No. of Printed Page : 1

SET - 6

BACHELOR IN COMPUTER APPLICATIONS (BCA Revised)

Term-End Practical Examination

00126

June, 2011

CS-72P : C++ AND OBJECT ORIENTED PROGRAMMING

Time allowed : 2 hours | *Maximum Marks : 100*
(Weightage : 15%)

General Instructions :

*(i) There are two **compulsory** questions in this paper of **40** marks each. Rest **20** marks are for the **viva-voce**.*

(ii) You must write the appropriate main( ) function and test your programs.

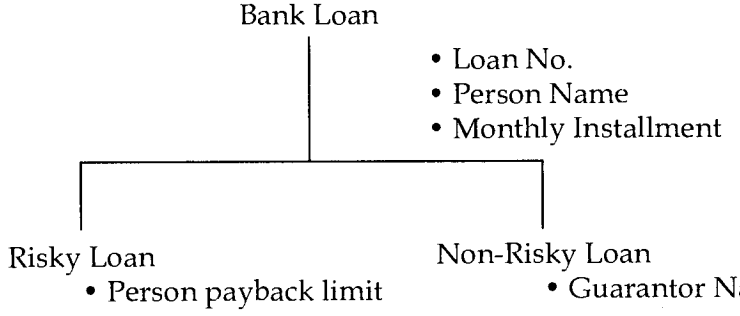
(iii) Write/Print the programs, input and results on your answer-script.

(iv) Make and state suitable assumptions, if any.

---

1. Design and implement a class "ColorCode" that stores a color as Red, Blue and Green. The values for these colors may be in the range of 0 to 255. The class has a constructor that initialise the data members of the class. The class has overloaded comparison operator > that returns the ColorCode object that has higher value for Red data member. Make suitable assumptions, if any. **40**

2. Consider the following class hierarchy along with suggested data members of the classes : **40**



A bank gives loan to a person. In case the loan is a Risky loan the person payback limit is calculated based on his/her assets. You may assume this value as Rs. 2,00,000/- for an object. In case loan is of Non-Risky type the name of the guarantor is stored. Please note that the loan has to be either of the two types.

Design and implement the classes in the hierarchy using C++. You may add more data members in the classes, if needed. You may include constructor in the classes, wherever needed. Also implement a function print-loan-details( ) in the classes, wherever it is needed. This function prints all the details of the object. Demonstrate the use of polymorphism using this print-loan-details( ) function and appropriate main( ) function.
