

Mock Test - 6**20 Marks****PART - A****10 x 1 = 10**

1. Which of the following is a way to define a function that can take a variable number of arguments?
 - a. `def my_function(*args):`
 - b. `def my_function(args[]):`
 - c. `def my_function(args...):`
 - d. `def my_function(args):`
2. Which of the following functions is used to open a file in Python?
 - a. `open_file()`
 - b. `open()`
 - c. `file_open()`
 - d. `fopen()`
3. Which of the following methods reads the entire content of a file into a string?
 - a. `read_all()`
 - b. `readlines()`
 - c. `reads()`
 - d. `read()`
4. What is the purpose of the with statement when working with files?
 - a. It automatically closes the file after the block of code is executed.
 - b. It opens the file in read mode only.
 - c. It allows multiple files to be opened simultaneously.
 - d. It is used to write data to a file.
5. What will be the output of the following code?

```
def add(a, b=5):  
    return a + b  
print(add(3))
```

 - a. 3
 - b. 5
 - c. 8
 - d. TypeError
6. What is the result of the following code?

```
a = 10  
b = 20  
a, b = b, a  
print(a, b)
```

 - a. 10 20
 - b. 20 10
 - c. Error
 - d. None
7. What will happen if you try to open a file in 'r' mode that does not exist?
 - a. It creates a new file.
 - b. It throws a FileNotFoundError.
 - c. It opens a blank file.
 - d. It returns None.
8. What does JSON stand for?
 - a. JavaScript Object Notation
 - b. Java Standard Object Notation
 - c. JavaScript Open Notation
 - d. Java Object Notation
9. Which of the following is a valid JSON object?
 - a. `{"name": "John", "age": 30}`
 - c. `["name": "John", "age": 30]`

- b. {name: "John", age: 30} d. {"name": "John", "age": 30}
10. What is the file extension for a JSON file?
- a. .txt b. .js c. .json d. .json

PART - B

5 x 1 = 5

11. A function in Python is defined using the keyword _____.
12. The values passed into a function are known as _____.
13. If you try to open a file that does not exist in read mode ('r'), Python will raise a _____ error.
14. A JSON object is represented using _____ braces
15. JSON supports the following data types: string, number, object, array, _____, and _____.

PART - C

16. You are given the following JSON data representing information about friends (5 Marks)

```
{
  "name": "Frieda",
  "hobbies": ["eating", "sleeping", "barking"],
  "address": {
    "work": null,
    "home": ["Berlin", "Germany"]
  },
  "friends": [
    {
      "name": "Philipp",
      "hobbies": ["eating", "sleeping", "reading"]
    },
    {
      "name": "Mitch",
```

```
    "hobbies": ["running", "snacking"]
  }
]
```

To modify the given JSON data by removing the second index value from the hobbies list of the friend named "Philipp," you can follow these steps in Python:

- a. Load the JSON data.
- b. Iterate through the list of friends to find the friend named "Philipp."
- c. Remove the item at index 2 from the hobbies list of that friend.
- d. Convert the modified data back to JSON if needed and print