PSG COLLEGE OF ARTS & SCIENCE (AUTONOMOUS)

BVoc DEGREE EXAMINATION MAY 2025

(Fourth Semester)

Branch - NETWORKING AND MOBILE APPLICATIONS

FUNDAMENTALS OF PYTHON PROGRAMMING

Time: Three Hours

Maximum: 75 Marks

SECTION-A (10 Marks)

Answer ALL questions

ALL questions carry EQUAL marks

 $(10 \times 1 = 10)$

		ALL questions carry EQUAL marks (10	× 1 = 1	
Module	Question	Question	K Level	со
No. 1	No1	Python was influenced by which programming language(s)? a) ABC b) C c) Modula-3 d) All of the above	K1	CO1
	2	What was the main reason Guido van Rossum created Python? a) To replace C++ b) To make a simpler alternative to Java c) To create a language that was easy to read and write d) To develop a programming language for AI	K2	COI
2	3	a) func b) define d) function	K1	CO2
	4	What is the return type of a function that does not have a return statement? a) int b) NoneType c) str d) yoid	K2	CO2
3	5	Which of the following methods is used to add an element at the end of a list? a) insert() b) append() c) extend() d) add()	K1	CO3
	6	What will be the output of the following code? list1 = [1, 2, 3] list1.extend([4, 5]) print(list1) a) [1, 2, 3, [4, 5]] b) [1, 2, 3, 4, 5] c) [1, 2, 3, 4] d) Error	K2	CO3
4	7	How can you create an empty tuple in Python? a) tuple 1 = () b) tuple 1 = tuple([]) c) tuple 1 = tuple() d) All of the above	K1	CO4
	8	What will be the output of the following code? tuple1 = ("apple",) print(type(tuple1)) a) <class 'tuple'=""> b) <class 'str'=""> c) <class 'list'=""> d) From</class></class></class>	K2	CO4
5	9	Which of the following is the correct mode to open a file for reading? c) 'a' d) 'x'	K1	CO
	10	What will happen if you try to open a non-existent file using 'r' mode? a) A new file is created b) The file is opened in read mode c) An error occurs d) The file is opened in append mode	K2	CO

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SECTION - B (35 Marks)

Answer ALL questions

ALL questions carry EQUAL Marks

 $(5 \times 7 = 35)$

Module No.	Question No.	Question	K Level	СО
1	11.a.	Explain the different types of loops available in Python with syntax.		
	(OR)			CO1
	11.b.	Write a Python program to print numbers from 1 to 10 using a for loop and a while loop.		
	12.a.	Explain any five string methods in Python with examples.		[
2	(OR)			CO2
	12.þ	Write a Python program to check if a given string is a palindrome.		
	13.a.	How can you access elements of a list using indexing and slicing? Explain with examples.		
3	(OR)			CO3
	13.b.	What is a list in Python? How is it different from tuples?		
	14.a.	Give notes on sets. Explain how to create a sets?		
4	(OR)			CO4
	14.b.	Elucidate the set operations with example.	-	
	15.a.	Evaluate the advantages and disadvantages of file handling.		
5	(OR)			CO5
	15.b.	Give notes on core concepts and vocabulary of graphics.		

SECTION -C (30 Marks) Answer ANY THREE questions ALL questions carry EQUAL Marks

 $(3\times10=30)$

Module No.	Question No.	Question	K Level	СО
1	16	Write a Python program to print the Fibonacci series up to n terms using a loop.	К3	CO1
2	17	Write a Python program to count the number of vowels and consonants in a given string.	K4	CO2
3	18	Discuss different list methods in Python, such as append(), extend(), insert(), remove(), pop(), sort(), and reverse(), with examples.	K5	CO3
4	19.	Discuss in details about creating and formatting directories with example.	K.5	CO4
5	20	Write a Python program using Pygame to create a basic window with a title and background color.	K6	CO5