

QP Code: D143678		Total Pages: 1	Name:
		Register No.	
FOURTH SEMESTER (CUFYUGP) DEGREE EXAMINATION, APRIL 2026			
COMPUTER SCIENCE			
CSC4CJ204 - FUNDAMENTALS OF PYTHON PROGRAMMING			
2024 Admission onwards			
Maximum Time: 2 Hours		Maximum Marks: 70	
Section A			
All Questions can be answered. Each Question carries 3 marks (Ceiling: 24 Marks)			
1	Explain the main features of Python programming language.		
2	What are identifiers and keywords in Python? Give examples.		
3	Define operators and operands. List any four types of operators used in Python.		
4	Explain the concept of indentation in Python with an example.		
5	Describe the use of input() and print() functions in Python.		
6	Write a Python program to print numbers from 1 to 10 using a for loop.		
7	What are positional and keyword arguments in Python functions?		
8	Explain the scope and lifetime of variables in Python.		
9	Write short notes on Python lists and tuples.		
10	What are NumPy arrays? Mention two advantages of using NumPy.		
Section B			
All Questions can be answered. Each Question carries 6 marks (Ceiling: 36 Marks)			
11	Explain Python data types with suitable examples.		
12	Describe decision-making statements in Python with examples.		
13	Explain different types of function arguments in Python with examples.		
14	Write a Python program to find the factorial of a number using recursion.		
15	Explain various string operations and methods in Python.		
16	Describe list operations and commonly used list methods with examples.		
17	Explain dictionaries in Python and illustrate how key-value pairs are accessed and modified.		
18	Explain the concept of broadcasting and fancy indexing in NumPy.		
Section C			
Answer any ONE. Each Question carries 10 marks (1x10=10 Marks)			
19	Explain different looping structures in Python. Illustrate for loop and while loop with suitable examples and discuss the role of control statements say break, continue and pass.		
20	Explain the construction and usage of Pandas Series and DataFrames with examples. Also discuss how data can be created from arrays and dictionaries.		