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MCS-014

MCA (Revised) / BCA (Revised)

Term-End Examination

June, 2019

08952

MCS-014 : SYSTEMS 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) Describe the significance of a Data Flow Diagram (DFD). Draw DFD's upto 2nd level for a *Study Centre Management System* depicting various processes, data flow and data repositories. Follow all the conventions properly. *10*

(b) Describe Open systems and Closed systems. Give two examples for each. *10*

(c) What is the role of fact finding techniques in systems development ? Mentioning their advantages and disadvantages, explain the following fact finding techniques : *10*

(i) Interviews

(ii) Group Discussions

(d) List and explain any two object oriented CASE tools along with a suitable example. *10*

2. (a) Describe the following types of maintenance activities : $4 \times 2\frac{1}{2} = 10$

(i) Corrective maintenance

(ii) Adaptive maintenance

(iii) Perfective maintenance

(iv) Preventive maintenance

(b) Define the term Audit. List its objectives. Also, discuss the responsibility of system auditor. *10*

3. (a) Define an expert system. How are they different from traditional information systems ? Explain various components of an expert system. Mention two examples of expert systems. *10*

(b) Describe the criteria for form design and report designs. *10*

4. (a) With reference to RDBMS, explain the use of the following files in a system : *5×2=10*

   (i) Master file

   (ii) Transaction file

   (iii) Archive file

   (iv) Audit file

   (v) Work file

   (b) How does a system analyst contribute to the success of a system ? *10*

5. Write short notes on the following : *4×5=20*

   (a) Prototype Approach

   (b) Joint Application Development (JAD)

   (c) SRS

   (d) Decision Support Systems