

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

BSc DEGREE EXAMINATION MAY 2025
(Second Semester)

Branch - COMPUTER SCIENCE WITH DATA ANALYTICS

PYTHON FOR DATA ANALYSIS

Time: Three Hours

Maximum: 75 Marks

SECTION-A (10 Marks)

Answer ALL questions

ALL questions carry EQUAL marks

$(10 \times 1 = 10)$

Module No.	Question No.	Question	K Level	CO
1	1	Which of the following is primitive data type? a) String data b) Floating data c) Integer data d) All the above	K1	CO1
	2	The exponential calculations is performed with _____. a) * b) *** c) ** d) ^	K2	CO1
2	3	Which keyword is used to define the user-defined function? a) def b) return c) Assign d) func	K1	CO2
	4	The length of the string for character data is _____. a) 0 b) 1 c) 2 d) 3	K2	CO2
3	5	Slicing operator is _____. a) ? b) / c) # d) :	K1	CO3
	6	List contains ____ data items. a) unordered b) ordered c) string d) primitive data type	K2	CO3
4	7	In Dictionary, values is accessed by a) Index b) Key c) Size d) Null	K1	CO4
	8	How many types of modes are available for open(). a) 1 b) 2 c) 4 d) 3	K2	CO4
5	9	Full form of CSV is a) Comma Separated Values b) Common Separated Value c) Comma Separated Variables d) Common Separated Variables	K1	CO5
	10	The readline() function is read till the _____. a) End of word b) end of characters c) end of line d) end of file	K2	CO5

Cont...

SECTION - B (35 Marks)

Answer ALL questions

ALL questions carry EQUAL Marks

 $(5 \times 7 = 35)$

Module No.	Question No.	Question	K Level	CO
1	11.a.	Classify different data types in python. Explain with example. (OR)	K4	CO1
	11.b.	How do we implement if, elif, else condition with suitable example.		
2	12.a.	Define recursion. Explain the process of finding the factorial of a given number using recursion. (OR)	K5	CO2
	12.b.	Interpret following string methods: i) Split ii) join iii) len iv) replace v) find.		
3	13.a.	Discuss how to Create and access elements in the List. (OR)	K4	CO3
	13.b.	Elaborate the tuple functions and methods with example.		
4	14.a.	Explain about i) Formatting dictionary ii) Comparing two dictionaries. (OR)	K5	CO4
	14.b.	Describe about binary files in python.		
5	15.a.	Elaborate about loading of data from excel file. (OR)	K6	CO5
	15.b.	Discuss the methods for combining data from multiple Excel files.		

SECTION - C (30 Marks)

Answer ANY THREE questions

ALL questions carry EQUAL Marks $(3 \times 10 = 30)$

Module No.	Question No.	Question	K Level	CO
1	16	Elucidate Loop Control statements in python with example.	K5	CO1
2	17	Categorize various string operations and write a program to check if string is palindrome or not.	K4	CO2
3	18	Write about creating tuple and inbuilt functions for indexing and slicing operations.	K4	CO3
4	19	Show the detailed concepts of dictionary in python.	K5	CO4
5	20	Analyze the data in python using loading, saving and combining data from multiple excel files.	K6	CO5