MASTER OF LIBRARY AND INFORMATION SCIENCE (DIGITAL LIBRARY) EXAMINATION, 2024

(1st Year, 1st Semester)

Information Technology – I

Course: MLDL-04

Time: Two Hours Full Marks: 50

Answer all questions.

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

OR

- 1. B) Discuss the role of "Open-Source Software" in LIS related services. Discuss how cat command in Linux can be used for different purposes. Discuss the usage of the following Linux commands with example: (i) chmod (ii) man 3+3+4
- 2. Write C-programs for the following problems (*any two*): $5\times2=10$
 - a) Convert time given in seconds into hours, minutes and seconds. Take input during run time.

Clue: 1 hour = 60 minutes and 1 minute = 60 seconds

[Turn over

b) Calculate and print the sum of the odd numbers between 1 to 100

Clue: Odd numbers are whole numbers not exactly divisible by 2

c) 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 >= 60 but < 80

Grade = "C" if marks >= 40 but < 60

Grade = "FAIL" if marks < 40

d) Check whether a number is odd or even. Take input during run time.

Clue: The even numbers are divisible by 2.

3. A) In web technology environment, differentiate XHTML, XML and DHTML. Explain the need and purposes of these languages with suitable examples.

4+6

OR

B) Mention the web technologies used in content development in digital library with related examples. Draw a diagram of a home page of an academic library which shows the information you would consider keeping in the website with necessary code. 4+6

4. A) Write a XML and HTML code for a list of three books with imaginary author, title, publisher and price.

Display it through CSS and XSL code. 3+3+2+2

OR

- B) Differentiate html4 and html5? How is XML changing the Web? Discuss about XSLT in XML with examples.

 4+3+3
- 5. Write short notes on *any two* of the following: $5 \times 2 = 10$
 - i) Different data types used in C programming language
 - ii) Linux Distros
 - iii) Redirection in Linux
 - iv) HTML Table tag and Form tag with attributes
 - v) Text page, Webpage, Home page, Web site and Web portal