MCA (Revised)

Term-End Examination

June, 2008

MCS-014 : SYSTEMS ANALYSIS AND DESIGN

Time : 3 hours *Maximum Marks : 100*

(Weightage 75%)

Note : *Question number 1 is* ***compulsory****. Answer any* ***three*** *questions from the rest.*

1. (a) Design a SRS Document for a hospital management system. Also draw a DFD (context-level), (1-level) and (2-level) for the above said system. *10*

(b) What do you mean by Risk Management ? Categorize Risks and how we can assess these risks. *10*

(c) What are the attributes of a good system analyst ? Also explain the need of documentation in a system design. *10*

(d) Explain the testing phase of SDLC in detail. *10*

2. (a) Explain Joint Application Development (JAD) and prototyping as an approach for Information System development. *10*

(b) Give five tasks performed by a project team leader in software development. *5*

(c) Explain categories of feasibility analysis. 5

3. (a) Give a diagram each of a Gantt chart and Structured chart. Explain their functionality also. 5

(b) Explain the techniques for gathering of requirements for system analysis. Give their examples also. 10

(c) Differentiate between a bottom-up and a top-down design (with diagrams). 5

4. (a) Categorize cohesion and coupling. Also discuss the relative performance and advantages of each type of cohesion and coupling. 8

(b) Explain logical and physical design with appropriate diagrams. 8

(c) Categorize system maintenance. Explain the types in brief. 4

5. (a) What are the factors which concern a form and report design ? What are the types of information which have to be delivered by a form or a report ? 5

(b) Construct ERD for a School Management System. Explain it. 5

(c) Explain the following : $4 \times 2\frac{1}{2} = 10$

(i) Decision trees

(ii) CASE tools

(iii) MIS

(iv) Expert systems