

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

Term-End Examination

00440

December, 2017

**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) Considering a Food Ordering System, draw a Data Flow Diagram (DFD) depicting various processes, data flows and data repositories after making necessary assumptions. 8
- (b) What is Ergonomics ? Justify the need of ergonomics in system design. 5
- (c) Explain why the aspect of HCI is very important in system design. Explain the various factors that must be considered for providing good and efficient Human Computer Interface (HCI). 5
- (d) What is Feasibility Study ? Explain various types of feasibility studies. 12

2. (a) What are Flow charts ? Explain the various elements of a flow chart. 8
- (b) Discuss questionnaire as a method of fact finding. Comment on its usefulness by giving suitable examples. 7
3. (a) What is SDLC ? Explain briefly all the phases of SDLC with any specific example. 7
- (b) What is the full form of VTOC ? Explain its significance. Draw a VTOC for any system (task) of your choice. 8
4. (a) What is Prototyping ? Explain all the phases of prototyping with an example. 10
- (b) What is a Form ? Explain four factors to be considered in form design. 5
5. (a) "Conversion is the process of changing from the old system to the newly developed one." Explain any two methods of conversion. 5
- (b) Explain the following with an example for each : 10
- (i) Gantt Chart
- (ii) PERT Chart
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