# BPP–1095(A)

## M.Sc. (Previous) Examination, 2022
## COMPUTER SCIENCE

### (For Due Students)

Paper – MCS–102

## (Programming in C++)

*Time : 3 Hours* ]　　　　　　　　　　　　[ *Maximum Marks : 100*

*Note* :–　　Attempt *five* questions in all, selecting *one* question from each Unit. All questions carry equal marks.

### Unit–I

1. Explain all features of object oriented programming.　　20

2. (i)　Explain C++ Data types.　　8

   (ii)　Explain different C++ Operators.　　12

### Unit–II

3. (i)　Input a number and display its Factorial.　　8

   (ii)　Give an example of recursive function.　　8

   (iii)　What is the use of break in a loop ?　　4

4. (i) Explain function overloading with example. 10

(ii) Differentiate pass by value and reference. 10

### Unit–III

5. (i) Explain two dimensional arrays. 10

(ii) What is the role of Dynamic Array in C++ ? 10

6. What do you understand by class and objects ? Give an example of a class named book with features as book title, book author, publisher, price and number of pages, with functions to input and display book data. 20

### Unit–IV

7. (i) Explian Inline Functions. 5

(ii) What do you understand by Abstract Classes ? 5

(iii) Explain function overriding with example. 10

8. (i) Explain Copy Constructor with example. 10

(ii) Give an example of static data members and methods. 10

### Unit–V

9. (i) Give an example of overloading a binary operator. 10

(ii) Explain basic to class and class to basic type conversion. 10

10. (i) Explain Virtual Function with example. 10

(ii) Give an example to read and write text from files. 10