

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)
BSc DEGREE EXAMINATION MAY 2026
(Fourth Semester)
Branch- **COMPUTER TECHNOLOGY**

PYTHON PROGRAMMING

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	Which data type is used to store a list of items that cannot be changed during the execution? a) Lists b) Array c) Tuples d) Dictionaries	K1	CO1
	2	Interpret the result for the following python code. def MaxNum(x, y): if x > y: print(x, 'is maximum') elif x == y: print(x, 'is equal to', b) else: print(y, 'is maximum') MaxNum(3, 4) a) 3 is maximum b) 4 is maximum c) 3 is equal to 4 d) Error	K2	CO1
2	3	Find which method is used to insert 5 to the third position in list1 in python. a) list1.insert(2, 5) b) list1.insert(3, 5) c) list1.add(3, 5) d) list1.append(3, 5)	K1	CO2
	4	Interpret which of the following is incorrect for the statement t1 = (1, 2, 4, 3), a) print(t[3]) b) t[3] = 45 c) print(max(t)) d) print(len(t))	K2	CO2
3	5	What method returns a list of all the keys in a dictionary? a) values() b) items() c) keys() d) get()	K1	CO3
	6	Show the purpose of access modifiers in Python. a) To define class properties b) To restrict access to certain components of an object c) To create read-only properties. d) To initialize instance variables	K2	CO3
4	7	How do you call a method from the base class within a method of the derived class? a) Using the call_base keyword b) Using @base director c) By creating the instance for a base class d) Using the super() function	K1	CO4
	8	Relate which special method is used to enable item access using square brackets [] for an object in Python? a) __call__() b) __getattr__() c) __getitem__ () d) __setitem__ ()	K2	CO4
5	9	What is the purpose of the 'a+U' mode in file opening? a) Append and Unicode support b) Access and Universal newline support c) Add and Update d) Append and Update	K1	CO5

Cont...

		Infer what will be the output of the following code? try: result = 10 / 0 except ZeroDivisionError: result = "Infinity" print(result) a) "Infinity" b) 10 c) ZeroDivisionError d) Error	K2	CO5
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SECTION - B (35 Marks)

Answer **ALL** questions

ALL questions carry EQUAL Marks $(5 \times 7 = 35)$

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Module No.	Question No.	Question	K Level	CO
1	11.a.	Develop a python code snippet to find the factorial of a given number.	K3	CO1
	(OR)			
	11.b.	Construct the function definition and explain how to call the function in python with an example.		
2	12.a.	Analyze how to concatenate, append and multiply a string in a python.	K3	CO2
	(OR)			
	12.b.	Experiment the various list operations with its syntax and example in python.		
3	13.a.	Examine the following concepts in python dictionaries. i) Adding and modifying an items ii) Sorting an items	K4	CO3
	(OR)			
	13.b.	Inspect the use of garbage collection in python.		
4	14.a.	Examine the composition in inheritance with an example.	K4	CO4
	(OR)			
	14.b.	Distinguish between the operator overloading and overriding.		
5	15.a.	Explain briefly about how to read and write in files with a python code.	K5	CO5
	(OR)			
	15.b.	Justify how to handle Except Block without Exceptions.		

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	Classify the data types in python and explain with a suitable example.	K4	CO1
2	17	Examine the basic list operations in python with an appropriate example.	K4	CO2
3	18	Explain how to Call a class method from another class method with a code snippet.	K5	CO3
4	19	Categorize the various types of inheritance with neat sketch.	K4	CO4
5	20	Determine the use of multiple Except Blocks in exception handling.	K5	CO5

Z-Z-Z END