ISLAMIC UNIVERSITY OF TECHNOLOGY

Organization of Islamic Cooperation

Board Bazar, Gazipur

Course Name: Physics II Lab

Course No. PHY 4242

Experiment No. 05

Name of Experiment:

Familiarization with Alternating Current Waves and Study of Serial and Parallel R-L-C Circuits

Date of Performance: 01 July, 2019

Date of Submission: 15 July, 2019

Task 5B

Name of Experiment:

Study of Series and Parallel R-L-C Circuits

Equipment Used:

Signal Generator, Capacitor, Resistor, Inductor, Multi-meter, AC Ammeter, Bread Board, Oscilloscope

Data Table:

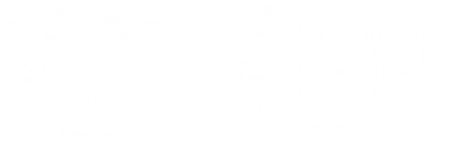
1. For series circuit:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| / | / | / | / | / |
|  |  |  |  |  |

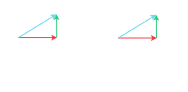
1. For parallel circuit:

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| / | / | / | / | / | / | / |
|  |  |  |  |  |  |  |

Circuit Diagram:



Vector Diagram:



Calculations:

Error Analysis:

1. Percentage Error

1. Percentage Error

Discussions:

All connections were thoroughly checked for loose connections. Readings were taken multiple times to improve accuracy.