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Question Paper Code: 95703

B.E./B.Tech. DEGREE EXAMINATION, APRIL 2024

Fifth Semester

Mechanical Engineering

19UME503 – OBJECT ORIENTED PYTHON PROGRAMMING

(Regulations 2019)

Duration: Three hours   Maximum: 100 Marks

Answer ALL Questions

PART A - (10 x 2 = 20 Marks)

1. _____ is the syntax used to get the input from the user.   CO1- U

   (a) input( )   (b) int( )   (c) id( )   (d) iter( )

2. Write the output of the following Python function.   CO1- U

   len(["hello", 2, 4, 6])

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

3. Which of the following items are present in the function header?   CO1- U

   (a) function name   (b) keyword   (c) parameter list   (d) all the above

4. Which of the following function header(s) is/are correct?   CO1- U

   (a) def area (a = 1, b):   (b) def area (a = 1, b, c = 2):

   (c) def area (a = 1, b = 1, c = 2):   (d) All the above

5. Output of round (4.576) is _____   CO1- U

   (a) 4.5   (b) 5   (c) 4   (d) 4.6

6. _____ function is used for transpose of an array in Numpy.   CO1- U

   (a) sum   (b) T   (c) matmul   (d) dot

7. _____ is reference for an object.   CO4- U

   (a) class   (b) def   (c) self   (d) init

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8. _____ defines the constructor method.   CO4- U

    (a) def __init__ (title, author):   (b) def __init__ (self, title, author):

    (c) def __init__ ( ):   (d) __init__ (self, title, author):

9. Which statement will read 5 characters from a file object 'f'?   CO5- U

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

10. Which of the following string format is used for center alignment   CO5- U

    (a) : >   (b) : <   (c) : ^   (d) : =

<div align="center">PART – B (5 x 6= 30 Marks)</div>

11. Define operators and explain briefly about types of operators.   CO1- U

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

13. Explain about different queue types with proper syntax.   CO1- U

14. Explain briefly about inheritance with example.   CO1- U

15. Explain briefly about Except Handling.   CO1- U

<div align="center">PART – C (5 x 10= 50 Marks)</div>

16. (a) Write a python program to find the length of the lists, form   CO2-App   (10)
matrix from the lists and find the first column of the matrix from the given lists. List1 = [10,11,12]; List2 = [13,14,15]; List3 = [16,17,18]

<div align="center">Or</div>

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

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

<div align="center">Or</div>

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(b) Define a function that create the list of roll numbers for present students and write another function to check the status of the students attendance by giving their roll no.   CO2-App   (10)
List of Roll No: 101, 102, 104, 105, 107, 108
Attendance checking Roll No: 102, 111

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

Or

(b) Write a python queue program for the input of 8, 10, 14, 7, 9, 2 and returns priority.   CO3- App   (10)

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

Or

(b) Write a program to create inheritance for derived function from addition (addition of two numbers) and multiplication (multiplication of two numbers) class to division class (division of two numbers).   CO4- App   (10)

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

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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