

JECRC UNIVERSITY, JAIPUR

Assignment – 2 (Unit – 4)

Data Analysis using Python

Submission Date – 5 April 2023

Instructions:

1. Attempt all the questions and write relevant question numbers before writing the answer.
2. Illustrate your answers with suitable examples and diagrams, wherever necessary.

Part A

Multiple Choice Questions: - total 10 questions.

1x10 = 10

Q. 1 What will be the output of the following code?

```
>> print(3 + 4 % 7)
```

Q. 2 Which one of these is operator is used for getting division remainder?

A. /

B. //

C. |

D. %

Q. 3 What is the output of the following code:

```
>>> print(2**(3**2))
```

```
>>> print((2**3)**2)
```

```
>>> print(2**3**2)
```

A. 512, 64, 512

C. 64, 64, 64

B. 512, 512, 512

D. 64, 512, 64

Q. 4 What is the output of below expression?

```
>> str="hello"
```

```
>> print(list(str))
```

Q. 5 When you assign a variable (or name) in Python, a reference to the object on the righthand side of the equals sign is created,

A. True

B. False

Q. 6 What is the output of this expression,

```
>> True and True or False and True
```

A. True

B. False

C. Error

Q. 7 What is the output of below expression,

```
>> number = input("Enter a no. ")
```

```
>> type(number)
```

Q. 8 What is the output of the following code?

```
>> a = [1,2,3]
```

```
>> b = a
```

```
>> b.append(4)
```

```
>> print(a)
```

Q. 9 What will be the output of the following Python code?

```
>>> i = 1
```

```
>>> while True:
```

```
    if i%3 == 0:
```

```
        break
```

```
    print(i)
```

```
    i += 1
```

Q. 10 Write the output,

```
>> a = list(range(2,4))
```

```
>> print(a)
```

Part B

Very Short Answer Questions: - total 4 questions.

2x4 = 8

Q. 1 What is type casting? Write about it with example.

Q. 2 Write a Python program to display all the multiples of 3 within the range 10 to 50.

Q. 3 Write the output of the following code.

```
>>> rows = 5
>>> # outer loop
>>> for i in range(1, rows + 1):
...     # inner loop
...     for j in range(1, i + 1):
...         print("*", end=" ")
...     print("")
```

Q. 4 What are magic commands? Write about it with example.

Part C

Short Answer Questions: - total 2 questions.

6x2 = 12

Q. 1 WAP to add all the digits of a number. E.g., input => 234, output => 9 (2+3+4)
(No. to be inputted by the user.)

Q. 2 Write a program to accept the cost price of a car and display the road tax to be paid according to the following criteria:

Car Price (Rs)	Tax on price
< 500000	8%
> 500000 and < 1000000	12%
> 1000000	18%

Part D

Long Answer Questions: - total 2 questions.

10x2 = 20

Q. 1 A. Explain break, continue and pass statement with the help of a suitable code.

B. What is duck typing? Explain using suitable code.

Q. 2 A. What is the Datetime module in python?

B. Which Datetime function is used to convert a string into the datetime objects and from datetime object to string?

C. What is time delta?

D. What will be the output of below code?

```
>> temp = "02081994145432"
>> temp2datetime= dt.datetime.strptime(temp, '%d%m%Y%H%M%S')
>> print(temp2datetime)
```