NEPSD—201—2025

FACULTY OF SCIENCE AND TECHNOLOGY

B.Sc. (First Year) (Second Semester) EXAMINATION

APRIL/MAY, 2025

(As per NEP)

COMPUTER SCIENCE

Paper—SCSCCT–1151

(OOPs Using C++—II)

(Friday, 11-4-2025)   Time : 10.00 a.m. to 12.00 noon

Time—2 Hours   *Maximum Marks—40*

N.B. :— (i)   Question No. 1 is compulsory.

(ii)   From question No. 2 to 5 solve any *three* questions.

(iii) Draw neat and labelled diagram if necessary.

1. Attempt the following :   10

   (a)   Explain Applications of OOP in detail.

   (b)   What are the different operators used in C++ ?

   (c)   Explain the concept of functions.

   (d)   What are the different I/O statements used in C++ ?

   (e)   What are the different stream classes ?

2. Attempt the following (any *two*) :   10

   (a)   Explain benefits of OOPs in detail.

   (b)   Explain the concept of array with example.

   (c)   Write a program in C++ to describe concept of nested for loop.

3. Attempt the following (any *two*) :   10

   (a)   Explain concept of call by value in detail.

   (b)   What is overloading ? Explain function overloading in detail.

   (c)   Write a program in C++ to describe concept of friend function.

4. Attempt the following (any *two*) :   10

   (a)   Explain the concept of pure virtual function in detail.

   (b)   Explain the concept of inheritance in detail.

   (c)   Write a program in C++ to describe concept of single inheritance.

5. Attempt the following (any *two*) :   10

   (a)   Explain the concept of stream classes in detail.

   (b)   Explain the concept of formatted and unformatted I/O.

   (c)   Explain concept of manipulators in detail.