

**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).  (OR)	K2	CO1
	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"><li>• At least 1 letter between [a-z] and 1 letter between [A-Z].</li><li>• At least 1 number between [0-9].</li><li>• At least 1 character from [\$#@].</li><li>• Minimum length 6 characters.</li><li>• Maximum length 16 characters.</li></ul>	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?  (OR)	K3	CO2
	13.b.	Make use of method overriding using Python.		
4	14.a.	Utilize Python super() function using example.  (OR)	K3	CO3
	14.b.	Apply the concepts of Tkinter in Python.		
5	15.a.	Analyze the usage of pandas in Python.  (OR)	K4	CO5
	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