Computer Applications on Power Systems

Prepared by Dr. Eng. Amr Ameen Youssef
Introduction

In General
Total Marks:-

100 Marks

70 Marks ---- Final Exam
30 Marks ------ Midterm Exam

2\textsuperscript{nd} Part

35 Marks ---- Final Exam
15 Marks ------ Midterm Exam
* Sulbus of the course & Plan :-

1- Electric Power Generation from Renewable Energy Sources.
   1.1. Design of Hydro-Electric Power.  
   1.2. Design of Wind Energy.  
   1.3. Design of Solar Energy.
2- Unbalanced 3-ph circuit, Load Calculations.
3- Cables Sizing, Voltage drop calculations and Power Factor correction.
4- Transient Analysis.
   4.1. RL-network
   4.2. RC-network
5- Balanced Fault Analysis.
6- Symmetrical components and unbalanced fault.

Lec. 7 ----------------------------- Midterm Exam
References:


2- ELECTRONICS and CIRCUIT ANALYSIS using MATLAB, JOHN O. ATTIA (e-book).

3- Published papers.

4- Some data from sites of international companies.

5- Egyptian code for Electric.

6- El-Sewdy Cables Catalogue.