Register Number.....

M.E. DEGREE EXAMINATIONS: DECEMBER 2009

First Semester

POWER ELECTRONICS AND DRIVES

PED501: Computer Aided Design of Electrical Apparatus

Time: Three Hours **Maximum Marks: 100**

Answer ALL Questions:-

PART A (10 x 2 = 20 Marks)

1. What are the advantages of implementing computer aided design of electrical apparatus?
2. What is meant by design analysis approach?
3. What is cost accounting and give its importance?
4. Define overhead cost.
5. Name any four graphic input devices.
6. What is meant by a feasible design in CAD?
7. Name the co-ordination systems used in AutoCAD.
8. What is the use of FILL command in AutoCAD?
9. What is a macro in AutoCAD VBA?
10. Mention the facilities available in AutoCAD based on the quality and accuracy of drawing.

PART B (5 x 16 = 80 Marks)

11. (a) (i) Explain the design procedure for a rotating electrical machine using analysis and synthesis approaches through flow charts. (10)

(ii) Explain briefly the need for CAD. (6)

(OR)

(b) (i) What is meant by "Branching" in CAD? (4)

(ii) Enumerate the various steps to be followed in developing computer aids for the design of electric machinery. (12)

12. (a) Explain with the help of a flow chart the solution of Hooke and Jeeves method.

(OR)

(b) Discuss the performance of any two optimization problems used for optimization of electrical machine design.

13 (a) Explain in detail the graphic input devices used in CAD.

(OR)

(b) With the help of a flow chart explain in detail the design of a three phase induction motor.

14 (a) (i) Explain the various parts of the AutoCAD window. (8)

(ii) How Grid and Snap codes work together in AutoCAD? (8)

(OR)

(b)Write short notes on 3D drawing and erasing facilities in AutoCAD.

15 (a) Explain linking of BASIC with AutoCAD.

(OR)

(b) Explain the various methods used to invoke the AutoCAD commands to start a drawing.

****