

PGDCA / MCA (I Yr)
Term-End Examination
December, 2007

**CS-05 : ELEMENTS OF SYSTEM
ANALYSIS & DESIGN**

Time : 3 hours

Maximum Marks : 75

Note : Question no. 1 is **compulsory**. Answer any **three** questions from the rest.

1. (a) Differentiate between direct and indirect costs.
How is it used in feasibility analysis ?
- (b) Differentiate between sequential and direct file organisation.
- (c) List and explain any four quality factors which are critical in Quality Assurance during software life cycle.

- (d) Write any four differences between third generation languages and fourth generation languages.
- (e) Write main factors which lead to a very good design of human – computer interface, with the help of an example. 5×6=30
- 2.** (a) Explain hierarchy view of computer base information systems with suitable diagrams. 7
- (b) Explain the following categories of information systems : 8
- (i) Transaction Processing System
- (ii) Decision Support System
- 3.** (a) Draw a data flow diagram (DFD) depicting various processes, data flow and data repositories for a Institute Management System of a computer institute. 8
- (b) Explain different types of files along with their utilities. 7
- 4.** (a) List the conditions where the prototypes are considered to be most useful. Also mention the steps in the prototyping process. 8
- (b) List and explain the input design guidelines. 7

5. Differentiate between :

5×3=15

- (i) Strategic data and Tactical data
- (ii) Ergonomics and Environment science
- (iii) Animation and Morphing
- (iv) Validation and Verification
- (v) Flow chart and Warnier diagrams

