

**Bachelor of Computer
Application (Pre-Revised) (BCA)
Term-End Examination
December, 2018**

**C++ AND OBJECT ORIENTED
PROGRAMMING**

Time : 2 Hours

Maximum Marks : 100

(Weightage : 15%)

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- 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 your programs, input and results on your answer-sheet.
 - (iv) Make and state suitable assumptions, if any.
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1. Design and implement a class "Candidate" using C++. The class should have the following data members and functions : 40

(a) Data members of the class should include :

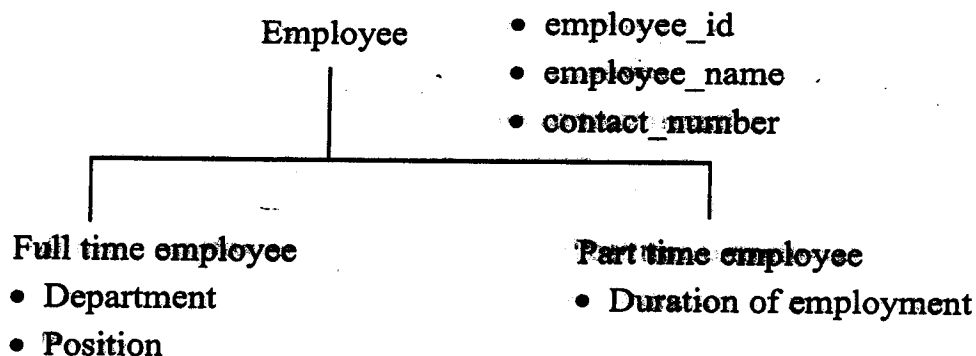
- (i) Candidate_id
- (ii) Name
- (iii) Highest qualification
- (iv) Number of years of experience

(b) The member functions should include :

- (i) A member function to input data into data members of a "Candidate" object.
- (ii) A member function to display highest qualification and number of years of experience of an object.

Write a main() function that creates a list of three "Candidate" objects and displays the highest qualification and number of years of experience of each "Candidate" object.

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



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 one member function `display_employee_info()` which should display all the information of that object. Demonstrate polymorphism using the `display_employee_info()` and `main()` functions.