

Total No. of Questions :7]

SEAT No. :

[Total No. of Pages :4

P1014

[5319] - 4001

S.Y.B.C.A. (SCIENCE)

BCA - 401 : C++

(2016 Pattern) (Semester - IV)

Time : 3 Hours]

[Max. Marks :70

Instructions to the candidates:

- 1) *Question No.1 (A & B) are compulsory.*
- 2) *Attempt any two questions from group - I.*
- 3) *Attempt any two questions from group - II.*
- 4) *Figure to the right indicate full marks.*

Q1) A) Attempt the following.

[7×1=7]

- a) In operator overloading _____ in the basic meaning of operator is not allowed.
- | | |
|--------------|--------------|
| i) increment | ii) addition |
| iii) change | iv) none |
- b) The read () and write () functions handle data in _____ form
- | | |
|----------------|-------------------|
| i) Text | ii) Binary |
| iii) Character | iv) none of these |
- c) The words which has predefined meaning and cannot be changed by the users are known as _____.
- | | |
|----------------|-----------------|
| i) constants | ii) identifiers |
| iii) key words | iv) none |

P.T.O.

- d) What are mandatory parts in function declarations?
- i) return type, function name
 - ii) return type, fun name, parameter
 - iii) both i & ii
 - iv) none of these
- e) The try block contain the statements that _____.
- i) Throws exception
 - ii) catch exceptions
 - iii) correct exception
 - iv) all of these
- f) A class is inherited known as _____.
- i) Base class
 - ii) Hybrid
 - iii) derived
 - iv) both i & ii
- g) By default members of class are
- i) protected
 - ii) private
 - iii) public
 - iv) all of above

B) Attempt all of the following.

[7×1=7]

- a) List the operations of string
- b) Write the operators which cannot be overloaded.
- c) What is generic programming?
- d) what is compile time polymorphism?
- e) What is dynamic constructor
- f) What is difference between oop & pop?
- g) The 'This' pointer must be declared in program state true or false.

Group - I

Q2) Attempt all of the following.

- a) Write C++ program to accept employee details like empno, empname, city, idate salary, deptname using accept () and display () function for array of object. [5]
- b) Explain function overloading with example. [5]
- c) Explain the manipulators uses in C++. [4]

Q3) Attempt all of the following.

- a) What is friend function? Explain with properties & example. [4]
- b) What is class? Explain access specifies use in it with example. [4]
- c) Write a C++ program to find maximum no of three number using parameterized constructor. [3]
- d) Explain applications of C++. [3]

Q4) Attempt all of the following.

- a) Explain pure virtual function with example. [4]
- b) What is inheritance? Explain single inheritance with example. [4]
- c) Write short note on function template. [3]
- d) Explain hierarchy of file stream classes with proper diagram. [3]

Group - II

Q5) Attempt all of the following.

- a) Explain all the forms of inheritance. [5]
- b) Write C++ program for how the unary minus operator is overloaded. [5]
- c) Explain how run time polymorphism is achieved using virtual function. [4]

Q6) Attempt all of the following.

- a) Explain simple try & catch mechanism with example. **[4]**
- b) What is STL? Explain its components. **[4]**
- c) Write a program for opening two files with same stream & storing the content in it. **[3]**
- d) What is abstract class. **[3]**

Q7) Attempt all of the following.

- a) Write a short note on this pointer. **[4]**
- b) Explain scope resolution operator with example. **[4]**
- c) Write the rules of operator overloading. **[3]**
- d) Write a corrected code of the following program segment by underlining the corrected error removed code.

```
Void main ( )
```

```
{int a, b;
```

```
  Cin <<a;
```

```
  b = a ;
```

```
  Cout << "b =", a;
```

```
};
```

[3]

