Code: IT5T5FE1, EE5T6FE1

## III B. Tech - I Semester – Regular Examinations - November 2014

## **MATLAB**

(Common for IT, EEE)

Duration: 3 hours Marks: 5x14=70

Answer any FIVE questions. All questions carry equal marks

1. Explain the following MATLAB commands

i) f plot	3 M
ii) legend	3 M
iii) title	4 M
iv) meshgrid.	4 M

2. a) What does the input function do?

7 M

b) How to generate random numbers in MATLAB with the condition that each new number has a minimum difference with all previously generated numbers for that matrix

7 M

- 3. Briefly explain how "precedence of arithmetic operators" works in MATLAB.
- 4. By default, MATLAB prints floating point numbers to four decimal places of accuracy. How would you adjust this option?

  14 M

- 5. a) How can the axes in a two-dimensional plot be constrained to retain the true shape of a figure?

  6 M
  - b) Explain how a system of m linear equations containing n unknowns can be represented in matrix form. 8 M
- 6. Write a MATLAB program that computes and plots the relationship between Fahrenheit and Celsius temperature.

14 M

- 7. How vertical bar plot graph is plotted in MATLAB? Give one example 14 M
- 8. a) Explain how to save and load the data in MATLAB? 8 M
  - b) Write the built in functions for character string manipulation? 6 M