MCS-014

MCA (Revised)

Term-End Examination

December, 2010

10227

MCS-014 : SYSTEM ANALYSIS AND DESIGN

Time : 3 hours   *Maximum Marks : 100*

(Weightage: 75%)

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

1.   (a)   Construct an Entity Relationship Diagram   10
            for employee management system. Also
            construct a relational database schema for
            it.

      (b)   With the help of diagrams, explain the steps   10
            in physical and logical design.

      (c)   What are the CASE tools ? Explain object   10
            oriented CASE tools in detail. *Also explain*
            differentiate between Reverse and forward
            engineering.

      (d)   Describe the various levels and components   10
            of MIS. Explain the role of a system analyst
            in system development.

2. (a) Develop a SRS for inventory management system. Give any three characteristics of SRS. **8**

   (b) Why is feasibility study considered an important task in system development ? Classify feasibility and elaborate the key features of each. **8**

   (c) Classify Information systems and describe the characterizing features, in brief. **4**

3. (a) Explain in brief, the following SDLC models (with suitable diagrams) : **4x2=8**

   (i) Waterfall Model. (with feedback)

   (ii) Spiral Model.

   Explain the key features of the above models.

   (b) What are the various types of documentation. Give an example of each type. **6**

   (c) Differentiate between a decision tree and a decision table. Give an example and explain the decision table. **6**

4. (a) Give steps in Report design. Classify   6
Reports.

(b) Write short notes on the following :   4x2=8
(i) JAD
(ii) data dictionary

(c) Why is audit important for system   6
development. Explain the types of audit.

5. (a) What is cost Benefit analysis. Explain any   8
one model with a suitable example.

(b) What are the various types of file   4
organisation ? Describe in brief.

(c) Differentiate between various types of   8
coupling and cohesion. Which of these
types (in each) is the best and worst and
why ?

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