Institute / College Name :   **MIT Muzaffarpur**
Program Name   **B.Tech Electrical Engineering**
Course Code   **03 1505**
Course Name   **Netwok Theory**
Lecture/ Tutorial (perweek):   **3-0-3**   **Course Credits   5**
Course Coordinator Name: **Prof. Shahzad Ahsan**

Lecture Plan

Lecture Number	Topics
1	Introduction and features of basic signals and different sources.
2	Transient response of RC circuits to various excitation signals such as step, ramp, impulse and sinusoidal excitations using Laplace transform.
2	Transient response of RLcircuits to various excitation signals such as step, ramp, impulse and sinusoidal excitations using Laplace transform.
2	Transient response of RLC circuits to various excitation signals such as step, ramp, impulse and sinusoidal excitations using Laplace transform.
1	Network functions for one-port and two-port networks.
1	Poles and zeros of network functions
2	Restrictions on pole and zero locations for driving point functions and transfer functions
2	Time domain behavior from the pole-zero plot.
2	Short circuit Admittance parameters
2	Open circuit impedance parameters
2	Transmission parameters
2	Hybrid parameters
2	Relationships between parameter sets
2	Inter-connection of two-port networks.
1	Introduction and basic issues of graph theory
2	Graph matrices and different topology
3	Network analysis using graph theory
1	Introduction and applications of Filters
3	High-pass, low-pass filters.
3	Band-pass, and band-reject filters.
2	Role of Positive real functions
3	Synthesis of one-port and two-port networks
1	Elementary ideas of Active networks.
TOTAL 45	