**1151**

**BCA / M--14**
**PROGRAMMING IN C++**
**Paper—BCA-361**

Time allowed: 3 hours] [Maximum marks: 80

Note: Attempt five questions. Q. No. I is compulsory. Select at least one from each unit.

1. (a) Differentiate Protected and Public Derivatives.

 (b) What is Abstract and virtual class.

 (c) Discuss output streams.

 (d) Differentiate:

   Console I/0 and Disk I/0. 4x4=16

## Unit-1

2. (a) Explain multilevel and multipath Inheritence using example.

 (b) Discuss role of constructors in Inheritance. 16

3. (a) Write a program using function overriding

 (b) Discuss overloaded constructors. 16

## Unit-II

4. (a) Discuss virtual function and its need.

 (b) Write note on virtual destructor. 16

5. What is Type Conversion? Discuss conversion between objects and basic types. 16

6. Explain template class and template function using a program. 16

7. Explain following using example:

 (a) Catch all Handlers.

 (b) Rethrowing an exception. 16

## Unit—IV

8. Discuss input modes in file handling. Emphasize on text mode and Binary mode inputs using example. 16

9. Write note on:

   (a) Manipulators in files.

   (b) File pointers and their need. 16