

Tribhuvan University  
Institute of Science and Technology  
2081



Bachelor Level / Third Year /Six Semester/Science  
**Computer Science and Information Technology (CSC 364)**  
(Software Engineering)  
**(NEW COURSE)**

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 figures in the margin indicate full marks.

**Group A**

Attempt any TWO questions.

(2×10=20)

1. Explain the importance of software pricing. Highlight COCOMO cost modeling technique. List its disadvantages. (2+6+2)
2. Draw use case diagram, class diagram and sequence diagram for online book recommendation system. Make your own assumptions. (3+3+4)
3. What do you understand by software process model? Explain different software process activities. (3+7)

**Group B**

Attempt any EIGHT questions.

(8×5=40)

4. How risk management is carried out during software development? Explain. (5)
5. "Software maintenance is one of the most important activity". Justify the statement with an example. (5)
6. Differentiate between verification and validation. Explain software inspection process. (2+3)
7. What do you understand by design patterns? What role does it have in object oriented design? (3+2)
8. Explain any one application of architecture. (5)
9. Differentiate between structural model and behavioral model. What is the importance of behavioral model? (3+2)
10. Briefly explain on the requirements of engineering process. (5)
11. What are the principles of agile development? Explain agile development techniques. (2+3)
12. Write short notes (2×2.5=5)
  - a) System engineering
  - b) Release testing.