Tribhuwan University Institute of Science and Technology 2074

Bachelor Level / sixth-semester / Science Full marks: 60 **Computer Science and Information Technology(CSC364)** Pass marks: 24 (Software Engineering) Time: 3 hours Candidates are required to give their answers in their own words as far as practicable. The figures in the margin indicate full marks.

Attempt any Ten questions.(10 x 6 = 60)

- 1. Differentiate between software engineering and system engineering.
- 2. Describe a spiral model with its advantages and disadvantages.
- 3. What is risk management? Explain risk management process.
- 4. What is a software requirement? Explain software requirement process.
- 5. What is rapid prototyping technique? Mention the types of rapid prototyping techniques and explain
- it. 6. Why is formal specification important for software development? Explain.
- 7. What is the client server model? Explain the advantages and disadvantages of the client server model.
- 8. Draw a use case diagram of the credit card validation system.[Use your own assumptions].
- 9. Describe the clean room software development process.
- 10. Compare and contrast between white box and black box testing.
- 11. What is source code translation? Explain the program translation process with a diagram.