ADITYA INSTITUTE OF TECHNOLOGY AND MANAGEMENT (AITAM) TEKKALI

(Approved by AICTE, Accredited by NBA Affiliated to JNTU, Kakinada)

STUDENT ATTENDENCE REGISTER

Name	: M. BHASKARARAO
Subject	: EMFT
Class	: II-B
Year	: 2014-15

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LESSON PLAN

Period	Date (Tentative)	Topic	Unit No.	Teaching Methodology	Remarks	Corrective Action Upon Review
1	1/9/14	Scalar, Vector	1			
		Field, Scalar				
		Vector products				
		Vector component				
2	4/9/14	Unit vector.				
		Unit vector normal				
		to a plane				
		Vector Triple product				
3	4/9/14	Cartesian				
		Cylindrical				
		Spherical				
4	5/9/14	Differential length				
		area, Volume				
		divergence, Curl				
		Gradient, Laplacian				
5	8/9/14	Electro static fields				
		Coulomb's law				
6	9/9/14	EFI due to a line and surface				
		charge				
		Workdone in moving a point				

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Period	Date (Tentative)	Topic	Unit No	Teaching Methodology	Remarks	Corrective Action Upon Review
7	11/8/14	Charge in electrostatic field of electric potential				
8	12/8/14	Properties of potential function				
9	13/8/14	Potential gradient				
		Gauss's law				
		Application of Gauss's law				
10	18/8/14	Maxwell's first law				
		$\operatorname{div}(D) = \rho_v$				
11	22/8/14	Laplace's and Poisson's eqn	2			
		Solution of Laplace's equation in one variable				
12	24/8/14	Electric dipole Dipole moment				
		Potential and Eff due to an electric dipole				
13	25/8/14	Torque on an electric dipole in an electric field.				
14	26/8/14	Behaviour of conductors in an electric field				

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Period	Date (Tentative)	Topic	Unit No.	Teaching Methodology	Remarks	Corrective Action Upon Review
15	23/9/14	Conductors and Insulators				
		Electric field inside a dielectric material				
16	29/9/14	polarization				
		Dielectric and				
17	6/10/14	Conductor materials				
18	4/10/14	Dielectric boundary conditions				
		Capacitance				
19	27/10/14	Capacitance of Parallel plate				
		spherical and				
20	28/10/14	Co-axial capacitor				
		Composite dielectrics				
21	30/10/14	Static magnetic fields	3			
		Biot-Savarts law	4			
22	3/10/14	Oersted's experiment	4			
		Magnetic field intensity	4			
		MFI due to a straight Current carrying filament				
23	6/11/14	MFI due to Circular				
		Square and				
24	7/11/14	Solenoid Current				

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LESSON PLAN

Period	Date (tentative)	Topic	Unit No	Teaching Methodology	Remarks	Corrective Action Upon Review
28	14/11/14	Relation between magnetic flux density and magnetic field strength, Maxwell's 2nd equation $\text{div}\,B = 0$				
26	17/11/14	Ampere's Circuital Law & its applications				
27	19/11/14	MFI due to an Infinite sheet of Current and a long Current carrying filament				
28	24/11/14	Point form of Ampere's Circuital Law				
29	27/11/14	Maxwell's 3rd equation $\text{Curl}(H) = J$				
30	29/11/14	field due to Circular loop Rectangular and Square loops				
31	2/12/14	Magnetic forces	4			
32	3/12/14	Moving charge in a Magnetic field Lorentz force equation	4			
33	8/12/14	Force on a Current element	4			
34	10/12/14	Force on a Straight and a long current Carrying Conductor	4			

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LESSON PLAN

Period	Date (Tentative)	Topic	Unit No.	Teaching Methodology	Remarks	Corrective Action Upon Review
37	11/12/14	force between two straight long and				
38	5/12/14	Parallel Current Carrying Conductors				
39	6/12/14	Magnetic dipole				
40	9/12/14	dipole moment				
41	10/12/14	a differential Current loop				
42	11/12/14	Torque on a Current loop				
43	12/12/14	Self and Mutual inductance	5			
		Neumann's formula				
44	15/12/14	determination of Self-inductance	4			
		of a Solenoid and toroid and				
45	17/12/14	Mutual inductance between a straight				
46	18/12/14	long wire and a Square loop wire				
		energy stored and density in a				
47	19/12/14	Magnetic field				
		Time Varying fields				
		Faraday's Law of electromagnetic				
48	22/12/14	Integral and point form				
		Maxwell's fourth equation				
		$Curl(E) = -\frac{\partial B}{\partial t}$				
		Statically & dynamically induced emf				

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LESSON PLAN

Period	Date (Tentative)	Topic	Unit No.	Teaching Methodology	Remarks	Corrective Action Upon Review
47	31/12/14	Simple problems				
		Modification of				
		Maxwell's equation				
		for time varying				
		fields				
48	31/12/14	Displacement Current				
		Poynting Theorem				
		Poynting Vector.				

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