



USN

Second Semester B.E./B.Tech. Degree Examination, Dec.2023/Jan.2024

Introduction to Python Programming

Time: 3 hrs.

Max. Marks: 100

*Note: 1. Answer any FIVE full questions, choosing ONE full question from each module.
2. M : Marks , L: Bloom's level , C: Course outcomes.*

Module – 1			M	L	C
Q.1	a.	Explain Local and global variable and scope of variable in python.	7	L1	CO1
	b.	List and explain with example different comparison and Boolean operators.	8	L1	CO1
	c.	Write a python program to generate Fibonacci sequence of length 'n'.	5	L3	CO1
OR					
Q.2	a.	List and explain with syntax and example the flow control statement in python.	10	L1	CO1
	b.	Demonstrate with example print(), input() and string replication function in python.	6	L2	CO1
	c.	Develop a program to read the name and year of birth of a person. Display weather person is senior citizen or not?	4	L3	CO1
Module – 2					
Q.3	a.	What is a list? Explain append(), insert(), and remove methods with example.	10	L1	CO2
	b.	Explain the methods of list data types in python for the following operations with suitable code snippet for each. i) Adding value to list ii) Remaining value from list iii) Finding a value in a list iv) Sorting the value in a list v) Reversing a value in list	10	L1	CO2
OR					
Q.4	a.	Explain get(), item(), keys() and values() methods of dictionary in python.	8	L2	CO2
	b.	How is tuple different from list? Which function is used to convert list to tuple?	7	L1	CO2
	c.	Differentiate between list and dictionary.	5	L2	CO2
Module – 3					
Q.5	a.	Explain the syntax and example various string methods.	7	L1	CO3
	b.	Discuss the following methods of OS module i) chdir() ii) rmdir() iii) walk() iv) list dire()	8	L1	CO3

	c.	Read multidigit number from console. Develop a program to print frequency of occurrence of each digit with suitable message.	5	L3	CO3
OR					
Q.6	a.	Explain File reading and writing process with suitable python program.	7	L3	CO3
	b.	With code snippet, explain saving variables using shelve module and print() and print format() functions.	6	L2	CO3
	c.	Write a python code to implement multclip board project in python.	7	L3	CO3
Module – 4					
Q.7	a.	Explain the functions of shutil module with example.	10	L1	CO3
	b.	What is meant by compressing files? Explain reading, extracting and crating zip files with code snippet.	10	L1	CO3
OR					
Q.8	a.	Explain the following file operation in python with example. i) Copying files and folders ii) Moving files and folders iii) Permanently deleting files and folders	6	L1	CO3
	b.	Define assertions. What does an assert statement in python consists of? Give an example.	7	L1	CO3
	c.	Develop a program to sort contents of a text file and write the forted content into a separate file.	7	L3	CO3
Module – 5					
Q.9	a.	Explain operator overloading and polymorphism with example.	7	L1	CO4
	b.	Explain the concept of pure functions and modifiers with python code.	7	L1	CO4
	c.	Write a function called print time that takes a time object and print it in the form of hour: minute: second?	6	L3	CO4
OR					
Q.10	a.	What is class? How do we define class? How class members are accessed, explain with examples.	6	L1	CO4
	b.	Explain – init() and – str() method with an example.	8	L1	CO4
	c.	Discuss type based dispatch in python.	6	L1	CO4

CMRIT LIBRARY
BANGALORE - 560 037
