S–258

B. Sc. (First Semester)

EXAMINATION, 2018-19

COMPUTER SCIENCE

(Object Oriented Programming in C++)

(SOS/C. S./C–001)

Time : Two Hours] [*Maximum Marks : 70*

Note : (i) Attempt any *five* questions from Section A and any *three* questions from Section B.

(ii) Answer each question of Section A within 50 words.

(iii) Limit your answers within the given answer book. Additional answer book (B-Answer book) should not be provided or used.

Section—A

Note : Attempt any *five* questions. Each question carrics 5 marks.

1. Define local and global variables.

2. Write a program to implement to factorial of n numbers.
3. Differentiate call by value and call by reference.
4. Define object and class. Explain with example.
5. Explain data hiding with an example.
6. Explain Algorithm and its characteristics.
7. Explain operator overloading with an example.

Section—B

Note : Attempt any *three* questions. Each question carries 15 marks.

1. (a) Explain object oriented programming. Explain its features with an example.

   (b) Explain, what is friend class and friend function ?

2. (a) Explain the advantages of OOP.

   (b) How will you declare a pointer to an object ? Explain with example.

3. (a) List the assignment and append operator of a string.

   (b) How is an iterator like an array subscript ?

4. (a) Explain a class string. Use overload = = operator to compare two strings.

   (b) Differentiate call by value and call by reference with an example.

5. (a) Explain multilevel inheritance and multiple inheritance in detail.

   (b) Write a program using inheritance property.

6. (a) Define ADT with an example.

   (b) Differentiate between Data Abstraction and Data Encapsulation.