Python Sample Test II (20 Single Choice Questions)

Name and Surname: _____

1. What is the main purpose of the `matplotlib` library?

   A. handle errors
   B. create plots and graphs
   C. manage files
   D. perform hashing

2. Which command is commonly used to import matplotlib for plotting?

   A. `import plot`
   B. `import matplotlib`
   C. `import matplotlib.pyplot as plt`
   D. `import math`

3. What type of plot is created using `plt.plot(x, y)`?

   A. bar chart
   B. line plot
   C. histogram
   D. scatter plot

4. Which function displays the plot on the screen?

   A. `plt.draw()`
   B. `plt.print()`
   C. `plt.show()`
   D. `plt.end()`

5. How do you label the x-axis of a plot?

   A. `plt.x()`
   B. `plt.xlabel()`
   C. `plt.axis()`
   D. `plt.labelx()`

6. What does `plt.legend()` do?

   A. adds grid lines
   B. changes colors
   C. shows plot description
   D. displays plot labels

7. Which command adds a grid to a plot?

   A. `plt.grid()`
   B. `plt.lines()`
   C. `plt.legend()`
   D. `plt.show()`

8. What happens if a file opened for reading does not exist?

   A. program continues
   B. file is created
   C. an exception occurs
   D. file is ignored

9. Which keyword is used to handle exceptions?

   A. `error`
   B. `try`
   C. `handle`
   D. `check`

10. Which block runs only if no exception occurs?

    A. `except`
    B. `finally`
    C. `else`
    D. `raise`

11. What is the purpose of the `finally` block?

    A. handle specific errors
    B. run code only on error
    C. always execute code
    D. stop the program

12. Which exception occurs when dividing by zero?

A. `ValueError` B. `TypeError`
C. `ZeroDivisionError` D. `NameError`

13. Why is error handling important?

A. speeds up code B. prevents crashes
C. removes bugs D. shortens programs

14. What does this code do?

```
try:
    x = int(input())
```

A. ignores errors B. checks syntax
C. may raise an exception D. prints input

15. What is hashing used for?

A. sorting data B. encrypting files
C. mapping data to fixed values D. plotting values

16. Which data structure is commonly used to store hash results?

A. list B. tuple
C. dictionary D. string

17. What does a hash function return?

A. random number B. fixed-size value
C. text string D. list of values

18. What is a simple way to create a hash without libraries?

A. using loops B. using modulo operator
C. using files D. using matplotlib

19. What does this expression represent?

```
key % 10
```

A. division B. hash index
C. power operation D. comparison

20. Why should a hash function be consistent?

A. faster plotting B. better graphics
C. same input gives same output D. avoids exceptions