## Tribhuvan University Institute of Science and Technology 2075

ΧX

Bachelor Level/Third Year/Six Semester/Science Full Marks: 60

Computer Science and Information Technology (CSc. 351) Pass Marks: 24

(Software Engineering) 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.

 $(10 \times 6 = 60)$ 

- 1. Suppose you are a Software Engineer of "ABC Software Company". You are developing large numbers of software. Have you faced any problems? Give your idea.
- 2. What is waterfall model? Describe the activities of waterfall model and also mention its drawbacks.
- 3. What is project planning? Explain the types of project plan.
- 4. Differentiate between functional and non-functional requirements of software engineering requirements.
- 5. Explain why, for large systems development, it is recommended that prototypes should be throw-away prototypes.
- 6. Explain formal specification in software development process.
- 7. What is repository model? Explain its advantages and disadvantages.
- 8. Draw class diagram of Library Management System [Use your own assumptions].
- 9. Explain validation and verification planning.
- 10. Compare between top down and bottom up testing.
- 11. What is reverse engineering? Describe reverse engineering process.
- 12. Write short notes on (any two):
  - a) Security assessment
  - b) Export judgment
  - c) System and their environment