

M 7551

Reg. No. : .....

Name : .....

**III Semester B.Sc. Degree (CCSS-Reg./Supple./Imp.)**

**Examination, November 2014**

**CORE COURSE IN COMPUTER SCIENCE**

**3B03 CSC : Programming in C++**

**Time : 3 Hours**

**Max. Weightage : 21**

**SECTION – A**

**Answer all questions. Weightage for a bunch of four questions is 1.**

1. Mechanism of deriving a class from another derived class is known as \_\_\_\_\_
  - a) Polymorphism
  - b) Single inheritance
  - c) Multilevel inheritance
  - d) Multiple inheritance
2. Which one of the following operator cannot be overloaded ?
  - a) += operator
  - b) == operator
  - c) ?: operator
  - d) \* operator
3. The break statement causes an exit.
  - a) From the innermost loop only
  - b) Only from the innermost switch
  - c) From all loops and switches
  - d) From the innermost loop or switch
4. When a class is declared inside the function, it is called as \_\_\_\_\_
  - a) Abstract class
  - b) Global class
  - c) Nested class
  - d) Local class

5. Runtime Polymorphism is achieved by \_\_\_\_\_
- a) Friend function
  - b) Virtual function
  - c) In-line functions
  - d) Function overloading
6. In a protected derivation, visibility modes will change as follows :
- a) Private, public and protected become protected
  - b) Only public becomes protected
  - c) Public and protected become protected
  - d) Only private becomes protected
7. Which of the following about constructor is false ?
- a) It can be executed implicitly
  - b) It can be overloaded
  - c) It can return any value
  - d) None of these
8. Usually a pure virtual function
- a) Has complete function body
  - b) Is defined only in base class
  - c) Will be called only to delete an object
  - d) Is defined only in derived class

## SECTION – B

Answer **any five** questions. Weightage **one each**.

- 9. What is the use of in-line function ?
- 10. Give the syntax of do-while statement.
- 11. What is class ?
- 12. Explain the use of delete operator.
- 13. List the basic data types in C++.
- 14. Define destructor.
- 15. List various file stream classes.
- 16. Define Abstract class.



SECTION – C

Answer **any 5** questions. Weightage **two each**.

17. Explain different types of polymorphism in C++ with examples.
18. Explain any two looping statements in C++ with examples.
19. What are friend functions ? Explain their characteristics with a suitable example.
20. Explain the hierarchical inheritance with suitable example.
21. What is the difference between a virtual function and a pure virtual function ? Explain.
22. List and explain various types of constructors.
23. Write a program to concatenate two strings by overloading + = operator.
24. Explain file pointers and their manipulators. (5×2=10)

SECTION – D

Answer **any one** question. Weightage **4**.

25. Write a short note on :
  - a) Parameter passing techniques
  - b) I/O stream classes
26. Discuss in detail about the basic concepts of object oriented programming. (1×4=4)