

Tentative Teaching Plan

Name of Teacher: **Engr. Saima Hafeez**
Subject: Electromagnetics
Term Starting Date: 11-7-16

Batch: **15TL Sec I & II**
Year: Second-year: semester: 2nd
Term Suspension date: - -16

S No.	TOPIC	No. of Lecture Hrs Required
1.	Review of vector analysis	02
2.	Co-ordinate systems.	02
3.	Gradient, Divergence of vector	02
4.	Curl of a vector	02
5.	Electric Force, Coloumb's Law, Electric Fields	01
6.	Field intensity due to point charge, and continuous volume charge density	02
7.	Field intensity due to line charge distribution	01
8.	Field intensity due to sheet of charge distribution	01
9.	Electric flux, Flux density, Gauss's law	01
10.	Applications of Gauss law	02
11.	Divergence theorem	01
12.	Work done in moving a point charge	01
13.	Electrostatic Potential, Potential difference and potential gradient	02
14.	Equipotential surfaces and Relation between E and V	02
15.	Capacitance and Electrostatic energy	01
16.	Laplacian operator, Poisson's and Laplace Equations	01
17.	Determination of E by the method of images.	01
18.	Magnetic Fields, Magnetic Flux and density, Gauss' Law for Magnetic Fields	02
19.	Biot-Savart Law,	01
20.	Ampere's Law	02
21.	Stokes theorem	01
22.	The field due to solenoid	01
23.	Force on a moving charge and differential current element	01
24.	Force & Torque on a closed circuit.	01
25.	Faraday's law	01
26.	Continuity equation	02
27.	Modified ampere's law	01
28.	Displacement current	01
29.	Maxwell's Equations in Point form	01
30.	Maxwell's Equations in Integral form	01
31.	Electromagnetic wave equation	01
	Total Lectures	42

Signature of Teacher:

Dated:

Remarks of DMRC:

Signature of Chairman:

Dated: