

Institute for Excellence in Higher Education, Bhopal (M.P.)
Department of Mathematics
B.Sc. III Year (SEM-V)
Questions Bank
on
MATLAB: Basics and Applications
(SEC/Vocational)
Multiple Choice Type Questions

1. Long assignments can be extended to another line by using an
(a) **ellipses** (b) Circle
(c) Triangle (d) None of these
2. The command displays 16 digits after decimal.
(a) format bank (b) **format long**
(c) format short e (d) None of these
3. The command rounds numbers to two decimal places.
(a) format long (b) format short e
(c) **format bank** (d) None of these
4. The command allows displaying in exponential form with four decimal places plus the exponent.
(a) format rat (b) format long
(c) format bank (d) **format short e**
5. The command gives the closest rational expression resulting from a calculation.
(a) **format rat** (b) format bank
(c) format long (d) None of these
6. are created by enclosing the set of elements in square brackets, using space or comma to delimit the elements.
(a) Column vectors (b) **Row vectors**
(c) Scalar (d) None of these
7. are created by enclosing the set of elements in square brackets, using semicolon (;) to delimit the elements.
(a) Row vectors (b) Scalar
(c) **Column vectors** (d) None of these
8. When an expression returns a result that is not assigned to any variable, the system assigns it to a variable named
(a) Key (b) Value
(c) Res (d) **ans**
9. The command is used for saving all the variables in the workspace, as a file with .mat extension, in the current directory.
(a) **save** (b) safe
(c) Both (a) and (b) (d) None of these
10. You can reload the file anytime later using the command.
(a) open (b) **load**
(c) Both (a) and (b) (d) None of these

11. The command displays all the variable names you have used.
(a) whos (b) what
(c) **who** (d) None of these
12. The command deletes all (or the specified) variable(s) from the memory.
(a) clean (b) delete
(c) erase (d) **clear**
13. To create an identity Matrix, we use the following command:
(a) **eye** (b) ones
(c) zero (d) det
14. To create an array of ones, we use the following command:
(a) eye (b) **ones**
(c) zero (d) det
15. To create an array of zeros, we use the following command:
(a) eye (b) ones
(c) **zero** (d) det
16. To computes determinant of an array, we use the following command:
(a) eye (b) ones
(c) zero (d) **det**
17. The main area where commands can be entered at the command line is:
(a) **Command Window** (b) Current Folder
(c) Work Space (d) Command History
18. A panel shows or return commands that are entered at the command line is:
(a) Current Folder (b) **Command History**
(c) Work Space (d) Command Window
19. A panel allows us to access the project folders and files is known as:
(a) Command Window (b) Work Space
(c) **Current Folder** (d) Command History
20. The shows all the variables created and/or imported from files.
(a) Current Folder (b) Command History
(c) Command Window (d) **Work Space**
21. The command Clears command window.
(a) **clc** (b) clear
(c) quit (d) type
22. The command Removes variables from memory.
(a) clc (b) **clear**
(c) quit (d) type
23. The command Stops MATLAB.
(a) clc (b) clear
(c) **quit** (d) type
24. The command Displays contents of a file.
(a) clc (b) clear
(c) quit (d) **type**
25. The command convert to character array.
(a) **char** (b) int2str
(c) mat2str (d) num2str

