Assignment 3

The due date for submitting this assignment has passed.

As per our records you have not submitted this assignment.

Due on 2021-02-10, 23:59 IST.

1. In python, given vectors of x and y coordinates, which function returns maximum p and q corresponding to a full 3-D grid?
   a. p, q = meshgrid(x, y)
   b. p = meshgrid(x)
   c. p = meshgrid(x, x)
   d. p = meshgrid(y, y)
   Accepted Answers:
   p = meshgrid(x)
   q = meshgrid(y)
   Na, the answer is incorrect.
   Score: 0

2. Which function is used to plot the (x, y) coordinates of a vector field in an x, y meshgrid in python environment?
   a. quiver3d(x, y, z, u, v)
   b. streamline(x, y, z, u, v)
   c. quiver2d(x, y, u, v)
   d. quiver3d(x, y, z, u, v)
   Accepted Answers:
   c. quiver2d(x, y, u, v)
   d. quiver3d(x, y, z, u, v)
   No, the answer is incorrect.
   Score: 0

3. In a particular example of contour plot in python the command is given as plt.contour(X, Y, Z, 11). What does the number 11 signify?
   a. Number of X coordinates
   b. Number of Y coordinates
   c. Number of iso-levels of constant F
   d. None of the above
   Accepted Answers:
   c. Number of iso-levels of constant F
   No, the answer is incorrect.
   Score: 0

4. In streamline function in python, which parameter controls the closeness of streamlines?
   a. linewidth
   b. dxy
   c. points
   d. None of the above
   Accepted Answers:
   a. linewidth
   No, the answer is incorrect.
   Score: 0

5. For the given command ax = subplonts(x, y, z, facecolor='black'): what does the last parameter signify?
   a. Events to track
   b. Terminates integration
   c. Compute a continuous solution
   d. None of the above
   Accepted Answers:
   d. None of the above
   No, the answer is incorrect.
   Score: 0

6. For the given command streamline(ax, X, Y, Z, Integration_direction='forward', density=1), X and Y are _____ and _____ respectively.
   a. 1D array, 1D array
   b. 2D array, 2D array
   c. 2D array, 1D array
   d. 1D array, 2D array
   Accepted Answers:
   b. 2D array, 2D array
   No, the answer is incorrect.
   Score: 0

7. For the command streamline(ax, X, Y, Z, Integration_direction='both',), the number of rows and columns of u must match with the length of x and y respectively.
   a. x and y
   b. y and x
   c. (x-1) and (y-1)
   d. (x-1) and (y+1)
   Accepted Answers:
   c. (x-1) and (y-1)
   No, the answer is incorrect.
   Score: 0

8. Which library is used to plot a 3D figure in python using the init_plt3d() function?
   a. matplotlib
   b. numpy
   c. matplab
   d. mayavi
   Accepted Answers:
   d. mayavi
   No, the answer is incorrect.
   Score: 0

9. In the solve() function of python which input parameter defines the time at which to store the computed solution?
   a. t, f, y
   b. t, f
   c. events
   d. args
   Accepted Answers:
   b. t, f
   No, the answer is incorrect.
   Score: 0