

(6 pages)

Reg. No. :

Code No. : 21264

Sub. Code : SMCS 21/
SMSE 21

B.Sc. (CBCS) DEGREE EXAMINATION, APRIL 2018.

Second Semester

Computer Science/Software Engineering — Main

OBJECT ORIENTED PROGRAMMING IN C++

(For those who joined in July 2017 onwards)

Time : Three hours

Maximum : 75 marks

PART A — (10 × 1 = 10 marks)

Answer ALL questions.

Choose the correct answer :

1. Which of the following is a global scope resolution operator in C++
(a) :: (b) ; ;
(c) % (d) 11
2. Arrays and pointers are _____ data types.
(a) derived (b) user-defined
(c) built-in (d) none

3. Constructor is executed when _____

- (a) object is declared
- (b) object id destroyed
- (c) both (a) and (b)
- (d) none

4. Destructors can be _____

- (a) overloaded
- (b) of any data type
- (c) able to return result
- (d) explicitly called

5. A _____ class is one of that inherits properties of a base class.

- (a) derived
- (b) super
- (c) single
- (d) multiple

6. A function declared in a base class that has no definition relative to the base class.

- (a) virtual function
- (b) friend function
- (c) pure virtual function
- (d) inline function

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7. _____ functions are associated accessed by using object pointers.

- (a) friend
- (b) static
- (c) inline
- (d) virtual

8. A stream is a sequence of _____

- (a) bytes
- (b) bites
- (c) numbers
- (d) append

9. The member function fill () belongs to _____ class.

- (a) in stream
- (b) is tream
- (c) ostream
- (d) iostream

10. Template class is also called as _____

- (a) container class
- (b) generic class
- (c) virtual class
- (d) base class

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PART B — (5 × 5 = 25 marks)

Answer ALL questions choosing either (a) or (b).

Each answer should not exceed 250 words.

11. (a) What are classes?

Or

(b) What does 'control flow' mean? Explain the example.

12. (a) What is parameterized constructor? Explain.

Or

(b) What is mean by dynamic operators and constructor? Explain.

13. (a) List down the rules for overloading opertors.

Or

(b) Explain the multiple inheritance and hierarchical inheritance.

14. (a) What are the rules of virtual functions? Explain with examples.

Or

(b) Write about the C++ streams and unformatted I/O operations.

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[P.T.O.]



15. (a) Write a short note on commandline arguments.

Or

- (b) Explain
- (i) Formatted console I/O operations.
 - (ii) Managing Output with Manipulators

PART C — (5 × 8 = 40 marks)

Answer ALL questions choosing either (a) or (b).

Each answer should not exceed 600 words.

16. (a) Discuss about the characteristics of some OOP languages.

Or

- (b) Write a C++ program to find the sum of and average of N input numbers.

17. (a) What are constructor characteristics? Explain with examples.

Or

- (b) What is Copy Constructor? Explain with an example.

18. (a) Discuss the various relational operators used in C++.

Or

- (b) With an example explain single and multi level inheritance.

19. (a) Explain
- (i) Pure virtual functions
 - (ii) Pointers

Or

- (b) Explain the following:
- (i) Pointer to class
 - (ii) Pointer to object
 - (iii) VOID pointer

20. (a) Explain
- (i) Opening and Closing a file
 - (ii) File modes and pointers

Or

- (b) Write in detail about templates.

