

2016

TIME: 3 HOURS

FULL MARKS: 70

GROUP – A

1. State True or False:

1x15=15

- a. In C++ the symbol `*/ */` used for writing comments.
- b. The `::` is known as scope access operator.
- c. The delete operator used to delete an object.
- d. The new operator releases memory.
- e. **While** loop statement is terminated by a `;`
- f. An expression in **C++** always returns **0** or **1**.
- g. **While (1) {}** is an infinite loop.
- h. The innermost loop is completed first in a nested loop.
- i. The **main()** function returns an integer value to OS.
- j. Function overloading is implemented using same function name with multiple definitions.
- k. The default arguments are used when function is void.
- l. The constant function makes its local variable constant.
- m. The function **abs()** returns absolute value.
- n. Use of parameter is optional with **return** statement.
- o. **Struct** and **class** are same in C++.

Group – B

Answer any **five** questions of the following:

4x5=20

2. Define and discuss the following terms:
 - a. Variable
 - b. Protected
 - c. Private
 - d. Public
3. Distinguish between the following:
 - a. cin() and scanf()
 - b. cout() and printf()
 - c. put() and get()
 - d. puts() and gets()
4. What are the key concepts of Object Oriented Programming?
5. Compare and contrast OOP with procedure oriented paradigm.
6. Distinguish between inheritance and delegation with appropriate example.

Group – C

Answer any **five** questions of the following:

7x5=35

7. Differentiate between structures vs classes and pointers vs reference.
8. What are the different types of inheritance?
9. Write a program in C++ language to multiply 3 m x m matrices using function.

10. In C++ language show the use of function overloading and default arguments.
11. Why we need constructors / destructors in C++?
12. What are anonymous objects? How would you implement multiple inheritance?
13. Explain polymorphism in the context of C++, using example.
14. Why we need friend function? Explain with example.

.....