



# LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

## B.Sc. DEGREE EXAMINATION – MATHEMATICS

FOURTH SEMESTER – APRIL 2017

### MT 4504- COMPUTER PROGRAMMING IN C

Date: 25-04-2017  
09:00-12:00

Dept. No.

Max. : 100 Marks

#### PART – A

Answer ALL questions

10 \* 2 = 20

1. Define Reading mixed data types.
2. Find the error in the following code:

```
if ( sex is female)
{
if (balance >500);
bonus = 0.5 * balance
}
else
balance = balance + bonus
```
3. Explain the formatted input.
4. Write about header files in C.
5. Define an Array.
6. What are getchar and gets functions?
7. Define Modules.
8. Explain the function call.
9. What is an understanding pointer?
10. Explain briefly about input/ output operations on files.

#### PART-B

Answer any FIVE questions

5 \* 8 = 40

11. Write a short note on integer constants and real constants using an example.
12. Write a C program to convert the given number of days into months and days.
13. Briefly explain about the GOTO statement with an example.
14. Write a C program to evaluate the equation  $y = x^n$ .
15. Explain initialization of one- dimensional arrays.
16. Explain arithmetic operations on characters.

17. What are the benefits of pointer to programmers?
18. Write a C program to print the address of a variable along with its value.

**PART-C**

**Answer any TWO questions**

2 \*20 = 40

19. (a) Write short notes on different data types and explain.  
(b) Write a C program to show the use of getchar function in an interactive environment.  
(10 + 10)
20. Explain decision making with SIMPLE IF statement, the IF...ELSE statement, Nested IF...ELSE statement and the ELSE IF ladder with an example.
21. (a) Write a C program to print the multiplication table from 1\*1 to 10\*10.  
(b) Write short notes on DO WHILE and FOR statements.  
(10 + 10)
22. (a) Explain all the six elements in the definition of functions.  
(b) Explain comparing and copying structure variables and write a C program to illustrate them.  
(10 + 10)

\$\$\$\$\$\$