Roll No. .....

Subject Code—6747-X

M.C.A. (Three Years) EXAMINATION

(First Semester)

(PGDCA/MCA)

(Re-appear Batch of 2009)

(Common with PGDCA–II)

MS-04

SYSTEM ANALYSIS AND DESIGN

Time : 3 *Hours* *Maximum Marks* : 70

Note : Attempt any *Five* questions. All questions carry equal marks.

1. (a) Define System. What are the elements of a system ? Discuss the primary characteristics of system. Also explain different types of systems in detail.

   (b) What is System Analysis ? Explain by using an example of your choice.

2. (a) What is the system development life-cycle ? Distinguish between preliminary investigation and feasibility study.

(b) Explain all the major sources of project requests.

3. (a) What considerations are involved in feasibility analysis ? Which one is the most crucial and why ? Explain the steps involved in feasibility analysis.

(b) Explain Fact-Finding techniques in detail.

4. (a) What do you mean by Cost/Benefit Analysis ? How do net present value and present value analysis differ ? Illustrate.

(b) What are Data Flow Diagrams ? What are the different types of DFDs used in system development process ? Explain the rules for drawing good DFDs.

5. (a) What do you mean by system design ? Distinguish between logical and physical design. What design methodologies are used in system design ? Explain.

(b) What is an Interface ? What are the basic objectives of interface design ?

6. (a) Why do we test systems ? How important is testing ? What design specifications are considered in preparing a test plan ? Explain.

(b) List and explain the factors that affect the quality of a system. What levels of quality assurance must a system meet ? Explain.

7. (a) What is Implementation ? How does it differ from conversion ? Explain the major activities in conversion. Which one is the most important ? Why ?

(b) Briefly explain the procedure of post-implementation review. Also summarize the key training aids for training users on a new system with example.

8. Write short notes on the following :

(a) System Reliability and System Maintenance

(b) Roles of System Analyst

(c) Requirements of Forms Design

(d) Decision Trees.