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

Code No. : 41442 E **Sub. Code : SMCA 21**

B.C.A. (CBCS) DEGREE EXAMINATION,
APRIL 2019.

Second Semester

Computer Application — Main

OBJECT ORIENTED PROGRAMMING WITH 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. The object oriented programming languages is/are

(a) C++ (b) Small talk

(c) Java (d) All of these

2. Which one of the following variable provides an alias for a previously defined variable?

(a) Static (b) Dynamic

(c) Reference (d) New

3. Floor (3.2) returns ———————

(a) 3 (b) 4

(c) 3.5 (d) 3.2

4. A member function can be called by using its name inside another member function of the same class. This is known as ———————

(a) Overloading

(b) Overriding

(c) Nesting of member functions

(d) Private member functions

5. Which one of the following function enables an object to initialize itself when it is created?

(a) Member function

(b) Constructor

(c) Destructor

(d) Friend

6. The mechanism of giving special meanings to an operator is known as

(a) Function overloading

(b) Overloading

(c) Operator overloading

(d) All of the above

7. The mechanism of deriving a new class from an old one is called as ————————

(a) Function overloading

(b) Operator overloading

(c) Inheritance

(d) None of these

8. Which one of the following class not used to create objects?

(a) Constructor class

(b) Abstract class

(c) Derived class

(d) Parent class

9. The source stream that provides data to the program is called the ———————— stream.

(a) Input (b) Output

(c) i/o (d) All of the above

10. Each file has ———————— associated pointers known as file pointers.

(a) One (b) Two

(c) Three (d) Four

PART B — (5 × 5 = 25 marks)

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

Each answer should not exceed 250 words.

11. (a) Discuss in detail about benefits of object oriented programming.

Or

(b) Discuss in detail about type cast operator and member dereferencing operator with an example program.

12. (a) Comment on function prototype. Explain it with an example program.

Or

(b) What do you mean by class? How does it accomplish data hiding?

13. (a) Elucidate in detail about constructor with an example program.

Or

(b) Elucidate in detail about rules for overloading operators.

14. (a) Describe in detail about single inheritance with an example program.

Or

(b) Describe in detail about nesting of class with an example.

15. (a) Analyze in detail about C++ stream classes with its diagram.

Or

(b) Analyze in detail about functions for manipulation of file pointers.

PART C — ($5 \times 8 = 40$ marks)

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

Each answer should not exceed 600 words.

16. (a) Discuss the key concepts of object oriented programming.

Or

(b) Discuss in detail about structure of C++ program with an example program.

17. (a) Describe in detail about function overloading with an example program.

Or

(b) Describe in detail about friend function with an example program.

18. (a) Illustrate copy constructor with an example program.

Or

(b) Illustrate overloading unary operator with an example program.

19. (a) Elucidate multilevel inheritance with an example program.

Or

(b) Elucidate virtual base class with an example program.

20. (a) Exemplify unformatted I/O operations with an example program.

Or

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

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