



Seat No. _____

B. C. A. (CBCS) (Sem. III) Examination

October / November – 2015

CS-14 : C++ And Object Oriented Programming

Faculty Code : 003

Subject Code : 003309

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

[Total Marks : 70]

1 Attempt the following MCQ :

20

(1) The preprocessor directive `#include` is required if _____

(A) Console input and output used

(B) Only Console input is used

(C) Only Console output is used

(D) None

(2) C++ was originally developed by _____

(A) Bjarne Stroustrup (B) Donald Knuth

(C) Nicolas Wirth (D) Ken Thompson

(3) The standard C++ comment

(A) /

(B) //

(C) /* and */

(D) None

- (4) The operator << is called
- (A) an insertion operator (B) put to operator
(C) either (A) or (B) (D) None
- (5) A constructor is called whenever _____
- (A) Object is declared (B) Object is used
(C) Class is declared (D) Class is used
- (6) Which of the following function that must contain in all C++ programs?
- (A) start () (B) main ()
(C) system () (D) program ()
- (7) What value will return to the operating system upon the successful completion of a program?
- (A) -1 (B) 0
(C) 1 (D) will not return a value
- (8) Which one of the following is the correct operator to compare two variables?
- (A) := (B) ==
(C) = (D) equal to
- (9) Which one of the following is not a correct variable type in C++ programs?
- (A) float (B) int
(C) real (D) double

- (10) The directives for the preprocessors begin with ____
- (A) Number Sign (#)
 - (B) Two Slashes (//)
 - (C) Ampersand symbol (&)
 - (D) Less than symbol (<)
- (11) Which one of the following is the Boolean operator for logical and?
- (A) &
 - (B) |
 - (C) &&
 - (D) |&
- (12) Constructors are used to ____
- (A) initialize the program
 - (B) construct the data members
 - (C) initialize the objects
 - (D) None
- (13) In C++ a function contained within a class is called
- (A) an operator
 - (B) a member function
 - (C) a class function
 - (D) a method
- (14) The fields in a class of a C++ program are by default
- (A) protected
 - (B) public
 - (C) private
 - (D) global
- (15) Which of the following is not a bitwise operator?
- (A) &&
 - (B) <<
 - (C) ~
 - (D) ^

- (16) C++ supports _____
- (A) Multiple inheritance
 - (B) Pointer to functions
 - (C) Recursion
 - (D) All of the above
- (17) In C++, the string literal "C++" occupies exactly _____ of memory.
- (A) 1 byte
 - (B) 2 bytes
 - (C) 3 bytes
 - (D) 4 bytes
- (18) The default copy constructor performs _____
- (A) Deep copy
 - (B) Shallow copy
 - (C) Hard copy
 - (D) Soft copy
- (19) The implicit argument passed to a member function of a C++ class is called _____
- (A) "implicit" pointer
 - (B) "sender" object
 - (C) "this" pointer
 - (D) "me" object
- (20) What is the result of the statement? : `x = 10 ; y = ++ x ;`
- (A) `x = 11, y = 11`
 - (B) `x = 11, y = 10`
 - (C) `x = 10, y = 11`
 - (D) an error

2 (a) Define Followings : (any three)

6

- (1) Identifier
- (2) Keywords
- (3) Variable
- (4) Const member function
- (5) Dynamic Binding
- (6) Manipulators

(b) Attempt the following : (any three)

9

- (1) Explain Constructor and Destructor.
- (2) Explain Operator Overloading.
- (3) Explain Storage Classes.
- (4) Call by Value VS Call by Reference.
- (5) Explain Function Overloading with suitable example.
- (6) Explain Dynamic initialization of object with suitable example.

(c) Attempt the following : (any two)

10

- (1) Write short note on Polymorphism.
- (2) Write short note on Multiple, Multi-Level and Hierarchical Inheritance.
- (3) Write short note on Virtual Class and Composition.

- (4) WAP that demonstrate Copy Constructor and Constructor overloading.
- (5) W.A.P. that accept string from user and display in reverse order without any string function.

3 (a) Define Followings : (any three)

6

- (1) seekg()
- (2) seekp()
- (3) tellg()
- (4) tellp()
- (5) RTTI
- (6) STL

(b) Attempt the following : (any three)

9

- (1) Write short note on UNFORMATTED console I/O operations.
- (2) Write short note on FORMATTED console I/O operations.
- (3) Differentiate Inheritance V/S Containership in C++
- (4) Write short note on "this" Pointer in C++
- (5) Write short note on File modes in C++
- (6) Write short note on File Pointers in C++

(c) Attempt the following : (any two)

10

- (1) Write short note on MANIPULATORS in C++
- (2) Write short note on Class Templates in C++

- (3) Write short note on Function Templates in C++
- (4) W.A.P. to overload binary "+" operator using friend function.
- (5) W.A.P. to display following pattern.

```
1
1 2 3
1 2 3 4 5
1 2 3 4 5 6 7
1 2 3 4 5
1 2 3
1
```
