XEV (H-3),BCA, (6)

2008

TIME : 3 Hours

Full Marks : 75

Candidate are required to give their answers in their own words as far as practicable.

i)   Answer any five questions including Q. No. 1 is compulsory

ii)   All questions have equal value

1.   a)   Choose the correct answer :

i)   C++ Language was invented by

a) Bjarne stroustrup b) Dennis M Ritchie c) Ken Thompson
              d) None of these

ii)   The packing of data and functions into a single component is known as :

a) Encapsulation b) Polymorphism c) Abstraction
d) None of these

iii)   Object oriented programming is popular because

a)   User can define user defined data types
b)   Programming statements are easy
c)   It is easy to find bugs and errors
d)   All of the above

iv)   The EXISTING CLASS CAN BE REUSED BY

a) Inheritance b) Polymorphism c) Dynamic binding d) Abstraction

v)   Composition of objects in a class is known as

a) Delegation b) Inheritance c) Polymorphism d) None of these.

B.   State whether the following statements are true or false :

     i)   In procedure oriented programming all data are shared by all functions.

     ii)   One problem with OOPS is that once a class is created it can never be changed.

     iii)   Object oriented approach cannot be used to creat data base

     iv)   Object oriented programs are executed much faster than conventional programs.

     v)   Inheritance means the ability to reuse the data value of one object by objects.

2.   What is object oriented programming? Distinguish between the data abstraction and data encapsulation.

3.   What do you mean by overloading of a function? when do you use this concept? Describe the different styles of writing prototypes.

4.   What are objects and classes? what is friend function? When are the merits and demerits of using a friend functions?

5.   What is a constructor? how do we invoke a constructor functions? Describe the importance of destructors.

6.   What are different forms of inheritance? Give an example for each. what is a Virtual base class?

7.   What does polymorphism mean in C++ language? What does this pointer point to ? What are the applications of this pointers?

8.   What is Artificial intelligence? Briefly explain the various components of artificial intelligence.

9.   Describe the difference among switch bridge and Hub.

10.   a) What is quick sort? write
     b) Sort the following No. using   sort:

     12 34 5 78 4 56 10 23 1 45 63