

**PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)**

**BSc DEGREE EXAMINATION DECEMBER 2025
(Second Semester)**

Branch - COMPUTER SCIENCE

COMPUTING USING PYTHON

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 of the following is an invalid variable? a) my_string_1 b) 1st_string c) foo d) _	K1	CO1
	2	Which keyword is used for function? a) Fun b) Define c) def d) Function	K1	CO1
2	3	Which of the following is a Python tuple? a) [1, 2, 3] b) (1, 2, 3) c) {1, 2, 3} d) {}	K1	CO1
	4	Which of these about a dictionary is false? a) The values of a dictionary can be accessed using keys b) The keys of a dictionary can be accessed using values c) Dictionaries aren't ordered d) Dictionaries are mutable	K1	CO1
3	5	The assignment of more than one function to a particular operator is _____ a) Operator over-assignment b) Operator overriding c) Operator overloading d) Operator instance	K2	CO2
	6	Which of the following functions accepts only integers as arguments? a) ord() b) min() c) chr() d) any()	K2	CO2
4	7	Which of the following functions will not result in an error when no arguments are passed to it? a) min() b) divmod() c) all() d) float()	K2	CO2
	8	What will be the output of the following Python function? hex(15) a) f b) 0xF c) 0Xf d) 0xf	K2	CO2
5	9	The output of which of the codes shown below will be: "There are 4 blue birds." a) 'There are %g %d birds.' %4 %blue b) 'There are %d %s birds.' %(4, blue) c) 'There are %s %d birds.' %[4, blue] d) 'There are %d %s birds.' 4, blue	K2	CO2
	10	Which of these is not a core data type? a) Lists b) Dictionary c) Tuples d) Class	K2	CO2

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.	Write a Python program to find those numbers which are divisible by 7 and multiples of 5, between 1500 and 2700 (both included).	K2	CO1
		(OR)		
	11.b.	Write a Python program that accepts a word from the user and reverses it.		
2	12.a.	Write a Python program to check the validity of passwords input by users. Validation : <ul style="list-style-type: none"> • At least 1 letter between [a-z] and 1 letter between [A-Z]. • At least 1 number between [0-9]. • At least 1 character from [\$#@]. • Minimum length 6 characters. • Maximum length 16 characters. 	K2	CO1
		(OR)		
	12.b.	Explain the size of a Tuple in Python.		
3	13.a.	How will you create a Python class and objects?	K3	CO2
		(OR)		
	13.b.	Make use of method overriding using Python.		
4	14.a.	Utilize Python super() function using example.	K3	CO3
		(OR)		
	14.b.	Apply the concepts of Tkinter in Python.		
5	15.a.	Analyze the usage of pandas in Python.	K4	CO5
		(OR)		
	15.b.	Categorize the data structures in pandas library.		

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	Explain Python features with suitable examples.	K4	CO5
2	17	Explain Python Tuples with data types.	K4	CO5
3	18	Discuss about the Python directories using mkdir().	K4	CO5
4	19	Elaborate Python Tkinter text widget with example.	K6	CO5
5	20	Discuss about data frames in Python pandas.	K6	CO5

Z-Z-Z

END