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Reg. No. :

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Question Paper Code: U3828

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

Third Semester

Electronics and Communication Engineering

21UIT328 - FUNDAMENTALS OF PYTHON PROGRAMMING

(Regulations 2021)

Duration: Three hours

Maximum: 100 Marks

Answer ALL Questions

PART A - (10 x 1 = 10 Marks)

1. What is the data type of (1)? CO1- U
(a) Tuple (b) Integer (c) List (d) Both tuple and integer
2. What will be the output of the following Python statement? CO1- U
"a"+"bc"
(a) bc (b) abc (c) a (d) bca
3. Which of the following refers to mathematical function? CO1- U
(a) sqrt (b) rhombus (c) add (d) avg
4. What will be the output of the following Python expression? CO1- U
round(4.576)
(a) 4.5 (b) 5 (c) 4 (d) 4.6
5. Which of the following is a Python tuple? CO1- U
(a) [1,2,3] (b) (1,2,3) (c) {1,2,3} (d) {}
6. What will be the output of the following Python code? CO1- U
>>>t1 = (1, 2, 4, 3)
>>>t2 = (1, 2, 3, 4)
>>>t1 < t2
(a) True (b) False (c) Error (d) None of these
7. In which year was the Python language developed? CO1- U
(a) 1995 (b) 1972 (c) 1981 (d) 1989

8. What will the following code print? `print("Hello, " + "world!")` CO1- U
 (a) Hello, world! (b) Hello + world! (c) "Hello, (d) Error world!"
9. Which are the advantages of functions in python? CO1- U
 (a) Reducing duplication of code (b) Decomposing complex problems into simpler pieces
 (c) Improving clarity of the code (d) All the above
10. To which of the following the “in” operator can be used to check if an item is in it? CO1- U
 (a) Lists (b) Dictionary (c) Tuples (d) All of the above

PART – B (5 x 2= 10 Marks)

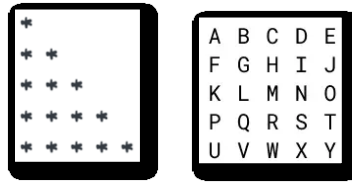
11. Write a python coding to find the sum of n natural numbers CO2 - App
12. Write the syntax and usage of for loop CO1 - U
13. What is meant by module in python? List some built in modules in python CO1 - U
14. Explain how to create a dictionary in python? CO1 - U
15. Write a python code snippet to add a new key-value pair to a dictionary. CO2 - App

PART – C (5 x 16= 80 Marks)

16. (a) Write a python code for the below scenario and also explain their types in detail with suitable examples. CO2-App (16)
 Accept a three-digit number from the user. The number is divisible by 100 then print “Divisible by 100”, else if the number is divisible by 50 then print “Divisible by 50”, else if the number is divisible by 20 then print “Divisible by 20”, and else if the number is divisible by 10 then print “Divisible by 10”. Otherwise, print “Try again
- Or
- (b) (i) Write a python program to print all the prime numbers in an interval. CO2-App (16)
 (ii) Write a python code to display the multiplication table of a given number.
17. (a) Write a python code for the below scenario and explain the scenario with suitable syntax & flowchart. CO2-App (16)
 Grade Classification: If the score is 90 or greater, it's an "A.", If the score is between 90 and 80, it's a "B.", If the score is between 80 and 70, it's a "C.", If the score is between 70 and 60, and it's a "D." If the score is below 50, it's an "F."

Or

- (b) Write a python program for the below patterns and also explain its iteration in detail using a flowchart. CO2- App (16)



18. (a) Explain in detail about function arguments in python and its types with suitable example. CO1 - U (16)

Or

- (b) What is modules and package? Explain about modules and package with example? CO1 - U (16)

19. (a) Explain in detail about list operations with suitable examples. CO1 - U (16)

Or

- (b) Define tuples in python. How are tuples different from lists? Give an example of a tuple and explain why they are immutable. CO1 - U (16)

20. (a) Differentiate list, tuple, set and dictionary in python with suitable example. CO1 - U (16)

Or

- (b) Explain in detail about various string methods in python with suitable example. CO1 - U (16)

