COER University END SEMESTER EXAMINATION, EVEN SEM 2022-23(BACK PAPER)

: 3 hours

Total Marks : 100

Program Name: B.Tech. (CSE, AI& ML, Cyber Security)

Semester : II

Course Name : Introduction to Python

Course Code : SOC 102

Note: All questions are compulsory. No student is allowed to leave the examination hall before the completion of the

Attempt Any Four Posts Fach Question Carries 5 Marks	CO	В
	CO 1	1
	CO 1	2
	CO 1	2
What do you mean by Python IDE? Explain different types of IDE available for	CO 1	:
Compare between local and global variables with examples	CO 1	2
		Write a short note on History of Python. Differentiate between google colab and jupyter notebook. Explain the Strength and Weakness of Python Programming language. What do you mean by Python IDE? Explain different types of IDE available for programming.

Q. No 2	Attempt Any Four Parts. Each Question Carries 5 Marks.	CO	BL
(a)	Discuss anonymous function. Write a program to create a function using lambda to add two numbers.	CO 2	2
(b)	Define Built-in functions. List any 5 Built-in functions with example.	CO 2	2
(c)	List different conditional statements in python with appropriate examples.	CO 2	1
(d)	Define the importance of lists in Python. Create a list with even number from to 100 and display its elements.	CO 2	2
(e)	Explain Datatypes. Also illustrate the user define data types in Python with example.	CO 2	2

Q. No 3	Attempt Any Four Parts. Each Question Carries 5 Marks.	СО	BL
(a)	Explain Dictionaries with the help of example program.	CO 3	2
(b)	Write a program to print Fibonacci series in Python.	CO 3	2
(c)	How to add values to a python array? Show with an example.	CO 3	2
(d)	Illustrate the use of range() in python along with the help of an example.	CO 3	2
(e)	How to create and import a module in Python? Explain.	CO 3	5

O. No 4	Attempt Any Two Parts. Each Question Carries 10 Marks.	СО	BL
(a)	Explain in brief GroupBy clause in python.	CO 4	2
(b)	Justify that NumPy arrays better than Python's lists? Explain	CO 4	2
(c)	Write a program to display the Fibonacci sequences up to nth term where n is provided by the user.	CO 4	2

Q. No 5	Attempt Any Two Parts. Each Question Carries 10 Marks.	СО	BL
(a)	Define pickling in Python. Explain serialization and descrialization of Python object.	CO 5	2
(b)	Write Python program to demonstrate the writing of data to a CSV file using Dict Writer	CO 5	5
` '	class.		
(c)	How you can handle exceptions in python? Explain.	CO 5	2