

STELLA MARIS COLLEGE (AUTONOMOUS), CHENNAI – 600 086
(For Candidates admitted during the academic year 2019-20 and thereafter)
SUBJECT CODE: 19CS/MC/FC13
B.C.A. DEGREE EXAMINATION – NOVEMBER 2022
FIRST SEMESTER

COURSE : MAJOR CORE
PAPER : FUNDAMENTALS OF COMPUTING
TIME : 1 ½ HOURS

MAX. MARKS : 50

SECTION – A

Answer all the questions

(10 x 1 = 10)

Choose the best answer:

1. Which option of ls command will list the file attributes?

- a) -d b) -w c) -l d) -s

2. Determine the output of the following code.

```
int a=5,b;  
b=((a==5)?(3):(2));  
printf("The value of 'b' variable is : %d",b);
```

- a) 3 b) 2 c) 5 d) 8

3. Which of the following allows you to examine the code at various stages of its execution?

- a) debugging b) breakpoint c) next d) continue

4. Pick up the function used to find the square of a given number.

- a) sqrt(x) b) pow(x,2) c) power(x,2) d) sqrt(x,2)

5. #define pi=3.14; is a

- a) external variable b) local variable c) global variable d) symbolic constant

Fill in the blanks:

6. _____ command is used to change the file permissions in Unix.

7. The logical operators in C are _____ and _____.

8. _____ command lists the breakpoints in gdb.

9. The diagrammatic representation of the program is called as _____.

10. In functions, call by reference uses the _____ of the argument.

SECTION - B

Answer ALL the questions:

(5 x 2 = 10)

11 What is the purpose of cat command in Unix?

12. Is a++ different from ++a? Justify.

13. How does the 'run' command in gdb work?

14. What is a conditional operator?

15. Differentiate break and continue.

SECTION - C

Answer any SIX of the following:

(6 x 5 = 30)

16. Discuss in detail about the structure of Unix file system.
17. Write a note on the directory related commands in Unix.
18. Describe debugging using gdb.
19. Explain the looping structures in C.
20. Discuss the purpose of arrays in C.
21. Write a brief note on scope of the variables in C.
22. Write a program to the factorial of a given number using recursion.
23. Is 'main' a built-in function? Justify your answer.
