Reg. No. : ⬜⬜⬜⬜⬜⬜⬜⬜⬜⬜⬜⬜

Question Paper Code: U5703

B.E./B.Tech. DEGREE EXAMINATION, NOV 2023

Fifth Semester

Mechanical Engineering

21UME503 – OBJECT ORIENTED PYTHON PROGRAMMING

(Regulations 2021)

Duration: Three hours   Maximum: 100 Marks

Answer All Questions

PART A - (10 x 2 = 20Marks)

1. _____ is the correct extension of the Python file.   CO1-U

    (a) .python   (b) .pi   (c) .py   (d) .p

2. Write the output of the following Python function.len(["hello", 2, 4, 6])   CO2 -App

    (a) Error   (b) 3   (c) 6   (d) 4

3. _____ is a built-in function in python.   CO1- U

    (a) fact( )   (b) print( )   (c) power   (d) squareroot( )

4. ____ is the keyword used to specify the definition of the function.   CO1-U

    (a) def   (b) define   (c) fun   (d) function

5. Brief the queue type LIFO   CO1-U

    (a) 4.5   (b) First in first out   (c) First in last out   (d) Last in first out

6. Which of the following file is used for package?   CO1-U
    (a) __str__.py   (b) __init__.py   (c) __len__.py   (d) __del__.py

7. How many objects and reference variables are there for the given   CO4-App
    Python code?

    class A:
        print("Inside class")
    A( )
    A( )
    obj=A( )
    (a) 2 and 1   (b) 3 and 3   (c) 3 and 1   (d) 3 and 2

8. Which of the following is not an OOPS concept?   CO1-U

    (a) Encapsulation   (b) Polymorphism   (c) Exception   (d) Abstraction

9. What will be output for the following code?   CO4 - App

```
try:
print(x)
exceptNameError:
print("Variable x is not defined")
except:
print("Something else went wrong")
```
(a) x   (b) Something else went wrong   (c) Error   (d) Variable x is not defined

10. Which statement will read 5 characters from a file object 'f'?   CO1 - U

(a) f.read( )   (b) f.read(5)   (c) f.reads(5)   (d) f.reading(5)

PART – B (5 x 6= 30Marks)

11. Compare tuples and list with syntax & examples.   CO1 - U

12. Explain briefly about functions with example.   CO1 - U

13. Write a python program using python random module to shuffle the below list   CO3 - App
and print the original list and shuffled list.

List1 = [1, 2, 3, 4, 5]

14. Define a class triangle using breadth and height and compute the area of triangle   CO1 - U
using constructor method. Take breadth = 10cm, height = 25cm.

15. Explain briefly about Except Handling.   CO1 - U

PART – C (5 x 10= 50Marks)

16. (a) Construct a dictionary with keys as Roll Nos. 101,102,103,104 and   CO2 - App   (10)
values as marks 64,45,78,59.
(a) Print the roll no for 104
(b) There was a mistake in the marks of Roll no 102, kindly add 5
marks
(c) Call all marks of the students

Or

(b) Write a Python program to create a dictionary of keys x, y, and z   CO2 - App   (10)
where each key has as value a list from 11-20, 21-30, and 31-40
respectively.
(a) Access the fifth value of each key from the dictionary.
(b) Update the dictionary with the key 'w' has the value of list from
41-50.
(c) Call all the values from w, x, y and z.

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17. (a) Write a python program for creating a multiplication table for first CO2 - App (10)
10 numbers using For Loop.

Or

(b) Write a python program to print cube of all numbers from 5 to 15 CO2 - App (10)
and stop when cubed value reaches 1000 using While Loop.

18. (a) Write a python queue program for the range of 8 and returns first in CO3 - App (10)
first out.

Or

(b) Write a python queue program for the range of 11 to 20 and returns CO3 - App (10)
last in first out.

19. (a) Write a Python Program to get the input of number of items and CO4 - App (10)
value of the item and determine the total cost of the items.

Or

(b) Write a program for creating class student with rollno, name and age CO4 - App (10)
using constructor method.

20. (a) Write a program to read a text file and rewrite as CO4 - App (10)
"Hello
Welcome to MECH".

Or

(b) Write a simple exception handling program for list addition. CO4 - App (10)
List1 = [100, 200, 300, "400", 500]
List1 = [100, 200, 300, 400, 500]

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