Kafrelsheikh University
Faculty of Engineering
Electrical Engineering Department

1st Year (Electrical Engineering)
Course: Electrical Circuits (ECE1001)

Topic #1 (Power Factor Correction)

The report should cover but not limited to the following points:

Theory of operation, design consideration, microcontroller based automatic power factor correction, its applications, its advantages.

Topic #2 (The Ground fault interrupter (GFI))

The report should cover but not limited to the following points:

Theory of operation, methods if implementation, its applications its advantages and disadvantages.

Topic #3 (Active and passive filter)

The report should cover but not limited to the following points:

Theory of operation approaches to implementing, applications, filter approximation methods.