



**A-2999**  
**Second Year B. Sc. (Sem. III) Examination**  
**March / April - 2015**  
**Applied Electronics : Paper - V**  
*(Matlab)*

Time : 2 Hours]

[Total Marks : 50

**Instructions :**

(1)

<p>नीचे दशांश देव निशानीवाणी विगतो उत्तरवही पर अवश्य कभवी. Fillup strictly the details of signs on your answer book.</p> <p>Name of the Examination : SECOND YEAR B. SC. (SEM. 3)</p> <p>Name of the Subject : APPLIED ELECTRONICS : PAPER - V</p> <p>Subject Code No. : 2 9 9 9 Section No. (1, 2,.....) : NIL</p>	<p>Seat No. : [ ][ ][ ][ ][ ][ ][ ]</p> <p style="text-align: center;">Student's Signature</p>
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- (2) Question one is compulsory.
- (3) All the symbols have conventional meanings.
- (4) Assume data where ever necessary.
- (5) Figures to the extreme right indicates full marks.

- 1 Write very short answers : 8
- (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. 8
- (b) Discuss the Matlab arithmetic operators. 6

**OR**

- 2 (a) What is Simulink ? Discuss how will you create Simulink model and put a sine wave block on Simulink. 8
- (b) Show how the parameters of the sine wave block can be modified. 6

**3** (a) Show how Matlab is useful for solving a set of linear equations. **8**

(b) Write a Matlab program to demonstrate matrix addition and multiplication. **6**

**OR**

**3** (a) Explain the plot facility provided by Matlab. **8**

(b) Write a Matlab program which plots two cycles of sine wave. **6**

**4** Write Short notes : (Any **two**) **14**

(1) Hierarchy of Matlab operators

(2) Matlab Plots

(3) Simulink input blocks

(4) Matlab trigonometric functions.

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