



AD-3287

Third Year B. Sc. (Sem. VI) Examination

March/April – 2015

Electronics : Paper - XI

(Simulation using Matlab)

Time : 2 Hours]

[Total Marks : 50

Instructions :

(1)

नीचे इशारेके निशानीवाणी विगतो उत्तरवडी पर अवश्य कपवी. Fillup strictly the details of signs on your answer book.	Seat No. :
Name of the Examination :	<input type="text"/>
<input type="text" value="THIRD YEAR B. SC. (SEM. VI)"/>	<input type="text"/>
Name of the Subject :	<input type="text"/>
<input type="text" value="ELECTRONICS : PAPER - XI"/>	<input type="text"/>
Subject Code No. : <input type="text" value="3"/> <input type="text" value="2"/> <input type="text" value="8"/> <input type="text" value="7"/>	Section No. (1, 2,...): <input type="text" value="Nil"/>
Student's Signature	

- (2) Figures to the right indicate full marks.
- (3) Assume data wherever necessary.
- (4) Use suitable examples.

- 1 Write very short answers : 8
 - (1) What is command history ?
 - (2) Explain the 'hold on' command.
 - (3) If $a = [1, 2, 3, 4, 5, 6]$ what will be printed if a command 'a' is executed?
 - (4) What is the use of 'grid on' command?

- 2 (A) Discuss the Matlab desktop and explain the function of each window. 8
(B) Write commands for the following : 6
 - (1) Creating an array of 100 numbers from $-\pi$ to π
 - (2) If 'a' is a matrix then square all the array elements of a matrix.

- OR**
- 2 (A) Discuss the facilities provided by Matlab to generate 2D plots. 10
(B) Write a program to plot a function $y = 3x^2$ 4

- 3** (A) Explain how a 3x3 matrix is entered in a variable called 'grace'. Explain how would each element of the matrix be modified in the following ways **9**
Add a value 5 to each element
Multiply each element by a value 3
Generate the fifth power of each element.
- (B) How are individual elements of matrix addressed in Matlab? Explain giving suitable examples. **5**

OR

- 3** (A) What is a function? Discuss the method of writing functions in Matlab giving suitable examples. **10**
- (B) Write a Matlab function so that it returns a cos of an angle given in degree. **4**

- 4** Write short notes (ANY TWO) **14**
- (1) All Matlab operators
 - (2) The 'IF' statement
 - (3) Solving linear equations
 - (4) Simulink