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Reg. No. :

Code No. : 41195 E Sub. Code : JMCS 21/
JMSE 21

B.Sc. (CBCS) DEGREE EXAMINATION,
APRIL 2019.

Second Semester

Computer Science/Software Engineering— Main

OBJECT ORIENTED PROGRAMMING IN C++

(For those who joined in July 2016 only)

Time : Three hours

Maximum : 75 marks

PART A — (10 × 1 = 10 marks)

Answer ALL questions.

Choose the correct answer :

1. The reusability idea is provided by the concept of _____.

- (a) Encapsulation
- (b) Inheritance
- (c) Polymorphism
- (d) Dynamic binding

2. Which one of the following is used to eliminate the cost of calls to smaller functions.

- (a) Inline function
- (b) Friend function
- (c) Virtual function
- (d) Function prototype

3. Which operator is used to allocate an object dynamically of a class in C++?

- (a) A scope resolution operator
- (b) Conditional operator
- (c) New operator
- (d) Membership operator

4. A copy constructor may be called when _____.

- (a) An object of the class is returned by value
- (b) An object of the class is passed by value as an argument in functions
- (c) An object is constructed based on another object of the same class
- (d) All of the above

5. Which of the following operator cannot be overloaded?

- (a) +
- (b) -
- (c) *
- (d) ? :

6. _____ operator can be overloaded for object
coat.
- (a) >> (b) <<
(c) + (d) ::
7. If a class contains pure virtual function, then it is
termed as _____.
- (a) Virtual class
(b) Sealed class
(c) Pure local class
(d) Abstract class
8. Run time polymorphism can be achieved with
_____.
- (a) Virtual Base Class
(b) Contains Class
(c) Virtual function
(d) Both (a) and (c)
9. To create an output stream, we must declare the
stream to be of class _____.
- (a) of stream
(b) if stream
(c) io stream
(d) None

10. Which keyword can be used is template?
- (a) Class
(b) Typename
(c) Both (a) and (b)
(d) Function

PART B — (5 × 5 = 25 marks)

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

Each answer should not exceed 250 words.

11. (a) What do you understands about classes and
objects? Explain and give examples.

Or

- (b) Describe static member function.

12. (a) What is parameterized constructors?
Discuss.

Or

- (b) What is the use of const objects? Give an
example.

13. (a) What are the rules for overloading
operators?

Or

- (b) Write a program to find the total marks for
given five subjects and print the result using
single inheritance.

14. (a) Write a C++ program to implement virtual function concept.

Or

- (b) Discuss about C++ Stream classes.

15. (a) Describe the classes for File Stream Operations.

Or

- (b) How do you detect end of file? Discuss.

PART C — (5 × 8 = 40 marks)

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

Each answer should not exceed 600 words.

16. (a) Explain the oops concepts with suitable examples.

Or

- (b) Explain Nesting of member function and friendly functions with examples.

17. (a) Briefly discuss about constructor and destructor member functions.

Or

- (b) Write a C++ program to implement constructors with default arguments.

18. (a) Write a C++ program to add two given numbers using overloading binary operators using friends.

Or

- (b) What is inheritance? Explain any two types with examples.

19. (a) Discuss about pointers to derived classes with examples.

Or

- (b) Explain, how do you manage the output by using manipulators? Give examples.

20. (a) Discuss in detail about the file opening and closing methods in C++.

Or

- (b) Explain function templates in detail.
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