

**BACHELOR OF COMPUTER APPLICATIONS
(BCA) (Pre-Revised)**

Term-End Examination

February, 2021

**CS-05 : ELEMENTS OF SYSTEM ANALYSIS
AND DESIGN**

Time : 3 hours

Maximum Marks : 75

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

1. (a) Consider a Study Centre Management System. Draw DFD's till Level-2 depicting various processes, data flows and data repositories. 10
- (b) What is HCI ? Why, when and where is it used ? 6
- (c) What is a Data Dictionary ? Describe its structure and uses. 4
- (d) Explain the following : 10
 - (i) Cost Benefit Analysis
 - (ii) Feasibility Study
2. (a) What is Software Crisis ? Describe the problems related to software crisis from the perspective of a programmer and user. 8

- (b) What is a Programming Language ? Describe the salient features of the various generations of programming languages, specifying one example language for each generation. 7
3. (a) What are the different methods of fact finding ? Discuss Interviewing as a method for fact finding with the help of an example. 10
- (b) Differentiate between the following : 5
- (i) Flat files and Database
- (ii) System Testing and Unit Testing
4. (a) What is a Test Design Document ? Explain the contents of this document. 8
- (b) What is “Benchmark Testing” ? Explain briefly with the help of an example. 7
5. (a) What is Decision Table ? Describe its structure. Explain application of decision table with the help of an example. 5
- (b) Write short notes on the following : 10
- (i) Transaction Processing System
- (ii) GUI Design
- (iii) VTOC
- (iv) Software Piracy
- (v) Software Maintenance
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