



Electrical Engineering Dept.
Faculty of Engineering
Assiut University
2nd Semester – Final Exam
2014/2015 - May 2015

Course: Electrical Testing (1)
1st year – bylaw: 2004
Time: 3 Hours
Marks: 50



Number of Pages: 1 - Answer the Following 5 Questions

Question no. 1 (10 points).

Construct an experiment to prove:

(a) Kirchhoff voltage law, (b) the superposition theorem

Describe in details the required steps, connections and all required equipments.

Question no. 2 (10 points).

Describe how to measure phase shift and frequency using Lissajou's figures. State the required steps, connections and all required equipments.

Question no. 3 (10 points).

Describe in details the required steps, connections and all required equipments to measure the frequency response of a high pass filter.

Question no. 4 (10 points).

Explain how to measure the Solar Cell I-V characteristics. Use drawings and details description as possible.

Question no. 5 (10 points).

Draw a circuit for 12 V voltage stabilizer. Construct an experiment to measure the regulated output voltage as a function of load current. Use practical components values to describe the experiment.

Good Luck

Dr. Mohamed Atef