

**PSG COLLEGE OF ARTS & SCIENCE**  
(AUTONOMOUS)  
**BSc DEGREE EXAMINATION DECEMBER 2019**  
(Fifth Semester)

Branch- **MATHEMATICS**

**ELECTIVE -1: PROGRAMMING IN C**

Time : Three Hours

Maximum : 75 Marks

**SECTION-A (20 Marks)**

Answer **ALL** questions

**ALL** questions carry **EQUAL** marks (10 x 2 = 20)

- 1 What is a floating point constants?
- 2 Write the syntax for declaring a variable.
- 3 Write any two rules for increment and decrement operators.
- 4 Define implicit type conversion.
- 5 What is the format of printing a single character?
- 6 Write the general form of the switch statement.
- 7 Define sentinel variable.
- 8 Write the general form of a multi-dimensional array.
- 9 Define modules. .
- 10 How to declare a pointer variable?

**SECTION - B (25 Marks)**

Answer **ALL** Questions

**ALL** Questions Carry **EQUAL** Marks (5 x 5 = 25)

- 11 a What are the rules applied to a #define statement?  
OR  
b Write a program to calculate the average of set of N numbers.
- 12 a Explain conditional operator.  
OR  
b List out the mathematical functions with examples.
- 13 a Write a short note for a reading character.  
OR  
b Write the rules of switch statement.
- 14 a Explain the DO statement with example.  
OR  
b Write a sort note on One-dimensional array.
- 15 a Discuss about a definition of functions.  
OR  
b Write a program to read data from the Keyboard, write it to a file called input, again read the same data from the input file, and display it on the screen.

**SECTION - C (30 Marks)**

Answer any **THREE** Questions

**ALL** Questions Carry **EQUAL** Marks (3 x 10 = 30)

- 16 -Explain the various types of constants in C with an example,
- 17 Discuss the different types of operators available in C.
- 18 Explain the syntax and purpose of decision making statements in c.
- 19 Explain the three constructors for performing loop operations.