

**MASTER OF LIBRARY AND INFORMATION SCIENCE  
EXAMINATION, 2024**

(1st Year, 1st Semester)

**INFORMATION & COMMUNICATION TECHNOLOGY**

**PAPER – ML-06**

Time : Two hours

Full Marks : 50

Answer *all* the questions.

1. Write C-programs for the following problems (*any two*):

5×2=10

- a) Print Grade according to the following logic. Marks should be in between 0 to 100 and taken during run time.

Grade = “A” if marks  $\geq 80$

Grade = “B” if marks  $\geq 60$  but  $< 80$

Grade = “C” if marks  $\geq 40$  but  $< 60$

Grade = “FAIL” if marks  $< 40$

- b) Print the following pattern through nested loop:

5 4 3 2 1

5 4 3 2

5 4 3

5 4

5

- c) Check whether a number is Prime or not. Take input during run time.

[ 2 ]

Clue: The prime members are divisible by 1 and the same number only 3, 5, 7, 11, 23 ...

- d) Print a temperature conversion table from Fahrenheit (0 to 100) to Centigrade.

Hints:  $C/5 = (F-32)/9$  where C = Centigrade and F = Fahrenheit

2. a) What are the basic Features of Linux? Explain Linux file system and directory structure? 4+6

OR

- b) What are the different types of operating systems, and how do they differ from each other?

3. a) What do you mean by RDBMS? Compare between Object-oriented databases and Bibliographic databases? 2+8

OR

- b) What are the different types of Database Management System (DBMS) and how do they differ from each other?

4. Write C-programs for the following problems (**any two**): 5×2=10

- i) Print the following pattern through nested loop:

```
1
2 3
4 5 6
7 8 9 10
```

[ 3 ]

- ii) Display the members of Fibonacci series below 200.

Clue: The value of any member is the summation of previous two members like 0, 1, 1, 2, 3, 5, 8, 13, 21 ....

- iii) Convert given days into year, month and days.

(Consider: 1 year = 365 days and 1 month = 30 days)

- iv) Calculate the summation of odd numbers from 50 to 100.

5. Write short notes (any **two**): 5+5=10

- i) Different Loops in C Programming language
- ii) Different data types in C Programming language and their importance
- iii) Linux Distros
- iv) Web databases