003-003302

28/20 (5-14 B. C. A. (CBCS) (Sem. III) Examination December - 2011

CS-14 : C++ & Object Oriented Programming

Faculty Code : 003 Subject Code : 003302

Time :  $2\frac{1}{2}$  Hours]

## [Total Marks : 70

20 (14)

Instruction : Write answer of all questions in main answer sheet.

## 1 **MCQs**

- C++ was originally developed by (1)
  - (A) Nicolas Wirith
  - (B) Donald Knuth
  - (C) Bjarne Stroustrup
  - (D) Ken Thompson
- The operator << is called
  - (A) An insertion operator
  - (B) Put to operator
  - (C) Either (A) or (B)
  - (D) None of these

When a language has the capability to produce new data type, it is called

- (A) Extensible
- (B) Overloading
- (C) Encapsulated
- (D) Reprehensible
- (4) What is a reference ?
  - (A) an operator
  - (B) a reference is an alias for an object
  - (C) used to rename an object

(D) None of these

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- (5) State the object oriented languages
  - (A) C++
  - (B) Java
  - (C) Eiffel
  - (D) All of the above

(6) A constructor is called whenever

- (A) a object is declared
- (B) an object is used
- (C) a class is declared
- (D) a class is used
- (7) Overload function in C++ means
  - (A) a group function with the same name
  - (B) all have the same number and types of argument
  - (C) function with same name and same number and type of argument
  - (D) All of the above
- (8) C++ name was suggested by
  - (A) Rrick Mascitti
  - (B) Bjarne Stroustrup
  - (C) Donald Knuth
  - (D) Ken Thompson
- (9) A class having no name
  - (A) is not allowed
    - (B) can't have a constructor
    - (C) can't have a destructor
  - (D) can't be passed as an argument

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- (10) A destructor takes
  - (A) One argument
  - (B) Two argument
  - (C) Three argument
  - (D) Zero argument

(11) The field in a class of a C++ program is by default

- (A) protected
- (B) public

()

- (C) private
- (D) none of these

(12) Find out the error in following block of code

if (x=100)

cout<<"x is 100";

- (A) 100 should be enclosed in quotation
- (B) There is no semicolon at the end of first line
- (C) Equals to operator mistake
- (D) Variable x should not be inside quotation
- (13) Which of the header file must be included to use string stream ?
  - (A) <iostream>
  - (B) <string>
  - (C) <sstring>
  - (D) <sstream>

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(14) Which of the following is input statement in  $C^{++}$ ?

- (A) cin
  - (B) input
  - (C) get
  - (D) none of above

(15) By default, the standard output device for C++ program is

- (A) Printer
- (B) Monitor
- (C) Modem
- (D) Disk

(16) Which of the following is extraction operator in  $C^{++}$ ?

- (A) ^
- (B) v
- (C) <<
- (D) >>

(17) What punctuation ends most lines of C++ code ?

- (A) Dot
- (B) Semi-colon
- (C) Colon
- (D) Single quote

(18) The preprocessor directive # include is required if

- (A) Console output is used
- (B) Console input is used
- (C) Both console input and output is used

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(D) None of these

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(19) Which of the following is selection statement in C++ ?

- (A) break
- (B) goto
- (C) exit
- (D) switch

(20) In C++ a function contained within a class is called

- (A) a member function
  - (B) an operator
  - (C) a class function
  - (D) a method
- 2 (a) Attempt any three :
  - (1) What is Class ?
  - (2) What is Destructor ?
    - (3) What is Abstract Class ?
    - (4) What is Stream ?
    - (5) What is Encapsulation ?
    - (6) What is Template ?
  - (b) Attempt any three :
  - (1), Differentiate : Procedure v/s Object Oriented Programming Language.
    - (2) Discuss Rules for Operator Overloading.
    - (8) Explain Scope Resolution Operator with example.
      - (4) List Expression types and explain any one.
      - (5) Explain file opening modes in details.
      - (6) Explain use of manipulator.

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[Contd...

6 (2)

9 (4)

- (c) Attempt any two :
  - (1) What is Inheritance ? Explain types of Inheritance in brief.
  - (N) (2) Explain Benefits of OOP.
    - (3) Explain Function Overloading with appropriate example.
    - (4) Discuss Error Handling Function with example.
    - (5) Explain call by value and call by reference with example.
- 3 (a) Attempt any three :
  - (1) What is Object ?
    - (2) What is Constructor ?
    - (3) What is Polymorphism ?
  - (4) What is OOP ?
    - (5) Structure of C++ Program.
    - (6) What is new operator ?
  - (b) Attempt any three :
    - (1) Differentiate : Structure v/s class.
      - (2) Discuss Rules for Constructor.
      - (3) Explain Virtual Base Class in Brief.
      - (4) Explain Memory Allocation for Object.
    - (5) Explain Copy Constructor with example.

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() (6) Explain inline function with example.

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10 (2)

6 ( 3 )

9 (3)

- (c) Attempt any two :
  - (1) Explain C++ stream class in brief.
  - (2) Explain Unary and Binary Operator Overloading in details.
  - (3) Explain virtual function and pure virtual function with example.
  - (4) Discuss Application of OOP.
  - (5) Explain friend function in detail with suitable example.

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