

2011

Time : 3 hours

Full Marks : 80

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

The questions are of equal value.

Answer any five questions in which

Q. No. 1 is compulsory.

1. Answer the following questions :

(a) The cin and cout functions require the header file to include :

(i) Iostream.h

(ii) Stdio.h

(iii) Iomanip.h

(iv) None of the above

(b) The manipulator <<endl is equivalent to :

(i) '\n'

- (ii) '\t'
- (iii) '\b'
- (iv) None of the above
- (c) To _____ an inline function, we must change it to an outline function.
- (i) Debug (ii) Edit
- (iii) Remove (iv) Comment out
- (d) The members of a class are by default :
- (i) Private (ii) Public
- (iii) Protected (iv) None of the above
- (e) In the prototype void sun (int 4) ; arguments are passed by :
- (i) Value (ii) Reference
- (iii) Address (iv) None of the above
- (f) Constructor is executed when :
- (i) Object is declared
- (ii) Object is destroyed
- (iii) Both (i) and (ii)
- (iv) None of the above

- (g) Destructors can be :
- (i) Overloaded
 - (ii) Of any data type
 - (iii) Able to return result
 - (iv) Explicitly called
- (h) The keyword operator is used to overload an :
- (i) Operator
 - (ii) Function
 - (iii) Class
 - (iv) None of the above

2. What do you mean by operator overloading ? Describe rules for operator overloading. Also explain the difference between operator overloading and function overloading.
3. What are the constructors and destructors ? Explain its characteristics.
4. What are static member variables and function ? How are static variable initialized ? How are static function and friend function invoked ?
5. Write a program in C++ to declare three classes. Declare integer array as data member in each

- class. Perform addition of two data member arrays into array of third class. Use friend function.
6. What is function overloading ? What are the rules for defining overloaded functions ? What precautions should we take while overloading function ? Also explain what are the r value and l value in an expression.
7. Explain the working of switch () case and nested switch () case statement. What are the differences between break and continue statements ?
8. Describe the use of scope access operator (: :) and reference operator (&). What are the advantages of 'new' operator over malloc function ? What are type modifiers ? Why are they essential ?
9. Write a program in C++ to convert integer to date and vice-versa using conversion function in source class.