

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

**Term-End Examination**

**December, 2014**

**MLI-003 : INFORMATION SYSTEMS**

*Time : 2 hours*

*Maximum Marks : 50*

*(Weightage : 40%)*

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*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.*

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1.1 What are the procedural components of systems analysis ? Draw a flowchart illustrating its use as a tool in the process of systems analysis.

**OR**

1.2 What do you understand by system development cycle ? Discuss different stages involved in system development.

2.1 Why there is a need for MIS ? Discuss the tasks related to implementation, evaluation and maintenance of an MIS.

**OR**

2.2 What is an expert system ? Explain the structure of an expert system with illustration.

**3.1** Describe the architecture of a Database Management System (DBMS) with illustration. Explain the purpose of views in the database architecture.

**OR**

**3.2** What are the criteria for a DBMS to be relational ? Discuss different types of keys and their functions.

**4.1** Discuss the general strategies for query optimization. Explain the role of Join operator in query formulation.

**OR**

**4.2** What are Boolean operators ? Explain their use with suitable examples.

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

- (a) Structured Query Language (SQL)
  - (b) Data models
  - (c) Artificial intelligence
  - (d) Distributed database systems
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