

Tribhuvan University
Institute of Science and Technology
2076



Bachelor Level / Third Year /Six Semester/Science
Computer Science and Information Technology (CSc. 351)
(Software Engineering)

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

Candidates are required to give their answers in their own words as far as practicable.
The questions are of equal value.

Attempt any Ten questions.

(10x6=60)

1. Explain system modeling with suitable example.
2. What is software process model? Discuss waterfall model with its merits and demerits.
3. Discuss different types of risks which are likely to arise in software projects. Briefly explain risk analysis stage during risk management process.
4. Briefly explain functional, non-functional, and domain requirements.
5. What are rapid prototyping techniques? Briefly explain different rapid prototyping techniques.
6. What is formal specification? Discuss interface specification in detail.
7. What are the activities of architectural design process? Discuss abstract machine model.
8. What is modular decomposition? Discuss object oriented model of decomposition.
9. Discuss the importance of use case diagram in object -oriented development. Draw a use case diagram for library system.
10. What is cleanroom software development? Discuss the characteristics of cleanroom software development.
11. Discuss path testing with suitable example.
12. Write short notes on:
 - a) Reliability validation
 - b) Reverse engineering