CLASS: MTECH/IMSC/PRE-PhD   SEMESTER : III/VII/NA
BRANCH: EEE/SER/CIVIL/ECE/IMH   SESSION :MO22

SUBJECT: IT570 BASICS OF PYTHON PROGRAMMING

TIME: 03 Hours   FULL MARKS: 50

INSTRUCTIONS:
1. The question paper contains 5 questions each of 10 marks and total 50 marks.
2. Attempt all questions.
3. The missing data, if any, may be assumed suitably.
4. **Tables/Data handbook/Graph paper etc., if applicable, will be supplied to the candidates**

Q.1(a)	Create an algorithm and a flowchart that will output all the prime numbers between 2 numbers.	[5]
Q.1(b)	Write a program which replaces all vowels in the string with '*'.	[5]
Q.2(a)	Explain the conditional branching statements with example.	[5]
Q.2(b)	Differentiate between tuples and dictionary. Write a program to sort (ascending and descending) a dictionary by key.	[2+3]
Q.3(a)	What do you understand by the term arguments?. How do we pass them to function?. Explain with example	[5]
Q.3(b)	Write a program to calculate exp(x, y) using recursion and without recursion.	[5]
Q.4(a)	Explain the different access mode in file. write a program that reads text from a file and prints only those lines that has the word 'print'.	[2+3]
Q.4(b)	Explain the try-except block with example. write a program that prompts the user to enter two numbers and displays their sum. Raise an exception and handle it if a non-number value is given as input.	[2+3]
Q.5(a)	Describe the object-oriented features in python with suitable example.	[5]
Q.5(b)	What are the self argument signify in the class method. explain with example. write a program that has a class student that stores roll number, name and marks(in three subjects) of the student. Display the information(roll number , name and total marks) stored about the student.	[2+3]

:::::24/11/2022:::::E