

3

**Model Question Paper**

**For Kashmir Division 2010 Regular Exam Only**

**Roll No.....**

**Subject                      COMPUTER SCIENCE**

**Maximum Marks --- 50**

**Time Allowed – 3 Hours (Fifteen Minutes Extra to read the question paper)**

**Do questions from Part A or Part B or from both Part A and B Part of maximum 50 marks as per your preparation.**

**Part A**

**SECTION—A**

**(Long Answer Type Questions)**

1. Define Control statement. Write a program in C++ to find the greatest of three numbers using if construct.

*Or*

Define and explain Data Encapsulation and Polymorphism. 7

2. What is a Structure ? How is it different from an Array ?

*Or*

Write a C++ program, declaring and defining a structure for displaying students Record—Name, Roll No. and Marks. 7

3. Give the importance of Constructors and Destructors.

P. T. O.

*Or*

Define and explain the following :

(i) Default constructor

(ii) Copy constructor.

7

4. Explain Dynamic Memory Allocation with reference to C++.

*Or*

Explain NULL pointer and this pointer giving suitable examples.

7

### SECTION—B

**(Short Answer Type Questions)**

5. Explain Logical Operators.

3

6. Give the explanation of Inline function.

3

7. What do you mean by Inheritance ?

3

8. Give the significance of Private and Public member functions.

3

9. Explain Function overloading.

3

### SECTION—C

**(Very Short Answer Type Questions)**

10. Name one header file for a C++ program.

1

11. How an object is created in C++ program ? (Write in one line).

1

12. Name the function which can not be inherited.

1

13. Write a C++ statement for declaring a String variable.

1

**SECTION—D**

**(Objective Type Questions)**

14. Choose the most appropriate/correct answer of the following questions among four given alternatives and write them in your Answer-book :

(i) ..... function is automatically involved by the complier. 1

(ii) An infinite Loop is a Loop that

A. Never ends

B. Ends immediately

C. Stops the execution of a program

D. None of the above. 1

(iii) When a Subclass is the Baseclass of another class, it is known as

A. Multiple inheritance

B. Multilevel inheritance

C. Hybrid inheritance

D. None of the above. 1

## Part B

### SECTION—A

#### (Long Answer Type Questions)

1. Explain the concept of 2-D array ? How are they represented in Memory ?

*Or*

Write a program to multiply two 2-D arrays.

7

2. Explain the concept of Stack. Give its application.

*Or*

Write a program to implement circular Queue using array.

7

3. Explain with syntax and example :

(i) open( )

P. T. O.

( 2 )

(ii) close( )

(iii) read( )

(iv) write( ).

*Or*

What is a Header file ? Give detailed description about fstream.h. 7

4. What is Full adder and Half adder ? Design the circuit for Full adder.

*Or*

What is Karnaugh Map and how it can be used for minimization of Boolean expressions ? 7

### SECTION—B

#### (Short Answer Type Questions)

5. Explain XNOR gate with truth table. 3

6. Explain the following SQL functions :

(i) SUM ( )

(ii) Count ( ). 3

7. Write SQL command to create student table with the following information :

Roll No., Name, Class, Marks. 3

8. Explain the concept of Firewall. 3

9. What is a Linked list ? Explain. 3

**SECTION—C****(Very Short Answer Type Questions)**

10. What is Polish Notation ? 1
11. Give one drawback of Star Topology. 1
12. Give one difference between Singly and Doubly Link list. 1
13. Define a Tuple. 1

**SECTION—D****(Multiple Choice Type Questions)**

14. Choose the most appropriate/correct answer of the following questions among four given alternatives and write them in your Answer-book :
- (i) Array index starts from
- A. 1
- B. 0
- C. -1. 1
- (ii) Which of the following is a language ?
- A. HTTP
- B. DHTML
- C. TCP. 1
- (iii) The concept of Normalization was given by
- A. Boehm
- B. E.F. Codd
- C. Dennis Ritchie. 1