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