

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 : $5 \times 2 = 10$
- (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 : $4 \times 5 = 20$
- (a) Prototype Approach
 - (b) Joint Application Development (JAD)
 - (c) SRS
 - (d) Decision Support Systems
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