

END TERM EXAMINATION

SIXTH SEMESTER [B.TECH] JUNE 2024

Paper Code: CIE-332T/IOT-330T

Subject: Programming in Python

Time: 3 hours

Max. Marks: 75

Note : Attempt five questions in all including Q. No. 1 which is compulsory. Select one Question from each Unit. Assume suitable missing data if any.

Q1 Answer following in brief.

[5x5 = 25]

- What is the role of data frame? How can data frames be merged?
- What are the features of Python Programming language?
- Differentiate between list, tuple and dictionary with example.
- Write a short note on different methods to read data from a file.
- How is exception handling implemented in python?

UNIT-I

- Q2
- What are loop interruption statements? What is the difference between break, continue and pass? Write a program that prints all integers lying between 1 and 50 that aren't divisible by either 2 or 3. [6]
 - Explain the different numeric, assignment, augmented operators used in python. [3]
 - Explain how operator precedence is used in evaluating expressions. [3.5]
- Q3
- What are the commonly used operators in python? Explain operator overloading with the help of an example. [6]
 - What is type conversion? Write a python program to demonstrate number type conversions. [6.5]

UNIT-II

- Q4
- What are the different ways of string manipulation in python? WAP in python check whether the string is Symmetrical or Palindrome [6]
 - What are functions in python? WAP in python to use Pythagoras theorem to calculate the length of the hypotenuse of a right-angled triangle where the other sides have lengths 3 and 4. [6.5]
- Q5
- Define the following: find(), isalnum(), zfill(), strip(), split() and rindex(). [6]
 - Write the definition of a function Reverse(X). WAP to display the elements in reverse order such that each displayed element is twice of the original element (element *2) of the List X. [3]
 - Write a function mul () which accepts list L, odd_L, even_L as its parameters. Transfer all even values of list L to even_L and all odd values of L to odd_L. [3.5]

UNIT-III

- Q6
- Write a program that accepts filename as an input from the user. Open the file and count the number of times a character appears in the file. [6]
 - What are files? Why do we need them? What are different access modes in which you can open file? [6.5]
- Q7
- What is directory access? How do you walk through a directory tree? [6]
 - Write a python program to merge two files and then change the content of this file to upper case letters. [6.5]

P.T.O.