- 6. (a) Explain various HTML Form tags with examples. What is JavaScript ? How to insert JavaScript code in HTML code ? Give an example and point out the different elements. 5+1+4
- 7. What is Web? List the technologies that can help in creating dynamic web page with suitable examples. Can we replace HTML with XML? Give arguments. Why it is important to st the meta information in the web page?

## OR

- What are the features of XML ? Write a XML code for catalogue of three books with imaginary author, title and ISBN in the library and display it through CSS and XSL code. 2+3+5
- 9. Write short notes on any two : 5x2=10(a) XPath and XQuery

— X ——

- (a) APath and AQuery
- (b) XML Namespace and DOM
- (c) SHTML
- (d) Operating Sysem

### MASTER OF LIBRARYAND INFORMATION SCIENCE

#### **EXAMINATION, 2019**

(1st Semester)

Information and Communication Technology

Paper : ML - 06

Time : Two hours

Full Marks : 50

## Answer *all* questions.

- 1. (a) Write a programme in C language to print the following pattern :
  - 00000 0000 000 00 00 0 4
  - (b) What are the advantages of Database Management Systems over File Processing Systems. Discuss the 3-tier architecture of a database 3+3
    Or

# 2. (a) What is kernel and shell in UNIX based operating systems?

#### (Turn over)

- (b) List atleast 15 concepts related to the domain 'Food'. Construct an Entity Relationship model out of the concepts you have listed.
- (c) Discuss about any one bibliographical database of your choice.
- 3. (a) Share your experiences encountered while using different features, user interface, applications etc. on Windows and UNIX operating systems.
  - (b) Write necessary MySQL statements to do the following : 5

Create a table containing data about students of a particular department of a university. The table should have data about the first name of the students in addition to other data.

Insert data into at least 5 rows into the table.

Arrange the table in descending order of the column containing data about the first name of the students.

Update the first name from any one of the entries

Delete the table and the data.

(c) "C has been already superseded by languages like C++, C# and Java, so why bother to learn C today". Comment.

- 4. (a) Why does it become imperative to switch to/ login as the root user in UNIX? What is the required command to switch to the root user in UNIX? 1+1
  - (b) What is the difference between a full backup and an incremental backup? What is CERT-In? 3+2
  - (c) Discuss decision control structure which are used in C with one suitable example.
- 5. (a) The following is an example of use of ternary operators in C. 1+1

y = (x > 10?0:1)

i) What value will be stored in the variable y if the value of the variable x is 10?

ii) Make necessary changes so that 1 is stored in the variable y, for any value of x.

- (b) Explain the structure of a UNIX command. Distinguish between ed and cd.. command in UNIX? 2+2
- (c) Describe the steps in the process of evaluating web information resources. 4

