M 5235

Reg. No. : ....

Name : ....

III Semester B.A./B.Sc./B.Com./B.B.A./B.B.A.T.T.M./B.B.M./B.C.A./B.S.W./
B.A. Afsal-Ul-Ulama Degree (CCSS – Regular/Supple./Improvement)
Examination, November 2013
CORE COURSE IN COMPUTER SCIENCE
3B03 CSC : Programming in C++

Time: 3 Hours   Max. Weightage : 21

Instructions : 1) Section **A** : Answer **all** questions.
2) Section **B** : Answer **any five** questions.
3) Section **C** : Answer **any five** questions.
4) Section **D** : Answer **any one** question.

SECTION – A

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

1. The package of data and functions in a single unit is known as _____
   a) abstraction   b) encapsulation
   c) data hiding   d) polymorphism

2. Runtime polymorphism is achieved by _____
   a) friend function   b) virtual function
   c) operator overloading   d) function overloading

3. In C++, dynamic memory allocation is accomplished with the operator _____
   a) new   b) this
   c) malloc()   d) delete

4. The main() function returns an integer value to
   a) main() function   b) compiler
   c) operating system   d) none of the above

5. Mechanism of deriving two or more classes from a class is known as _____
   a) multilevel inheritance   b) single inheritance
   c) multiple inheritance   d) hierarchical inheritance

6. A function call mechanism that passes arguments to a function by passing a copy of the values of the arguments is _____
   a) call by name   b) call by value
   c) call by reference   d) call by address

7. Which of the following about a friend is false function ?
   a) It is not called using the object of the class.
   b) It does not belong to the class.
   c) It can be declared only in the public part of a class.
   d) None of these

8. A class which contain pure virtual function is called _____
   a) base class   b) derived class
   c) friend class   d) abstract class   (2×

SECTION – B

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

9. What is the use of friend function ?

10. Give the syntax of if-else statement.

11. What is an object ?

12. Explain the use of Scope resolution operator.

13. Define default constructor.

14. What is meant by nested class ?

15. Explain the use of this pointer.

16. Define pure virtual function.   (5×

SECTION – C

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

17. Explain the term data abstraction with a suitable example.

18. What are the benefits of Object Oriented Programming ? Explain.

19. Differentiate between inline function and normal function.

20. Explain the multilevel inheritance with suitable example.

21. What is a file mode ? Describe the various file mode options available in C++.

22. List out the rules for overloading operators.

23. Write a program to find the area of a square, rectangle and circle using function overloading.

24. What are the two methods of opening a file ? Explain with examples.   **(5×2=10)**

SECTION – D

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

25. Write a short note on :
    a) looping statements in C++
    b) static members of a class.

26. Write a class to represent complex numbers and perform addition and subtraction of complex numbers using friend functions.   **(1×4=4)**

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