

## Unit 3 - Week 1

## Course outline

How does an NPTEL online course work?

## MATLAB

## Week 1

- Introduction to Matlab
- Plotting of Functions in Matlab
- Symbolic Computation in Matlab
- Functions definition in Matlab
- In continuation of basics of Matlab
- Feedback Form

 Quiz : Assignment 1

## Week 2

## Week 3

## Week 4

## Week 5

## Week 6

## Week 7

## Week 8

## Week 9

## Week 10

## Week 11

## Week 12

## Assignment Solutions

## Download Videos

## Assignment 1

The due date for submitting this assignment has passed.  
As per our records you have not submitted this assignment.

**Due on 2020-09-30, 23:59 IST.**

1) What does Matlab stand for ?

1 point

- Math Laboratory
- Matrix Laboratory
- Mathworks
- None of these

No, the answer is incorrect.  
Score: 0

Accepted Answers:  
Matrix Laboratory

2) Which of the following will correctly define x, y and z as symbols ?

1 point

- sym(x, y, z)
- syms x y z
- syms x, y, z
- sym x, y, z

No, the answer is incorrect.  
Score: 0

Accepted Answers:  
syms x y z

3) Which statement below will result in the variable y containing [1 3 5 7]?

1 point

- y = linspace(1,7,4)
- y = oddnums(1,7)
- y = 1:4:7
- y = 1:2:7

No, the answer is incorrect.  
Score: 0

Accepted Answers:  
y = linspace(1,7,4)  
y = 1:2:7

4) After the code below executes, what does the variable y contain ?

1 point

```
x = linspace(0, pi, 10);
y = cos(x(10));
```

- 1
- 0
- +1
- Some number that is not -1, 0 or +1

No, the answer is incorrect.  
Score: 0

Accepted Answers:  
-1

5) Which of the following is not an acceptable name for a Matlab variable ?

1 point

- 2index
- INDEX
- index\_2
- index2

No, the answer is incorrect.  
Score: 0

Accepted Answers:  
2index

6) How many errors will Matlab show if the following code entered ?

1 point

```
A = [1; 2; 3];
B = [1 2];
C = A * B;
D = C * A;
```

- 2
- 1
- No error
- 4

No, the answer is incorrect.  
Score: 0

Accepted Answers:  
1

7) Find the error in the following code

1 point

```
x = -10 : 1 : 10; y = -10 : 2 : 10; plot(x, y)
```

- Plot is not available in Matlab
- Syntax of plot is wrong
- Length of x and y should be same
- No error

No, the answer is incorrect.  
Score: 0

Accepted Answers:  
Length of x and y should be same

8) What are the functions to see the graph of a continuous and a discrete function ?

1 point

- plot() & stem()
- cont() & disc()
- plot() & disc()
- cont() & stem()

No, the answer is incorrect.  
Score: 0

Accepted Answers:  
plot() & stem()

9) Suppose you have a matrix

1 point

$$x = \begin{pmatrix} 1 & 2 & 3 & 4 \\ 3 & 4 & 5 & 6 \end{pmatrix}$$

Which of the following will evaluate to  $\begin{pmatrix} 3 \\ 5 \end{pmatrix}$

- x(3)
- x(3,:)
- x(:,3)
- None of these

No, the answer is incorrect.  
Score: 0

Accepted Answers:  
x(:,3)

10) Which of the commands below you use to define this function  $f(x) = \frac{e^x}{x} + \sqrt{x}$

1 point

- f = (x) exp(x)/x+sqrt(x)
- f = @(x) exp(x)/x+sqrt(x)
- f = @(x) e(x)/x+sqrt(x)
- None of these

No, the answer is incorrect.  
Score: 0

Accepted Answers:  
f = @(x) exp(x)/x+sqrt(x)