

Ref. No. Ex/ MLDL-04 /2022

Jadavpur University

MASTER OF LIBRARY & INFORMATION SCIENCE (DIGITAL LIBRARY)  
EXAMINATION, 2022

(FIRST YEAR FIRST SEMESTER)

INFORMATION TECHNOLOGY – I

Paper: MLDL-04

Full Marks : 50

Time : Two Hours

Answer all questions

Q. 1 A) Explain the structure of the HTML and XML webpage with an example of each. Compare HTML and XML. 4 + 4 + 2

OR

Q.1 B) How can XML be used? Explain about Cascading Style Sheets and Extensible Style Sheets language with an example of each. 2 + 4 + 4

Q.2 A) What is the need of XHTML in web Technologies? How to create a Hello Students page in XHTML? What are the differences between XHTML and HTML with an example? 2+ 4 + 4

.OR

Q.2 B) What are the benefits of a library having a website? Define Table and Frameset Tag. Divide the web page into four equal parts each individual part displays different web page in both tags. 2 + 2 + 6

Q. 3 A) Discuss different use of multi-user OS for library services. Name a few commands by which you can view the content of a text file. Name the default directories under root (/) in Linux. Discuss the usage of the following Linux commands with proper examples : (i) rm (ii) gzip 3+2+1+4

or

Q. 3 B) What do you mean by “Open-Source Software” and “Free Software”? Discuss how 'cat' command in Linux can be used for different purposes. Discuss “Redirection” in Linux with at least two examples. Discuss file permission in Linux in the context of a multi user environment.  
2+3+2+3

Q. 4 Write C-programs for the following problems (any two) 5x2=10

a) Calculate Income Tax according to the following logic. Income should be taken during run time.

Tax=0 for income  $\leq 200000$

Tax=10% of income for income  $> 200000$  but  $\leq 500000$

Tax=20% of income for income  $> 500000$  but  $\leq 1000000$

Tax=30% of income for income  $> 1000000$

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 odd or even. Take input during run time.

Clue: The even numbers are divisible by 2

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

e) Calculate the factorial of a given number. Take input during run time.

Ex. - Factorial of 5 =  $5*4*3*2*1$

Q. 5 Write short note (any two) 5x2=10

- A) Web architecture
- B) DOM in web technology
- C) DHTML
- D) Different types of loop in c programming
- E) Linux Distros
- F) Spooling and piping in Linux