Tribhuvan University

Institute of Science and Technology

2079

Bachelor Level / Third Year /Fifth Semester/Science Full Marks: 60 Computer Science and Information Technology (CSC315) Pass Marks: 24 (System Analysis and Design) Time: 3 hours. **NEW COURSE** Candidates are required to give their answers in their own words as for as practicable. The figures in the margin indicate full marks. Section A Attempt any TWO questions. 1. $(2\times10=20)$ 1). Differentiate between black box and white box testing. Explain different stages of testing. Why do we use DFD? Draw context diagram and data flow diagrams of a retail clothing store in a mall that sells different cloths to its customers. (2 + 8)3. Compare structured development with object-oriented development. Explain use case diagram and class diagram with suitable exam ple. (3+3+4)Section B Attempt any EIGHT questions. $(8 \times 5 = 40)$ Explain common skills of a project manager. Which skill do you think is most important? (4 + 1) Describe the project identification and selection process. (5)List and describe the steps in the project initiation and planning process. (5)Explain Joint Application Design in brief. How is it better than traditional information gathering techniques? (3+2)What is conceptual data modeling? Explain conceptual data modeling process. (1.5+3.5)Why do we need normalization? Explain 2NF and 3NF with example. (2+3)Compare form with report. Explain the process of designing forms and reports. (1.5+3.5)

. Define system maintenance. Explain the process of maintaining information systems in brief.

(1+4)

 $(2 \times 2.5 = 5)$

Write short notes on: a. CASE Tool

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b. Baseline Project Plan