26. The command convert integer data to string.
 (a) char (b) **int2str**
 (c) mat2str (d) num2str
27. The command convert matrix to string.
 (a) char (b) int2str
 (c) **mat2str** (d) num2str
28. The command convert number to string.
 (a) char (b) int2str
 (c) mat2str (d) **num2str**
29. The function creates an array of all zeros.
 (a) **zeros()** (b) ones()
 (c) eye() (d) rand()
30. The function creates an array of all ones.
 (a) zeros() (b) **ones()**
 (c) eye() (d) rand()
31. The function creates an identity matrix.
 (a) zeros() (b) ones()
 (c) **eye()** (d) rand()
32. The function creates an array of uniformly distributed random numbers on (0,1).
 (a) zeros() (b) ones()
 (c) eye() (d) **rand()**
33. The function creates a magic square array.
 (a) **magic()** (b) cat()
 (c) cell() (d) cells
34. The function to build multidimensional arrays.
 (a) magic() (b) **cat()**
 (c) cell() (d) cells
35. The function is used for creating a cell array.
 (a) magic() (b) cat()
 (c) **cell()** (d) cells
36. Enclosing the indices in braces {}, to refer to the data within individual
 (a) magic() (b) cat()
 (c) cell() (d) **cells**
37. MATLAB stands for?
 (a) **matrix laboratory** (b) math library
 (c) matric library (d) matrix library
38. Command used to display the value of variable x.
 (a) display (b) **disp(x)**
 (c) disp x (d) vardisp('x')
39. Executing in the command window the following code returns.
`a = [1:3]'; size(a)`
 (a) error message (b) 1 3
 (c) **3 1** (d) 31

40. What would be the output of the following code (in editor window)?
 $A = [1 \ 0 \ 2]; \quad b = [3 \ 0 \ 7]; \quad c = a.*b;$
 (a) $[2 \ 0 \ 21]$ (b) $[7 \ 0 \ 3]$
 (c) $[14 \ 0 \ 3]$ (d) $[3 \ 0 \ 14]$
41. Which of the following commands is used to calculate the square root of a number in MATLAB?
 (a) **sqrt** (b) root
 (c) power (d) exp
42. What is the default extension of a MATLAB script file?
 (a) .mat (b) **.m**
 (c) .md (d) .txt
43. Which of the following commands is used to generate a random integer between two specified values in MATLAB?
 (a) rand (b) randn
 (c) **randi** (d) random
44. What is the result of the following expression in MATLAB: $3 + 5 * 2$
 (a) 16 (b) 13
 (c) 11 (d) **15**
45. To determine whether an input is MATLAB keyword, command is?
 (a) **iskeyword** (b) key word
 (c) inputword (d) isvarname
46. If one operand is a scalar and the other is not, then MATLAB applies the scalar to every element of the other operand. This property is known as
 (a) operand divergence (b) **scalar expansion**
 (c) vector expansion (d) dimension declaration
47. Command is used to save command window text to file.
 (a) saveas (b) texttofile
 (c) **diary** (d) todiaary
48. What would be the output of the following code (in editor window)?
 $a=1:5; \quad c=a.^2$
 (a) $[1 \ 25]$ (b) $[1 \ 2 \ 3 \ 4 \ 5]$
 (c) $[25 \ 16 \ 9 \ 4 \ 1]$ (d) **$[1 \ 4 \ 9 \ 16 \ 25]$**
49. What is the basic difference between M-files and MAT-files?
 (a) **MAT files are binary data files while m-files are ASCII text files**
 (b) There is no difference
 (c) M files are binary data files while MAT-files are ASCII text files
 (d) There is no such thing as MAT files
50. How do you create a function file in MATLAB?
 (a) Begin script file with function definition
 (b) **Begin m-file with function definition**
 (c) There is no such thing called function file
 (d) An m-file is only a function file

Answer Key

1. (a)	2. (b)	3. (c)	4. (d)	5. (a)
6. (b)	7. (c)	8. (d)	9. (a)	10. (b)
11. (c)	12. (d)	13. (a)	14. (b)	15. (c)
16. (d)	17. (a)	18. (b)	19. (c)	20. (d)
21. (a)	22. (b)	23. (c)	24. (d)	25. (a)
26. (b)	27. (c)	28. (d)	29. (a)	30. (b)
31. (c)	32. (d)	33. (a)	34. (b)	35. (c)
36. (d)	37. (a)	38. (b)	39. (c)	40. (d)
41. (a)	42. (b)	43. (c)	44. (d)	45. (a)
46. (b)	47. (c)	48. (d)	49. (a)	50. (b)