

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

BSc DEGREE EXAMINATION DECEMBER 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 × 1 = 10)

Module No.	Question No.	Question	K Level	CO
1	1	Select from the following, who developed the Python language? a) Zim Den b) Guido van Rossum c) Niene Stom d) Wick van Rossum	K3	CO1
	2	Identify ,why does the name of local variables start with an underscore discouraged? a) To Identify the variable. b) It indicates a private variable of a class. c) It confuses the interpreter d) None of these	K3	CO1
2	3	Choose from the following, which is correctly evaluated for this function? pow(x,y,z). a) (x**y)/z b) (x/y)*z c) (x**y)%z d) (x/y)/z	K3	CO2
	4	Identify - What will be the output of the following python code? Print('ab,12'.isalnum()) a) True b) False c) None d) Error	K3	CO2
3	5	Select from the following, which method is used to remove the first occurrence of a specified element from a list in python? a) Remove() b) Pop() c) Delete() d) Discard()	K3	CO3
	6	Select the symbol which is used to access the element of a tuple through indexing. a) {} b) [] c) () d) None	K3	CO3
4	7	Choose the correct answer that the union() method returns a new set with all items from both sets by removing duplicates. a) True b) False c) Error d) None	K6	CO4
	8	Choose from the following which method is used to add a new key-value pair to a python dictionary? a) Add() b) Insert() c) Append() d)None of the above	K6	CO4
5	9	Choose the library in python which is commonly used for data manipulation and analysis? a) Pandas b) Matplotlib c) Numpy d) Scikit-learn	K3	CO5
	10	Select the function which is used to read a specific number of bytes from a file opened in binary mode? a) File.read() b) File.readline(size) c) File.read(size) d) File.readlines()	K3	CO5

Cont...

SECTION - B (35 Marks)

Answer ALL questions

ALL questions carry EQUAL Marks

(5 × 7 = 35)

Module No.	Question No.	Question	K Level	CO
1	11.a.	Apply python character set in an example.	K3	CO1
	(OR)			
	11.b.	Experiment with python Inbuilt functions with an example.		
2	12.a.	Utilize recursive functions in an example.	K3	CO2
	(OR)			
	12.b.	Develop traversing string with for and while loop in an example.		
3	13.a.	Organize list methods of python.	K3	CO3
	(OR)			
	13.b.	Construct inbuilt functions of tuples.		
4	14.a.	Discuss the steps to creating dictionary.	K6	CO4
	(OR)			
	14.b.	Discuss input and output of text in file handling using an example.		
5	15.a.	Experiment with how to load data from CSV files	K3	CO5
	(OR)			
	15.b.	Solve combine data from multiple Excel files.		

SECTION - C (30 Marks)

Answer ANY THREE questions

ALL questions carry EQUAL Marks

(3 × 10 = 30)

Module No.	Question No.	Question	K Level	CO
1	16	Construct decision and loop control statements with suitable example.	K3	CO1
2	17	Organize various string operations with examples.	K3	CO2
3	18	Select passing and returning list from a function using an example.	K3	CO3
4	19	Develop binary files in Python.	K6	CO4
5	20	Utilize data handling in excel files using python	K3	CO5

Z-Z-Z END