

MCA (Revised) / BCA (Revised)

Term-End Examination

December, 2015

MCS-014 : SYSTEMS ANALYSIS AND DESIGN

Time : 3 hours

Maximum Marks : 100

(Weightage : 75%)

Note : *Question number 1 is compulsory. Attempt any three questions from the rest.*

1. (a) Draw a 0-level and 1-level DFD of a library information system. Make necessary assumptions. 10
- (b) Explain the term 'Feasibility study'. Explain the categories of feasibility with suitable examples. 6
- (c) Explain waterfall model with the help of a diagram. How is it different from spiral model ? Explain the merits and demerits of both the models. 10
- (d) Differentiate between various types of file organisations. 4
- (e) Explain the term MIS. Explain the components of a transaction processing system with suitable diagram. 10

2. (a) Construct an Entity Relationship diagram for an airlines reservation system. 8
- (b) What is meant by the term CASE ? Describe the various components and tools of CASE. 8
- (c) Explain the terms 'User manual' and 'System documentation'. 4
3. (a) What is the relevance of an Information Security Architecture in MIS ? Draw its diagram. 8
- (b) Differentiate between System Analysis and System Design. What are the issues and constraints to be taken care of while designing a software product ? 8
- (c) Differentiate between Reverse engineering and Forward engineering. What is meant by a legacy system ? 4
4. (a) Prepare SRS for a "University admission system". Make necessary assumptions. 8
- (b) Differentiate between coupling and cohesion. Explain the various types of coupling. 8
- (c) What is meant by "User Interface" ? What are the basic guidelines to design a user interface ? 4

5. (a) What are the essential criteria for form design and report design ? Explain. 8
- (b) Explain software maintenance and differentiate between various types of software maintenance. 8
- (c) Give any one method of cost benefit analysis and explain it. 4
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