Tribhuvan University
Institute of Science and Technology
2080
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Bachelor Level / Third Year /Fifth Semester/Science
Computer Science and Information Technology (CSC315)
(System Analysis and Design)
NEW COURSE

Full Marks: 60
Pass Marks: 24
Time: 3 hours.

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.   (2×10=20)

1. Which activities are at the heart of systems development process? List and explain some of the problems with the traditional waterfall SDLC. Explain Agile development in brief.   (2+3+5)

2. What do you mean by balancing DFDs? Draw context diagram and data flow diagrams for online movie rental system that allows its users to watch movies online.   (2+8)

3. Explain physical database design. Why is physical database design important? Differentiate logical database design with physical database design.   (6+2+2)

Section B

Attempt any EIGHT questions.   (8×5=40)

4. Describe different activities performed by the project manager during project planning. (5)

5. Describe the steps involved in corporate strategic planning.   (5)

6. Define feasibility study. Explain economic and schedule feasibility in brief.   (1+4)

7. List traditional methods for determining system requirements. Explain the advantages and pitfalls of observing workers to determine system requirements.   (1.5+3.5)

8. Draw ER diagram to store data about students, programs, and courses at your college.   (5)

9. Describe several methods for interacting with the system.   (5)

10. What are the major activities of system maintenance? Explain.   (5)

11. Explain class diagram with suitable example.   (5)

12. Write short notes on: (2×2.5=5)
    a. Network diagram
    b. Structural and Behavioral Diagrams