Code : 051301

B.Tech 3rd Semester Examination, 2016
Object Oriental Programming

Time : 3 hours   Full Marks : 70

Instructions :

(i)   There are Nine Questions in this Paper.

(ii)   Attempt Five questions in all.

(iii) Question No. 1 is Compulsory.

(iv)   The marks are indicated in the right hand margin.

1. Explain briefly about the following terms (any seven):

(7×2=14)

(a) Overloading

(b) Overriding

(c) C++ STL

(d) Constructor

(e) Destructor

(f) Inheritance

(g) Encapsulation

(h) Templates

(i) Protected variable

(j) Private function

P.T.O.

2. (a) Write a C++ program to overload '–' operator to calculate age from date of birth and current date.

14

3. (a) What is a friend function and what are its advantages?   7

(b) What are the guidelines that should be followed while using friend function ?   7

4. Compare overloading and overriding of function with example.   14

5. What is exception handling ? Write a C++ program to demonstrate the 'try', 'catch' and 'throw' keywords?

14

6. Define C++ classes to represent the information of an ORGANISATION having EMPLOYEES and CLIENTS. Provide subclasses MANAGER, CLERK and SUPPORT_STAFF. In this organisation employees work on projects requested by clients.   14

7. (a) What is virtual function ? Explain with an example.   7

(b) Explain the abstract class with an example.   7

8. Explain inline functions with an example program. What are the conditions, where inline functions cannot be expanded ?   14

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9. (a) What is the difference between compile time and run time errors? What is the use of stack unwinding in exception handling?   7

(b) Discuss void, this and const pointers.   7

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