

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)
BSc DEGREE EXAMINATION MAY 2024
(Fifth Semester)

Branch – MATHEMATICS

DISCIPLINE SPECIFIC ELECTIVE - I : C PROGRAMMING

Time: Three Hours

Maximum: 50 Marks

SECTION-A (5 Marks)

Answer ALL questions

ALL questions carry EQUAL marks (5 x 1 = 5)

1. Which of the following is a predefined standard C function that reads formatted input from standard input stream.
(i) printf (ii) scanf
(iii) fprintf (iv) define
2. Which of the following operators has the lowest level precedence?
(i) % (ii) &
(iii) && (iv) ?=
3. Which of the following functions can be used to print a single character as output?
(i) scanf() (ii) printf()
(iii) putchar() (iv) Both 2 & 3
4. Which of the following looping statements end with a semi-colon?
(i) while (ii) do while
(iii) for (iv) break
5. A ____ is used to store memory address as value.
(i) Pointer (ii) Array
(iii) Memory (iv) Structure

SECTION - B (15 Marks)

Answer ALL Questions

ALL Questions Carry EQUAL Marks (5 x 3 = 15)

- 6 a. List the different types of constants. Write short notes on Integer Constants.
OR
b. Explain Integer data types.
- 7 a. Define operator. List the different types of operators used in c programming
OR
b. Discuss Implicit type conversion with suitable example.
- 8 a. How to inputting an integer number? Discuss with example.
OR
b. Explain simple if statement with suitable example.
- 9 a. Discuss while statement with example
OR
b. Explain one dimensional array with example.
- 10 a. List the advantages of functions.
OR
b. Write a C program to print the address of a variable along with its value.

Cont...

SECTION -C (30 Marks)

Answer ALL questions
ALL questions carry EQUAL Marks

(5 x 6 = 30)

- 11 a. Write a C program to display the equation of a line in the form $ax+by=c$ for $a=5$, $b=8$, $c=18$
OR
b. Write C program to calculate the average of a set of N numbers.
- 12 a. Illustrate increment/decrement operators with suitable example.
OR
b. Elaborate operator precedence and associativity with example.
- 13 a. Illustrate inputting an integer numbers with suitable example.
OR
b. Demonstrate switch statement with suitable example.
- 14 a. Write the syntax of for statement and write a C program to print all prime numbers between 1 to n.
OR
b. Write a C program to print multiplication using two-dimensional array.
- 15 a. Illustrate Functions in C with suitable example.
OR
b. How do you open a file in C? Discuss with example.

Z-Z-Z

END