CLASS: B.TECH   SEMESTER : V
BRANCH: ECE, EEE, CE, ME   SESSION : MO/2022

SUBJECT: IT271 INTRODUCTION TO PYTHON

TIME: 3:00 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. **Before attempting the question paper, be sure that you have got the correct question paper.**
5. Tables/Data hand book/Graph paper etc. to be supplied to the candidates in the examination hall.

Q.1(a)	What is formal definition of problem and Analysis? Explain with Flow Chart and algorithm using suitable examples?	[2]	CO1	BL1
Q.1(b)	What is Python? Explain with variables expressions and operators?	[3]	CO1	BL2
Q.1(c)	Explain about the python expression using eval()?find the output- >>>eval("sum([2,3,5])",{}),>>>eval("pow(10,2)",{}) >>>eval("x+y+z",{"x":x,"y":y,"z":300}) where x=100 and y=300	[5]	CO1	BL3
Q.2(a)	What is control statement? Explain with Iterative and loop Control statements?	[2]	CO2	BL1
Q.2(b)	Explain about the branching statement ?Write a program to determine whether a person is eligible to vote?	[3]	CO2	BL2
Q.2(c)	(i)Write a program to enter a binary number and convert it into decimal number? (ii) Write a program that display all leap year from 2000-2100	[5]	CO2	BL5
Q.3(a)	What is function and call? Explain with user defined functions?	[2]	CO3	BL1
Q.3(b)	Differentiate between Global and local variables?	[3]	CO3	BL4
Q.3(c)	(i)Write a program to swap two numbers? (i)Write a program to convert time into minutes?	[5]	CO3	BL6
Q.4(a)	What is file and folder? Explain with path using suitable examples?	[2]	CO4	BL1
Q.4(b)	How many file operations ?Explain with opening and closing , reading and writing files	[3]	CO4	BL4
Q.4(c)	What is an exception? Explain with multiple exceptions in single block? Write Built-In and user defined exceptions?	[5]	CO4	BL2
Q.5(a)	What is classes and objects? Explain with defining g the classes and creating the objects	[2]	CO5	BL1
Q.5(b)	Differentiate between class and object variable and public and private data member?	[3]	CO5	BL4
Q.5(c)	What is Garbage collection? Explain with an example WAP to that uses class to store the name and marks of student's .Use list to store the marks in five subject with subject name?	[5]	CO5	BL1 BL6