NAME OF FACULTY : JYOTI RANI

DISCIPLINE : Applied Sciences(All Branches)

SEMESTER : 2ND SEM

SUBJECT : : APPLIED MATHEMATICS-II

LESSON PLAN DURATION : 15 WEEKS (Jan 2018 – Apr 2018)

		Theory	
Month	**Week**	**Lecturer Day**	**Topics covered (Including Assignments/ class test)**
Jan.2018	2nd Week	1st	Definition of a function. Various examples of functions.
		2nd	concept of limits Introduction only(Examples)
		3rd	Foumules of standard limits. Examples based on four standard limits.
		4th	Define rules of first principal. Differentiation by first principle.
		5th	Diff. Of algebric functions, trignometric funtions, exponential funtions. Diff. of cosx, tanx, sinx by 1st principal method.
Jan.2018	3rd Week	6th	Diff. of sum function. Diff. of product.
		7th	Examples based on sum. Examples based on Product.
		8th	Diff. of quotient of functions. Diff. of trigonometric functions.
		9th	Diff. of inverse trigonometric function. Diff. of logarithmic differentiation.
		10th	Examples of logrithmic deff. Examples of Inverse trigonometric functions.
		11th	Successive differentiation . Examples of successive(2nd order)

	4th Week	12th	Applications of diff. calculus. Topic of rate measures
		13th	Maxima and minima. Examples of Max. and Min.
		14th	Integration as inverse operation. Simple examples of Integration.
		15th	Simple Integrals. Standard Integrals.
Feb. 2018	1st Week	16th	Examples of Integration. Exercise problesms of Integration.
		17th	Assignment of functions & limits. Revision of Differentiation.
		18th	Revision of slope and differentiation. Revision of Eq. of tangent .
		19th	Revision of Eq. of normal. Simple questions of differentiation
		20th	Questions of Maxima & Minima. Revision of exercise questions.
	2nd Week	21st	Revision. 1st sessional tests.
		22nd	1st sessional test. Revision of differentiation.
		23rd	1st sessional test. Revision of Eq. of normal &tangent.
		24th	1st sessional test. Revision of Eq. of normal.
		25th	1st sessional test. Revision of Unit - 1.
	3rd Week	26th	How to find definite integrals. Solution of exercise problems.
		27th	How to find simple integration. Exercise based on simple integtation.
		28th	How to find velocity using integration. To find acceleration using integ.
		29th	To find area under curve. Use of definite integrls.
		30th	Calculation of area under curve. Calculation of area under axes.
	4th Week	31st	Calculation of definite integral. Problem based on simply property of definite Integral.

		32nd	Revision of Applications of Integration. Introduction to numerical differentiation.
		33rd	To solve exercise problems. Revision of simple integration.
		34th	Introduce trapezoidal rule. Explaining trapezoidal rule.
		35th	Assignment of differentiation. Revision of some topic of diff.
March,2018	1st Week	36th	Ex. Ques. Of trapezoidal rule. Examples of trapezoidal rule.
		37th	Introduction to simpson's rule. Exercise questions of simpson.
		38th	Assignment of trapezoidal rule. Revision of integration.
		39th	Exercise problems and examples. Of trapezoidal & simpson's rule.
		40th	Assignment of simpson's rule. Revision of integration.
	2nd Week	41st	2nd sessional test. Revision of integration
		42nd	2nd sessional test. Revision of definite integral.
		43rd	2nd sessional test. Revision of are under curve.
		44th	2nd sessional test . Revision of area under axes.
		45th	2nd sessionl test. Revision of trapezoidal rule.
	3rd Week	46th	Class test of differentiation. Problem based on differentiation.
		47th	Introduction to ordinary diff. equation.
		48th	Simole examples of O.D.E. Definition of O.D.E.
		49th	Topic - order of diff. eqs. Examples of order.
		50th	Degree of diff. equations. Exercise problems of degree.
	4th Week	51st	Class test of integration.
		52nd	Definition of linear D.E. Exercise question of linearity.
		53rd	How to apply diff. equations. How to solve diff. equations.

		54th	Applications of diff. equations. Statement questions of diff. eqs.
		55th	Revision of ordinary eqs. Assignment of ordinary eqs.
April,2018	1st Week	56th	Class test of trapezoidal, Rule and simpson rule.
		57th	Introduction to statistics. Questions based on meand.
		58th	Examples based on mean. Median- Measures of central tendency.
		59th	Mode by various methods. Calculation of mode.
		60th	Revision of Mean, Median and Mode.
	2nd week	61st	3rd sessional tests. Revision of integration.
		62nd	3rd sesional tests. Revision of O.D.E.
		63rd	3rd sessional tests. Revision of Statistics.
		64th	3rd sessional tests. Revision of Mean,Median, Mode.
		65th	3rd sessional tests. Revision of exercise questions.
	3rd Week	66th	Class test of O.D.E.
		67th	How to calculate mean deviation. Questions based on ,mean deviation.
		68th	Calculation of standard deviation. Questions of standard deviation.
		69th	Exercise problems of mean. Deviation & standard deviation.
		70th	Assignment of Mean, Median,Mode.
	4th week	71st	Class test of Mean, Median, Mode.
		72nd	Calculation of coefficient of rank correlation.
		73rd	Exercise problems based on rank correlation.
		74th	Assignment of coefficient of rank correlation.
		75th	Class test of coefficient of rank correlation.