Roll No. .....

24424

B. Tech 7th Sem. (EE) Examination – May, 2018

COMPUTER APPLICATIONS TO POWER SYSTEM ANALYSIS

Paper : EE - 409 - F

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

Before answering the questions, candidates should ensure that they have been supplied the correct and complete question paper. No complaint in this regard, will be entertained after examination.

Note : ***First*** question is ***compulsory*** and attempt any ***one*** question from each section. All questions carry equal marks.

1. (a) What is Ferranti effect ? 5

(b) What is co-tree ? 5

(c) Explain double line to ground fault. 5

(d) What is MATLAB ? 5

SECTION – A

2. Explain model representation of transmission line with suitable diagram. 20

3. Write short note on the following :

(a) Security analysis. 10

(b) Contingency. 10

SECTION – B

4. Explain GS method for load flow study & write its algorithm. 20

5. (a) Comparison between GS, NR & FD. 10

(b) Explain formation of Y bus using singular transformation. 10

SECTION – C

6. Explain various digital techniques in short circuit Study. 20

7. (a) Explain symmetrical component in power system. 10

(b) Explain sequence network for transmission line. 10

SECTION – D

8. (a) Draw architecture of RTU and explain its working. 10

(b) Explain various states of power system. 10

9. What do you mean by energy control system ? Explain the function of central energy control centre and regional energy control centre in detail with suitable block diagram. 20