

QP CODE: D4BCS2404	(Pages: 2)	Reg. No :
		Name :
FOURTH SEMESTER FYUGP EXAMINATION, APRIL 2026		
Discipline Specific Core (DSC) Courses - Major		
CSC4CJ204 : PYTHON PROGRAMMING		
(Credits: 4)		
Time: 2 Hours	Maximum Marks: 70	
Section A		
Answer the following questions. Each carries 3 marks (Ceiling: 24 marks)		
1.	Explain the purpose of the elif statement in Python.	BL1 CO2
2.	Write the syntax of the for loop in Python.	BL2 CO2
3.	Define control statements in Python. List their main categories.	BL1 CO2
4.	Explain the difference between a built-in module and a user-defined module in Python.	BL2 CO3
5.	Evaluate the usefulness of anonymous functions in Python programs.	BL5 CO3
6.	Explain the difference between local and global variables in Python.	BL2 CO1, CO3
7.	Explain how key-value pairs are accessed and modified in a Python dictionary with a suitable example.	BL2 CO4
8.	Given two sets of integers, demonstrate how union and intersection operations are performed using Python syntax.	BL3 CO4
9.	Explain list indexing and list slicing in Python with suitable examples.	BL2 CO4
10.	Define universal functions in NumPy and give any two examples.	BL1 CO4
Section B		
Answer the following questions. Each carries 6 marks (Ceiling: 36 Marks)		
11.	Discuss the rules of indentation in Python and explain the errors caused by improper indentation with example.	BL4 CO1, CO2
(PTO)		

12.	Describe the commonly used mathematical functions available in Python with examples.	BL2	CO1, CO2
13.	List and define the different types of function arguments in Python. Give one example for each type.	BL1	CO2, CO3
14.	Construct a Python program using a user-defined function to calculate the area of a circle. Illustrate the flow of execution.	BL6	CO3
15.	Explain the following string concepts in Python with suitable examples: String indexing String traversal String slicing	BL2	CO4
16.	Define a tuple in Python and explain its syntax, characteristics, and any four built-in tuple methods or operations with examples.	BL1	CO4
17.	Write a Python program to create a NumPy array of integers using any two different NumPy functions and display its shape, size, and data type.	BL3	CO4
18.	Compare DataFrame construction using arrays and dictionaries in Pandas. Discuss their advantages and limitations with respect to ease of use and clarity.	BL5	CO5

Section C

Answer any one question. Each carries 10 marks (1 x 10 = 10 Marks)

19.	a) Explain the features of Python in detail. b) Discuss keywords, identifiers, and variables in Python with examples.	BL4	CO1
20.	(a) Write Python program to plot bar chart by assuming your own data and explain the various attributes of bar chart. (b) Write Python program to plot Line chart by assuming your own data and explain the various attributes of line chart.	BL3	CO6

CO : Course Outcome

BL : Bloom's Taxonomy Levels (1 – Remember, 2 – Understand, 3 – Apply, 4 – Analyse, 5 – Evaluate, 6 – Create)