A-3005
Second Year B. Sc. (Sem. III) Examination
March / April - 2015
Electronics for Computer Science : Paper - V
(Matlab)

Time : 2 Hours]
[Total Marks : 50

Instructions :
(1)

(2) All the symbols have conventional meanings.
(3) Assume data wherever necessary.
(4) Figures to the extreme right indicate full marks.

1 Write very short answers :
(1) What is the full form of Matlab ?
(2) Write an arithmetic expression for \( x^2 + 3x + 5 \) in Matlab.
(3) Give an example of Matlab command to create a row vector of three elements.
(4) Write a Matlab command to enter a \( 3 \times 3 \) matrix.

2 (a) Draw and discuss the Matlab desktop windows and its uses.
(b) Discuss the Matlab arithmetic operators.

OR

2 (a) What is Simulink ? Discuss how will you create a Simulink model and put a sine wave block on Simulink.
(b) Show how the parameters of the sine wave block can be modified.
3  (a) Show how Matlab is useful for solving a set of linear equations.  
     (b) Write a Matlab program to demonstrate matrix addition and multiplication.

     OR

3  (a) Explain the plot facility provided by Matlab.  
     (b) Write a Matlab program which plots two cycles of sine wave.

4  Write short notes: (any two)
    (1) Hierarchy of Matlab operators
    (2) Matlab Plots
    (3) Simulink input blocks
    (4) Matlab trigonometric functions.