



DRR-3287

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

March / April - 2016

Electronics : Paper - XI

(Simulation Using Matlab)

Time : 2 Hours]

[Total Marks : 50

Instructions :

(1)

नीचे दशावेक निशानीवाणी विगतो उत्तरवही पर अवश्य कभवी.
Fillup strictly the details of signs on your answer book.

Name of the Examination :
Third Year B. Sc. (Sem. VI)

Name of the Subject :
Electronics : Paper - XI

Subject Code No. : 3 2 8 7 Section No. (1, 2,.....) : NIL

Seat No. :

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 does Matlab stand for?

(2) What is the use of semicolon (;) after writing a Matlab command on the command window?

(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 facility provided by Matlab to perform matrix operations. 7
- (b) Write a program to solve the following set of linear equations : 7
- $$3x + 5y + 4z = 25$$
- $$2x - 3y + z = 11$$
- $$x + y - z = 22$$
- 3 (a) Discuss the plotting graphs related commands used in Matlab giving suitable examples. 9
- (b) Write a program to plot a graph demonstrating three phase voltage. 5
- OR**
- 3 (a) What is a function? Discuss the method of writing functions in Matlab.
- (b) Write a Matlab function so that it returns a cos of an angle given in degree.
- 4 Write short notes : (any two) 14
- (1) All Matlab operators (give suitable examples)
 - (2) Simulink
 - (3) Matlab conditional statement (if)
 - (4) Getting inputs in a Matlab program.
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