

POST GRADUATE DIPLOMA IN LIBRARY AUTOMATION AND NETWORKING (PGDLAN)

Term-End Examination December, 2013

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 answering.

1.1 Define the term 'System'. Explain the process of system analysis and role of a systems analyst.

OR

- 1.2 What do you understand by system development cycle? Explain the stages involved in system development.
- 2.1 What is an expert system? Discuss its main components and methods of knowledge representation.

OR

2.2 What is the need for MIS? Explain the process of implementation, evaluation and maintenance of an MIS.

3.1 Discuss different data models. What are the criteria for a DBMS to be relational?

OR

- **3.2** What do you understand by normalization of relations? Discuss its significance in database design. Explain third normal form.
- **4.1** What is a transaction? Explain the serial or concurrent executions of transactions and their role in database maintenance

OR

- **4.2** Explain the architecture of a distributed database system. What are the justifications and options for distributing data?
- 5.0 Write short notes on **any two** of the following (in about **250** words each):
 - (a) Boolean operators
 - (b) Flow charts
 - (c) Indexes
 - (d) Digital libraries and their uses