# CHRIST UNIVERSITY, BANGALORE-560029
## I B.Sc. End Semester Examination October 2010

**Code: CSC131** **Max. Marks: 100**

**Sub:Computer Fundamentals & C Programming** **Duration: 3 Hrs`**

***Instruction : All the Sections are compulsory.***

### SECTION - A

**Answer all the questions.** **10 x 2 = 20**

1. State Commutative and Associative laws.
2. Give the truth table of XOR gate.
3. Define Multiplexer .Give its logic symbol.
4. What is a cell?
5. What is a document?
6. Explain the syntax of scanf() statement.
7. Name the different types of 'if' statement.
8. Which characters comprise the C character set?
9. How do you declare a two-dimensional array?
10. What kind of information is represented by a pointer variable? Give an example.

### SECTION - B

**Answer any eight questions.** **8 x 6 = 48**

11. Differentiate BCD and decimal codes.
12. Explain the types of programming languages with examples.
13. Explain edge triggered S R Flip Flop
14. Discuss the pros and cons of secondary memory over primary memory.
15. Explain any three formulae used in excel.
16. Explain the structure of a C program.
17. Explain nested for loop with an example.
18. Perform bubble sort on the following set:
    100 34 0 10 6 12
19. Write a program to swap two numbers using functions and pointers.
20. Write a program to find the roots of a quadratic equation.

## SECTION - C

**Answer the following.** **2 x 16 = 32**

21. a)Explain with appropriate diagrams and truth table

1) Half adder circuit .

2)Full adder circuit

OR

a)Define multiplexer..Explain any one multiplexer circuit.(10 marks)

b)Explain any one application of multiplexer(6 marks)

22. a) Write a note on one dimensional and two dimensional arrays.

b) Write a menu driven program to find the sum and difference of two matrices.

OR

(a) Explain break and continue statements with suitable examples.

b) Write a program to arrange the elements of an array in ascending order using S selection sort.