

2111000102040002
First Year B.C.A (Sem) – II
Examination April -2023
Programming Skills

Seat No:

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[Time: Three Hours]

[Max. Marks:70]

Student's Signature

- Q.1 Answer in brief(Any Seven) [14]**
1. What is function prototype? Write its importance.
 2. Discuss memory allocation in union.
 3. What is Sets? List out features of it.
 4. Explain the term dynamic semantic.
 5. How to write comments in python?
 6. Explain identity operators in Python.
 7. Explain the *range()* function in python.
 8. What is the use of pass statement?
 9. What is dictionary? Give the syntax to declare a dictionary.
- Q.2 [A] Answer the following questions. (Attempt any Two) [10]**
1. Write a note on Structure in C with example.
 2. Explain recursion in C with proper example.
 3. Explain the categories of user defined functions in C language.
 4. Explain arithmetic operators in python.
- [B] What is 2D array? Explain the memory representation of 2D array in C. [4]**
- OR**
- [B] What is 2D character array? Write different ways to initialize 2D character array in C. [4]**
- Q.3 [A] Answer the following questions. (Attempt any Two) [10]**
1. Write a note on the operation performed on string in python.
 2. Explain list with its methods.
 3. Explain different types of operations perform on the tuple.
 4. Explain the different ways to pass arguments to user defined function in python.
- [B] Explain Pandas dataframe in brief. How to create dataframe using list? [4]**
- OR**
- [B] Explain numeric data types in Python. [4]**

- Q.4 [A] Do as directed. (Attempt any Two) [6]**
1. Differentiate structure and union in C.
 2. Differentiate tuple and dictionary.
 3. Differentiate find() and index() functions of string in python.

- [B] Answer the following questions. (Attempt any Two) [8]**
1. How to create an array using Numpy? Explain any two methods with example.
 2. Write a note on features of python programming language.
 3. Explain the list slicing with example.
 4. Explain fixed loop iterative statement in Python.

- Q.5 [A] Attempt any Two [10]**
1. Write a python program with a user defined function that accept a string as a parameter and replaces all vowels in the string with '*'.
 2. Write a C recursive function to display the Fibonacci series of N terms.
 3. Write a python program which repeatedly asks the user to enter product name and its price. Store all the information in a dictionary whose key are product name and price. Then make the provision to search the item based on the name entered by the user.

[B] Explain conditional statement in Python. [4]

OR

[B] Explain while loop with else clause. [4]