

**POST GRADUATE DIPLOMA IN LIBRARY
AUTOMATION AND NETWORKING
(PGDLAN)**

Term-End Examination

December, 2016

MLI-003 : INFORMATION SYSTEMS

Time : 2 hours

Maximum Marks : 50

(Weightage : 40%)

*Note : Answer all questions. All questions carry equal marks.
Illustrate your answers with suitable examples and
diagrams, wherever necessary. Write relevant question
number before writing the answer.*

1.1 Define a 'system'. What are the major components of a 'system' ? Describe role of each of these components. 2+8=10

OR

1.2 What is an 'information system' ? Discuss the use of General Systems Theory in designing an 'information system'. 2+8=10

2.1 Define Normalization. Why is it required ? Explain different 'forms of normalization' with example. 1½+1½+7

OR

2.2 Differentiate between 'data definition language' **4+6** and 'data manipulation language'. Explain with the help of an example, the following commands of RDBMS :

- (a) CREATE
- (b) INSERT
- (c) UPDATE

3.1 Explain the role of DBMS as decision support tool. **4+6** Illustrate the architecture of distributed database systems.

OR

3.2 Make a comparative study of 'data retrieval' and 'information retrieval'. Describe the 'user model' in information retrieval. **6+4**

4.1 What is 'Boolean Search' ? Explain the 'AND gate' and 'OR gate' with suitable examples. **2+8**

OR

4.2 Define a Data structure. Make a comparison **2+8** between 'Linked Lists' and 'Inverted Lists'.

5.0 Write short notes on **any two** of the following **5+5** (in about **250** words each) :

- (a) Expert system
- (b) Flow charting and its symbols
- (c) Data mining
- (d) Object-oriented data model.