PSG COLLEGE OF ARTS & SCIENCE (AUTONOMOUS)

BSc DEGREE EXAMINATION MAY 2019

(Fourth Semester)

Branch - MATHEMATICS WITH COMPUTER APPLICATIONS

C PROGRAMMING

Time: Three Hours

Maximum: 75 Marks

SECTION-A (20 Marks)

Answer ALL questions

ALL questions carry EQUAL marks $(10 \times 2 = 20)$

- 1 What are keywords?
- 2 How does user defined typed declaration is done in C?
- 3 Give the significance of bitwise operators.
- 4 What is the use of %x and %h?
- Write the syntax for if... else statement.
- What is the use of increment or decrement statement in for loop?
- 7 How to access element of an array in C?
- 8 How to call C functions in a program?
- 9 Define structure.
- What functions are required to read and write in a file?

SECTION - B (25 Marks)

Answer ALL Questions

ALL Questions Carry **EQUAL** Marks $(5 \times 5 = 25)$

11 a Give the structure of a C program.

OR

- b Illustrate with a C program for the use of symbolic constants.
- 12 a Write a C program using post increment operator and give its output.

OR

- b Write about ternary operator in C.
- 13 a Illustrate nested if statement with a C program.

OR

- b Write a C program using while loop for generating Fibonacci series.
- 14 a Write a C program to demonstrate call by value.

OR

- b Write a C program to find out the average of 4 integers using arrays.
- 15 a With the help of C program demonstrate the working of pointers.

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b Write a C program to write all the members of an array of structures to a file using fwrite(). Read the array from the file and display on the screen.

SECTION - C (30 Marks!

Answer any **THREE** Questions

ALL Questions Carry EQUAL Marks $(3 \times 10 = 30)$

- Explain the various storage classes in C with suitable examples.
- Write in detail about logical operators in C with an illustration program.
- Discuss about decision control statements in C programming.
- Discuss about various types of functions in C with example.
- Write a C program to read name and marks of n number of students from