

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

BSc DEGREE EXAMINATION DECEMBER 2025
(First Semester)

Branch - COMPUTER TECHNOLOGY

STRUCTURED PROGRAMMING USING C

Time: Three Hours

Maximum: 75 Marks

SECTION-A (10 Marks)

Answer ALL questions

ALL questions carry **EQUAL** marks

$$(10 \times 1 = 10)$$

SECTION - B (35 Marks)

Answer ALL questions

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

| Module No. | Question No. | Question | K Level | CO |
|------------|--------------|--|---------|-----|
| 1 | 11.a. | What is the need of Data type and explain the various types of data type in C? | K3 | CO1 |
| | (OR) | | | |
| | 11.b. | Write short notes on various types of operators in C Programming | | |

Cont...

| | | | | |
|---|-------|--|----|-----|
| 2 | 12.a. | Discuss about the commonly used input and output functions in C | K2 | CO2 |
| | (OR) | | | |
| | 12.b. | Explain the switch statement in C. Write a program to demonstrate the use of a switch statement with at least three different cases and a default case | | |
| 3 | 13.a. | Differentiate between call by value and call by reference in C | K3 | CO3 |
| | (OR) | | | |
| | 13.b. | Write short notes on storage classes in C. | | |
| 4 | 14.a. | What is a string in C? Explain about reading and writing a string. | K3 | CO4 |
| | (OR) | | | |
| | 14.b. | What is the difference between structure and union in C? | | |
| 5 | 15.a. | Discuss about the concept of Binary file. | K6 | CO5 |
| | (OR) | | | |
| | 15.b. | Briefly discuss about Command Line Parameters in C | | |

SECTION - C (30 Marks)

Answer ANY THREE questions

ALL questions carry EQUAL Marks $(3 \times 10 = 30)$

| Module No. | Question No. | Question | K Level | CO |
|------------|--------------|--|---------|-----|
| 1 | 16 | Define tokens? Explain the types of tokens and usage. | K3 | CO1 |
| 2 | 17 | Explain about decision making and branching statements in C with a suitable example. | K2 | CO2 |
| 3 | 18 | What are arrays? Classify the types of arrays with an example. | K3 | CO3 |
| 4 | 19 | Describe dynamic memory allocation and array of pointer with example programs. | K3 | CO4 |
| 5 | 20 | Discuss about Common File Handling Functions in C. | K6 | CO5 |

Z-Z-Z END