ALPINE SCHOOL

Melmuri- 27, Above SultanPalace, Malappuram - 676519

Computer Science First Year Model Examination Test Paper 1

Date: **Class: XI**

TIME: 2 Hr.

Cool Off Time: 15 Minutes **Max. Marks: 60**

PART A

Answer all the questions from 1 to 5. Each question carries 1 score (5 X 1 = 5 Score)

1) Who was the first programmer in the world? (1 Mark)

2) What is the input operator ">>" and output operator "<<" called? (1 Mark)

3) Which statement in C++ can transfer control of the program to a named label? (1 Mark)

4) What will be the output of the statement putchar(getchar()) ; be? (1 Mark)

5) To transmit signals from multiple devices through a single communication channel (1 Mark)

Simultaneously we use …... device

i) Modem ii) Switch iii) Multiplexer iv) Hub

PART B

Answer any 9 questions from 6 to 16. Each question carries 2 score (9 X 2 = 18 Score)

6) Discuss the working of Turing machine (2 Marks)

7) Find the dual of following Boolean equations. (2 Marks)

a) $A + \bar{A} = 1$ b) $(A + 0) . (A . 1 . \bar{A}) = 0$

8) Differentiate between Algorithm and Flow Chart (2 Marks)

9) What is meant by tokens? Name the tokens available in C++ (2 Marks)

10) What do you mean by a variable? What is L-Value and R-Value of a variable? Explain (2 Marks)

With the help of an appropriate example

11) What is the importance of including the header files in a C++ program? (2 Marks)

12) Define an Array, Give the C++ declaration statement for a two dimensional array of (2 Marks)

Floating point numbers having 5 rows and 4 columns

13) Discuss the memory allocation for strings in C++ (2 Marks)

14) What do you mean by DoS Attack? (2 Marks)

15) Differentiate between a computer virus and a computer worm (2 Marks)

16) Distinguish between actual parameter and formal parameter (2 Marks)

PART C

Answer any 9 questions from 17 to 27. Each question carries 3 score (9 X 3 = 27 Score)

17) Fill in the blanks

$(87)_{10}$ = (……)$_2$ = (……)$_8$ = (……)$_{16}$

18) a) Give the flow chart to print odd numbers between 1 and 100 (2 Marks)

b) Name two approaches in problem solving (1 Mark)

19) Describe the different phases in programming (3 Marks)

20) Write a C++ program to find the ASCII value of a character entered by the user (3 Marks)

21) Differentiate between break and continue statement in C++ (3 Marks)

22) What are registers? Write and explain any two of them (3 Marks)

23) Discuss any three logical Gates along with their name and symbol (3 Marks)

24) Differentiate between linear search and binary search (3 Marks)

25) Illustrate the working of selection sort for the following array (3 Marks)

98,17,15,33,54,36,49

26) Discuss any three console IO functions with example (3 Marks)

27) Differentiate between call by value and call by reference methods in function calls (3 Marks)

PART D

Answer any 2 questions from 28 to 30. Each question carries 5 score (2 X 5 = 10 Score)

28) Discuss the functional units of a computer system in detail (5 Marks)

29) i)What is TCP/IP? (1 Mark)

ii) What is a MAC address? (1 Mark)

iii) Name and explain any 3 data communication devices (3 Marks)

30) Write a C++ program to input an integer and check whether it is palindrome or not? (5 Marks)