

(4)

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5. (a) (i) Write a user-friendly python program.

Input a number ( $n$ ) from user and print the  $n$ th even and odd number :

Example : input is  $n = 3$

Result : 6, 5

(ii) Write a user -friendly python program to swap two numbers without using the temporary variable.

10 Marks (CO3)

OR

(b) Discuss with suitable example how lists are efficient when used as a stack or queue. Discuss how dictionary in python is different from list. 10 Marks (CO4)

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**B. TECH. (CSE)**  
**(FOURTH SEMESTER)**  
**MID SEMESTER EXAMINATION, 2021**  
**PYTHON PROGRAMMING**

**Time : 1½ Hours**

**Maximum Marks : 50**

**Note :** (i) Answer all the questions by choosing any *one* of the sub-questions.

(ii) Each question carries 10 marks.

1. (a) (i) Differentiate between the Compiler and Interpreter. Is python compiler-based or interpreter-based language ?
- (ii) Write a short note on the use of lambda in python. Discuss with proper example. 10 Marks (CO1)

OR

(b) Write a python program to demonstrate the following operation :

- (1) Type casting of float to int

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- (2) String concatenation
- (3) Logical operator demonstration
- (4) Membership operator demonstration
- (5) Bit wise operator demonstration.

With each case also provide some sample

Input/Output.

10 Marks (CO3)

1. (a) (i) Differentiate between list and tuple with suitable example.

- (ii) Write a user-friendly python program to input  $n$  elements in the list and print the result as a single integer value :

Example :  $n = 3$

Input : list = [12, 23, 34, 55]

Output : 12233455. 10 Marks (CO4)

OR

- (b) (i) Write a simple python program to get the largest and smallest number from the list.

- (ii) Write a python program to print the sum of all the elements of the tuple and also print the difference between the largest and smallest number.

10 Marks (CO4)

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3. (a) How is Python Programming different from C, C++ and Java Programming ? Discuss the various domains where python programming plays an important role.

10 Marks (CO2)

OR

- (b) (i) Write a user-friendly python program to input two numbers and print all the Armstrong number in between these numbers.

- (ii) Discuss the working of for loop and while loop in python with suitable example. 10 Marks (CO3)

4. (a) (i) Discuss the difference between the remove and pop operation in the python list using suitable example.

- (ii) Write a python program to generate a random number. 10 Marks (CO4)

OR

- (b) With the help of suitable user-friendly python program, demonstrate the working of set and dictionary in python. Also discuss the properties of Set and Dictionary. 10 Marks (CO4)