

MCA (Revised) / BCA (Revised)

Term-End Examination

February, 2021

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) Draw a Data Flow Diagram (DFD) till level-3 depicting various processes, data flow and data repositories for booking a room in Hotel Management System. Make necessary assumptions. 10
- (b) Draw an E-R Diagram for Hotel Management System. Make necessary assumptions. 10
- (c) Write SRS outline for Hotel Management System. Make necessary assumptions. 10
- (d) Explain the difference between “Analysis” and “Design” phases of Software Development. 10

2. (a) What is Data Dictionary ? What are its uses ? Explain with example. 8
- (b) What is a Decision Table ? Design a Decision Table for a system of your choice. Explain it. 8
- (c) Describe any one method of performing Cost Benefit Analysis. 4
3. (a) Differentiate between Function-Oriented and Object-Oriented Design. Also explain the problems if two modules have high coupling. 8
- (b) Explain the characteristics of MIS. Also list the components of MIS. 6
- (c) Explain the criteria and specifications to be considered while designing Reports. 6
4. (a) Explain the process of design of physical records. 10
- (b) Why is documentation needed during the development of a system ? What are the various stages in SDLC where documentation is required ? 10

5. Write short notes on the following :

4×5=20

- (a) Real Time and Distributed Systems
 - (b) Software Quality Assurance
 - (c) Types of File Organization
 - (d) Audit of Transaction
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