculty: Any varation in Leture plan and actual syllabus coverage is to be notified to HOD/Principal with valid reason and measures to cover that variation.