COURSE TITLE : ELECTRONIC CIRCUITS LAB
COURSE CODE : 3047
COURSE CATEGORY : B
PERIODS/WEEK : 5
PERIODS/SEMESTER : 75/3
CREDITS : 3

LIST OF EXPERIMENTS

On completion of the course the student will be able :

1.0 To construct and test various electronics circuits using discrete components.

1.1 To design and construct (i) RC differentiator circuit (ii) RC integrator circuit and study its pulse response (for 3 sets of RC values.)

1.2 To setup a transistor as switch and observe its performance.

1.3 To setup a single stage RC coupled CE amplifier with potential divider bias and

(i) observe the phase difference between input and output wave forms.
(ii) measure mid band gain.
(iii) plot its frequency response and determine the band width.

1.4 To construct an emitter follower circuit and

(i) measure the gain.
(ii) plot its input / output waveforms.

1.5 To construct a single stage tuned amplifier circuit and

(i) plot its frequency response.
(ii) measure its peak gain and bandwidth.

1.6 To setup a RC phase shift oscillator and

(i) plot the output waveform.
(ii) measure the frequency of oscillation.

1.7 To construct a Wien bridge oscillator and

(i) plot the output waveform.
(ii) measure the frequency of oscillation.

1.8 To setup a Hartley oscillator and

(i) plot the output waveform.
(ii) measure the frequency of oscillation.

1.9 To setup a Colpitts oscillator and

(i) plot the output waveform.
(ii) measure the frequency of oscillation.

1.10 To construct a transistor astable multivibrator circuit and

(i) plot the collector and base waveforms.
(ii) measure the frequency of oscillation.

1.11 To setup a transistor monostable multivibrator circuit

(i) plot the collector and base waveforms.
(ii) measure the time delay.

1.12 To setup a Schmitt trigger circuit using BJT and

(i) plot the input output waveforms.
(ii) measure the UTP and LTP voltages.

1.13 To setup a UJT relaxation oscillator and plot the waveforms at emitter, base1 and base2

1.14 To construct a two stage RC coupled Amplifier

(i) plot the frequency response curve.
(ii) measure the mid band gain.
(iii) find the 3dB bandwidth.

1.15 To setup a two stage direct coupled amplifier

(i) plot the frequency response curve.
(ii) find the gain and bandwidth.