

Lesson Planning for the semester started w.e.f...5th Jan. 2018

Name of Institute :- Sat Kabir Institute of Technology and Management,Ladrawan (Jhajjar)

Name of teacher with designation :-Ms Monika , A.P

Department :- Applied Science

Month	Class	Topic/Chapter Covered	Academic Activity	Test/Assignment
Jan.	2 nd	Vector Calculus: Differentiation of vectors, scalar and vector point functions. Gradient of a scalar field and directional derivative, divergence and curl of a vector field (2 week)	Presentation	Assignment(3rd week)
		Integration of vectors, line integral, surface integral, volume integral, Green, Stoke's and Gauss theorems (without proof) and their applications. (2 week)	Seminar	Test(4th week)
Feb.	2 nd	Ordinary Differential Equations and Applications: Exact differential equations, equations reducible to exact differential equations. Applications of differential equations of first order & first degree to simple electric circuits, Newton's law of cooling, heat flow and orthogonal trajectories, linear differential equations of second and higher order (2 week)	GD	Assignment(3rd week)
		Complete solution, complementary function and particular integral, method of variation of parameters to find particular integral, simultaneous linear equations with constant coefficients. Applications of linear differential equations to simple pendulum, oscillatory electric circuits. (2 week)	Presentation	Test(4th week)
March	2 nd	Laplace Transforms and its Applications: Laplace transforms of elementary functions, properties of Laplace transforms, existence conditions, transforms of derivatives, transforms of integrals, multiplication by t^n division by t . Evaluation of integrals by Laplace transforms. (2 week)	Seminar	Assignment(3rd week)
		Laplace transform of unit step function, unit impulse function and periodic function. Inverse transforms, convolution theorem, application to linear differential equations and simultaneous linear differential equations with constant coefficients and applications to integral equations. (2 week)	GD	Test(4th week)
April	2 nd	Partial Differential Equations and Its Applications: Formation of partial differential equations, Lagrange's linear partial differential equation, first order non-linear partial differential equation, (2 week)	Presentation	Assignment(3rd week)
		Charpit's method. Method of separation of variables and its applications to wave equation, one dimensional heat equation and two dimensional	Seminar	Test(4th week)

Monika

29.12.17