(6 pages) Reg. No. : .....

Code No. : 21124 **Sub. Code : JMCS 21/ JMSE 21**

B.Sc. (CBCS) DEGREE EXAMINATION, APRIL 2017.

Second Semester

Computer Science – Main

OBJECT ORIENTED PROGRAMMING IN C++

(For those who joined in July 2012–2015)

Time : Three hours Maximum : 75 marks

PART A — (10 × 1 = 10 marks)

Answer ALL questions.

Choose the correct answer :

1. How many specifiers are present in access specifiers in a class?

   (a) 1 (b) 2
   (c) 3 (d) 4

2. Static member function

   (a) can access any other member function and member variables
   (b) can access only static member function and static member variables
   (c) can access only through object of the class
   (d) returns only static data

3. A constructer that accepts ———— parameters is called the default constructer.

   (a) one (b) two
   (c) three (d) no

4. A class's ———— is called when an object is destroyed.

   (a) constructor
   (b) copy constructor
   (c) destructor
   (d) assignment function

5. While overloading unary operators using friend function, it requires ———— arguments.

   (a) 0 (b) 1
   (c) 2 (d) 3

6. What is meant by hybrid inheritance?

   (a) Combination of multiple and single inheritance
   (b) Combination of multiple and multilevel inheritance
   (c) Combination of multiple and multipath inheritance
   (d) Combination of multiple and hierarchical inheritance

7. _____ concept supports reusability of code

(a) encapsulation (b) inheritance

(c) polymorphism (d) overloading

8. Void pointer can point to which type of objects?

(a) int (b) float

(c) double (d) all of the above

9. Which of the following mode is used to open a file for writing only?

(a) in (b) out

(c) app (d) ate

10. What may be the name of the parameter that the template should take?

(a) same as template (b) same as class

(c) same as function (d) none of the above

PART B — (5 × 5 = 25 marks)

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

Each answer should not exceed 250 words.

11. (a) Briefly discuss about class with an example program.

Or

(b) Discuss about static member functions with an example program.

12. (a) Discuss in detail about parameterized constructors.

Or

(b) Discuss in detail about copy constructors.

13. (a) Explain in detail about rules for overloading operators.

Or

(b) Explain in detail about single inheritance with an example program.

14. (a) Describe this pointer with an example program.

Or

(b) Describe get() and put() functions with an example program.

15. (a) Discuss I/O operations on characters.

Or

(b) Discuss in detail about class template.

PART C — (5 × 8 = 40 marks)

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

Each answer should not exceed 600 words.

16. (a) Can we pass class objects as an arguments? Explain with the help of an example program.

Or

(b) Illustrate in detail about nesting of member function with an example program.

17. (a) Discuss in detail about dynamic constructers with an example program.

Or

(b) Discuss in detail about constructors with default arguments.

18. (a) Explain in detail about overloading binary operators using friend function with an example program.

Or

(b) Explain in detail about hierarchical inheritance with an example program.

19. (a) Elucidate virtual function with an example program.

Or

(b) Elucidate pointer to functions with an example program.

20. (a) Exemplify sequential input and output operations with an example program.

Or

(b) Exemplify function template with an example program.

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