

# **DRONACHARYA**

College of Engineering

KHENTAWAS, FARRUKHNAGAR, GURGAON, HR

Department: Applied Sciences and Humanities

Academic Session: 2017-18 (Jan-June 2018)

Lesson Plan for the Semester started w.e.f 08.01.2018

Subject with code: MATH-102-F (MATHEMATICS-II)

Name of Faculty with designation : Dr. Jyoti Anand, Assistant Professor

Month	Date & Day	Sem-Class	Unit	Topic/Chapter covered	Academic activity	Test / assignment
January	08.01.2018 Monday	II-IT & ECS	2	Exact Differential Equations.	.....	Assignment of 02 Ques. given
January	10.01.2018 Wednesday	II-IT & ECS	2	Equations reducible to exact differential equation.		Assignment of 02 Ques. given
January	11.01.2018 Thursday	II-IT & ECS	2	Equations reducible to exact differential equation.		Assignment of 02 Ques. given
January	12.01.2018 Friday	II-IT & ECS	2	Application of differential equation in R.L.series circuit.Application in Newton's law of cooling		Assignment of 02 Ques. given
January	15.01.2018 Monday	II-IT & ECS	2	Application to Heat flow. Orthogonal trajectories.		Assignment of 02 Ques. given
January	17.01.2018 Wednesday	II-IT & ECS	2	Linear diff. Eq. of second & higher order. Rules for finding the complementary function.		Assignment of 02 Ques. given
January	18.01.2018 Thursday	II-IT & ECS	2	Complementary $f^n$ and particular integral.		Assignment of 02 Ques. given
January	19.01.2018 Friday	II-IT & ECS	2	Method of variation of Parameters to find Particular integral. Cauchy's Homogeneous differential equation.		Assignment of 02 Ques. given
January	24.01.2018 Wednesday	II-IT & ECS	2	Legendere's linear differential equation and problems.Simultaneous Linear equations with constant coefficients.		Assignment of 02 Ques. given
January	25.01.2018 Thursday	II-IT & ECS	2	Application of Linear differential equation		Assignment of 02 Ques. given
January	29.01.2018 Monday	II-IT & ECS	3	Laplace transform of elementary function. Properties of Laplace Transform.		Assignment of 02 Ques. given
January	01.02.2018 Thursday	II-IT & ECS	3	Evaluation of integrals by Laplace transforms. Inverse transforms using properties.		Assignment of 02 Ques. given

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January	02.02.2018 Friday	II-IT & ECS	3	Inverse Using Partial Fraction. Convolution theorem.		Assignment of 02 Ques. given
February	05.02.2018 Monday	II-IT & ECS	3	Laplace transform of unit-step function, unit – Impulse function and periodic function		Assignment of 02 Ques. given
February	07.02.2018 Wednesday	II-IT & ECS	3	Application of Laplace transform to solve linear differential equations		Assignment of 02 Ques. given
February	08.02.2018 Thursday	II-IT & ECS	3	Application of Laplace transform to solve linear differential equations		Assignment of 02 Ques. given
February	09.02.2018 Friday	II-IT & ECS	3	Simultaneous linear diff. Eq. With constant co-efficient		Assignment of 02 Ques. given
<b>12th February to 17th February 2018</b>			<b>FIRST SESSIONAL EXAMINATION</b>			
Month	Date & Day	Sem-Class	Unit	Topic/Chapter covered	Academic activity	Test / assignment
February	19.02.2018 Monday	II-IT & ECS	4	Formation of partial differential eqs.		Assignment of 02 Ques. given
February	21.02.2018 Wednesday	II-IT & ECS	4	Solution of partial differential Equation		Assignment of 02 Ques. given
February	22.02.2018 Thursday	II-IT & ECS	4	Lagrange's linear partial diff. Equations		Assignment of 02 Ques. given
February	23.02.2018 Friday	II-IT & ECS	4	First order non – linear partial differential equation		Assignment of 02 Ques. given
February	26.02.2018 Monday	II-IT & ECS	4	First order non – linear partial differential equation		Assignment of 02 Ques. given
February	28.02.2018 Wednesday	II-IT & ECS	4	First order non – linear partial differential equation		Assignment of 02 Ques. given
March	05.03.2018 Monday	II-IT & ECS	4	Charpit's method		Assignment of 02 Ques. given
March	07.03.2018 Wednesday	II-IT & ECS	4	Method of separation of variables and its applications		Assignment of 02 Ques. given
March	08.03.2018 Thursday	II-IT & ECS	4	Application to wave equation, one and two dimensional heat flow.		Assignment of 02 Ques. given
March	09.03.2018 Friday	II-IT & ECS	4	Revision of partial differential equation		Assignment of 02 Ques. given
March	12.03.2018 Monday	II-IT & ECS	1	Gradient of a scalar field and directional derivatives		Assignment of 02 Ques. given
March	14.03.2018 Wednesday	II-IT & ECS	1	Divergence and curl of a vector fields.Physical interpretations of Divergence and Curl		Assignment of 02 Ques. given

Month	Date & Day	Sem-Class	Unit	Topic/Chapter covered	Academic activity	Test / assignment
March	15.03.2018 Thursday	II-IT & ECS	1	Properties of Divergence and Curl		Assignment of 02 Ques. given
March	16.03.2018 Friday	II-IT & ECS	1	Integration of vectors : line integral,surface integral		Assignment of 02 Ques. given
19th March to 24th March 2018			SECOND SESSIONAL EXAMINATION			
March	26.03.2018 Monday	II-IT & ECS	1	Integration of vectors: volume integral		Assignment of 02 Ques. given
March	28.03.2018 Wednesday	II-IT & ECS	1	Green's theorem		Assignment of 02 Ques. given
April	02.04.2018 Tuesday	II-IT & ECS	1	Stoke's theorem		Assignment of 02 Ques. given
April	04.04.2018 Wednesday	II-IT & ECS	1	Gauss theorem		Assignment of 02 Ques. given
April	05.04.2018 to 13.04.2018	II-IT & ECS	1	Revision		
16th April to 23rd April 2018			Pre-University EXAMINATION			