UG-454 **BMS–34**

B.Sc. DEGREE EXAMINATION – DECEMBER, 2018.

Third Year

Mathematics with Computer Applications

PROGRAMMING IN C AND C++

Time : 3 hours Maximum marks : 75

PART A — (5 × 5 = 25 marks)

Answer any FIVE of the following.

1. Describe the purpose of escape sequence characters.

2. Compare *while* and *do .... while* loops in *C*.

3. Write a C-program to calculate simple interest and total amount given P,N,R.

4. Write a C-program to compute factorial of a given number using recursive techniques.

5. What is a pointer? How are the pointer variables declared?

6. Write a short note on

   (a) fopen( ),

   (b) fclose( ),

   (c) feof( ) functions in C.

7. Explain basic concepts of object oriented programming.

8. What do you mean by function overloading? Explain.

PART B — (5 × 10 = 50 marks)

Answer any FIVE of the following.

9. Explain various assignment operators, increment and decrement operators with illustration.

10. Explain *if, if ... else*, and *else* if ladder with suitable examples.

11. Explain the importance of *continue, break* and *goto* statements in *C*.

12. Explain the four different storage classes in detail.

13. Write a C-program to arrange a given set of *n* numbers ascending order.

14. What is a structure? Discuss its accession, usage, reading and printing with suitable illustrations.

15. A file named DATA contains a series of integers. Code a program to read these numbers and then write all odd numbers to a file to be called ODD and even numbers to a file to be called EVEN.

16. Write a short note on constructors and destructors in C++.