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

**Code No. : 21018** **Sub. Code : GMCA 21**

B.C.A. (CBCS) DEGREE EXAMINATION,
NOVEMBER 2014.

Second Semester

Computer Applications – Main

OBJECT ORIENTED PROGRAMMING C++

(For those who joined in July 2012 onwards)

Time : Three hours Maximum : 75 marks

PART A — (10 × 1 = 10 marks)

Answer ALL questions.

Choose the correct answer :

1. OOPs give more importance to ————————

   (a) Class (b) Object

   (c) Data (d) Algorithm

2. Which of the following is scope resolution operator?

   (a) : (b) : :

   (c) ? (d) &&

3. Every C++ program must include ———— header file

(a) stdio.h (b) conio.h

(c) iostream.h (d) math.h

4. A function can access between two classes is called

(a) nesting member function

(b) inline function

(c) recursive function

(d) friend function

5. Which feature of C++ is operator overloading?

(a) polymorphism (b) inheritance

(c) datahiding (d) encapsulation

6. If an array has 50 elements then the range is ————

(a) 1 - 50 (b) 0 - 49

(c) 1 - 49 (d) 0 - 50

7. A ———— is a variable that holds the address of another variable

(a) class (b) pointer

(c) array (d) object

8. To destroy an object we use ———— operator in pointers

(a) new (b) malloc ( )

(c) calloc ( ) (d) delete

9. ———— gives the current position of get pointer

(a) Seekg (b) Seekp

(c) Tellg (d) Tellp

10. ———— function is encountered when a file reaches end

(a) Fail (b) Bad

(c) Good (d) Eof

PART B — (5 × 5 = 25 marks)

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

Each answer should not exceed 250 words.

11. (a) Write down the applications of C++.

Or

(b) Write a C++ program to convert centigrade to Fahrenheit temperature.

12. (a) How memory is allocated for objects?

Or

(b) What is meant by nesting of member functions?

13. (a) Write down the rules for overloading operators.

Or

(b) Explain type conversion.

14. (a) State the use of this pointer with suitable example.

Or

(b) Write about constructors in derived class.

15. (a) Write short notes on command line arguments.

Or

(b) Describe about file modes.

PART C — (5 × 8 = 40 marks)

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

Each answer should not exceed 600 words.

16. (a) Differentiate between the following terms :

(i) Inheritance and polymorphism

(ii) Dynamic binding and message passing.

Or

(b) Write a C++ program to calculate the grade of a student.

17. (a) How to pass object as function arguments? Explain.

Or

(b) Write a C++ program to find the sum of first *n* natural numbers.

18. (a) What is operator function? Describe the syntax of an operator function.

Or

(b) Write a C++ program to overload operator '=='.

19. (a) How pointers used with arrays? Explain with example.

Or

(b) Write a C++ program to illustrate the use of pointers to objects.

20. (a) Write a C++ program to read two files simultaneously.

Or

(b) Describe file pointers and manipulations.

———————