BACHELOR OF COMPUTER APPLICATIONS (Pre-revised)
(BCA)
Term-End Practical Examination
June, 2016

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CS-72(P)/S1 : C++ AND OBJECT ORIENTED PROGRAMMING

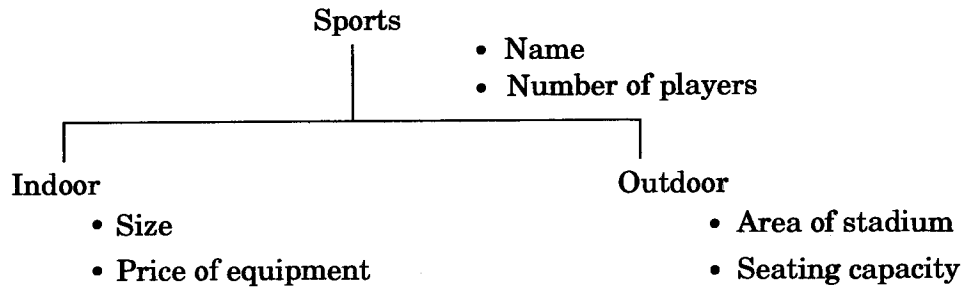*Time : 2 Hours*

Maximum Marks : 100

(Weightage : 15%)

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

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

(iii)   *Write/print the programs, input and results on your answer-sheet.*

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

1.   Design and implement a class "Player" using C++ having the following features :

*   The class should store Player_ID, Player_name, Sport and State_represented_by_player.
*   The member functions (three in number) of the class should perform :

    (a)   Input of values in a Player object

    (b)   Display of information of a Player object

    (c)   Display of information about State_represented_by_player

Write appropriate main( ) that creates an array of three "Player" objects and demonstrates all the member functions. You should enter meaningful values in the objects.   *40*

2. Consider the following class hierarchy along with suggested data members :

Sports
- Name
- Number of players

Indoor
- Size
- Price of equipment

Outdoor
- Area of stadium
- Seating capacity

Design and implement the classes in the hierarchy using C++. You may add more data members in the classes, if needed. You should include at least one constructor in each class. All the classes should have a member function print_sports_info( ) which should display all the data of that object. You must demonstrate polymorphism using the print_sports_info( ) and main( ) functions. *40*