**PVP 14**

Code: EC6T6FE-E, IT6T5FE-B, ME6T6FE-C

**III B.Tech-II Semester–Regular/Supplementary Examinations–March 2018**

# MATLAB PROGRAMMING AND APPLICATIONS
**(Common for ECE, IT & ME)**

Duration: 3 hours Max. Marks: 70

PART – A

Answer *all* the questions. All questions carry equal marks

11x 2 = 22 M

1. a) List some of the advantages of MATLAB.
   b) Give the command to Plotting multiple columns.
   c) Give the difference between Surface plots and Contour plots.
   d) Write a MATLAB code for 2x2 matrix addition.
   e) Write the commands used for logical operations.
   f) What is meant by Interpolation?
   g) Define function file.
   h) Write the syntax for the command polyfit with an example?
   i) Give the syntax to for-end loop in MATLAB?
   j) What are the different file types in MATLAB?
   k) Write the special variables used in MATLAB.

## PART – B

Answer any *THREE* questions. All questions carry equal marks.

3 x 16 = 48 M

2. a) Give the command for the various arithmetic operations using MATLAB. 8 M

   b) Write a MATLAB program to implement the expression $(a+b)^2$. 8 M

3. a) Discuss about character strings, character string functions with suitable examples in MATLAB coding. 8 M

   b) Write the MATLAB commands for specialized matrices. 8 M

4. a) Explain the procedure for saving and loading data. 8 M

   b) Write a matlab program to generate a fibonacci series. 8 M

5. a) Write MATLAB program to solve $d^2y(t)/ dt^2 + d\ y(t)/dt + y(t) = 0$. 8 M

   b) Explain details about curve fitting and interpolation in detail. 8 M

6. a) Write short notes about object handles and object properties. 8 M

b) Write the Syntax for Surface plots & Contour plots. 8 M