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, 22:59 IST

1) What does Matlab stand for?
   - Math laboratory
   - Math Laboratory
   - Mathlab
   - None of these
   No, the answer is incorrect.
   - Accepted Answers: Math laboratory

2) Which of the following statements are true?
   - $\sin x = \sin y$
   - $\sin x > \sin y$
   - $\sin x < \sin y$
   - $\sin x \neq \sin y$
   No, the answer is incorrect.
   - Accepted Answers: $\sin x \neq \sin y$

3) What is the value of $y$ if $\sin x = \sin y$?
   - $y = \sin^{-1}(1.74)$
   - $y = \sin(1.74)$
   - $y = 1.74$
   - $y = 0.57$
   No, the answer is incorrect.
   - Accepted Answers: $y = \sin^{-1}(1.74)$

4) After the code below executes, what does the variable $y$ contain?
   
   ```matlab
   x = linspace(0, pi, 10);
   y = cos(x(10));
   ```
   - -1
   - 1
   - 0
   - 1
   No, the answer is incorrect.
   - Accepted Answers: -1

5) Which of the following is not an acceptable name for a Matlab variable?
   - index
   - INDEX
   - indx
   - index2
   No, the answer is incorrect.
   - Accepted Answers: INDEX

6) How many errors will Matlab show if the following code entered?
   
   ```matlab
   A = [1, 2, 3];
   B = [1 2];
   C = A + 2B;
   ```
   - 7
   - 6
   - 5
   - 4
   No, the answer is incorrect.
   - Accepted Answers: 7

7) Find the error in the following code
   
   ```matlab
   x = -10:1:10; y = -10:2:10; plot(x,y)
   ```
   - Error is not allowed in Matlab
   - Syntax of plot is wrong
   - Length of x and y should be same
   - No error
   No, the answer is incorrect.
   - Accepted Answers: Syntax of plot is wrong

8) What are the functions to use the graph of a continuous and a discrete function?
   - plot & stem
   - comet & comet3
   - comet & comet3
   - plot & stem
   No, the answer is incorrect.
   - Accepted Answers: plot & stem

9) Suppose you have a matrix
   
   \[
   x = \begin{pmatrix}
   1 & 2 & 3 & 4 \\
   5 & 6 & 7 & 8 \\
   \end{pmatrix}
   \]
   Which of the following will evaluate to
   
   \[
   x^\top
   \]
   - $x^\top$
   - $x^2$
   - $x^2$
   - None of these
   No, the answer is incorrect.
   - Accepted Answers: $x^\top$

10) Which of the commands below you use to define this function $f(x) = x^2 + \sqrt{x}$?
   - $f = \exp(x)/x + \exp(x)$
   - $f = \exp(x)/x + \exp(x)$
   - $f = \exp(x)/x + \exp(x)$
   - None of these
   No, the answer is incorrect.
   - Accepted Answers: None of these

   ```matlab
   f = @(x) exp(x)/x + exp(x)
   ```