

PSG COLLEGE OF ARTS & SCIENCE  
(AUTONOMOUS)

MSc (SS) DEGREE EXAMINATION DECEMBER 2025  
(Sixth Semester)

Branch – SOFTWARE SYSTEMS (Five Years Integrated)

**PROGRAMMING IN PYTHON**

Time: Three Hours

Maximum: 50 Marks

**SECTION-A (5 Marks)**

Answer ALL questions

ALL questions carry EQUAL marks

(5 x 1 = 5)

1. In flowcharts, which shape represents a decision-making step?  
(i) Oval (ii) Rectangle  
(iii) Parallelogram (iv) Diamond
2. How can you access a specific element in a dictionary in Python?  
(i) dict[index] (ii) dict.element()  
(iii) dict.key() (iv) dict[key]
3. Which of the following is not a type of inheritance?  
(i) Double-level (ii) Multi-level  
(iii) Single-level (iv) Multiple
4. How can you create a Python package?  
(i) by creating a directory with a special 'init.py' file  
(ii) by creating a text file with a list of module names  
(iii) by using the 'package' keyword followed by the package name  
(iv) by importing modules from other packages
5. Which of the following method creates a new array object that looks at the same data?  
(i) review (ii) view  
(iii) paste (iv) copy

**SECTION - B (15 Marks)**

Answer ALL Questions

ALL Questions Carry EQUAL Marks

(5 x 3 = 15)

6. a) How does Python code execute?  
OR  
b) Discuss various types in Python.
7. a) Brief about dictionary and its representation.  
OR  
b) Which type of error leads to an exception?
8. a) What is meant by Class?  
OR  
b) What is known as Default constructor?
9. a) What is a module? Show its functionality.  
OR  
b) What is built-in module in Python? Give examples.
10. a) Brief about Numpy.  
OR  
b) Write down the importance of Panda.

Cont...

**SECTION -C (30 Marks)**

Answer ALL questions

ALL questions carry EQUAL Marks

(5 x 6 = 30)

11. a) Discuss the feature of Python.  
OR  
b) Explain about different methods of flow control.
12. a) Elaborate the operations to prove Mutability in list.  
OR  
b) Explain about reading and writing files.
13. a) What is Default constructor? How it is created?  
OR  
b) Explain the working of Operator Overloading and highlight its advantages.
14. a) How do you import module?  
OR  
b) Write down the Steps for installation of packages.
15. a) How Python Standard Library is used? Give examples.  
OR  
b) Elaborate the data types of Panda.

Z-Z-Z

END