

Jadavpur University

MASTER OF LIBRARY & INFORMATION SCIENCE, 2022

(FIRST YEAR FIRST SEMESTER)

Subject: INFORMATION & COMMUNICATION TECHNOLOGY

Paper: ML-06

Full Marks : 50

Time : Two Hours

Answer all questions

Q. 1 Write C-programs for the following problems (any two) : 5x2=10

a) Print Grade according to the following logic. Marks should be taken during run time.

Grade ="A+" if marks >=90

Grade ="A" if marks >=80 but <90

Grade ="B+" if marks >=60 but <80

Grade ="B" if marks >=50 but <60

Grade ="C" if marks >=40 but <50

Grade ="FAIL" if marks <40

b) Print the following pattern through nested loop:

5 5 5 5 5

4 4 4 4

3 3 3

2 2

1

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

Clue: The prime members are divisible by 1 and the same number only

3, 5, 7, 11, 13 ...

d) Print a temperature conversion table from Centigrade (0 to 100) to Fahrenheit.
Hints: $C/5 = (F-32)/9$ where C = Centigrade and F = Fahrenheit

Q. 2 What do you mean by Operating System? Explain basic components of an operating system? 3+7

OR

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

Q. 3 a) What do you mean by Database Management System? Compare between Distributed databases and Bibliographic databases.? 2+8

OR

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

Q. 4 a) Explain Inline CSS, Internal CSS and external CSS with proper HTML codes. Write HTML code for a standard form for personal information with text and radio button.

5+5 =10

OR

Q. 4 b) Explain with example how javascript can be used with HTML code. Discuss objects in javascript and how they are created in different ways. 5+5=10

Q. 5 a) Discuss ER model in RDBMS. Discuss the differences between HTML and XML.

5+5 =10

OR

Q. 5 b) Discuss Linux distros. Discuss the role of CSS, Javascript and XML for a dynamic Website. 5+5=10