

**Tribhuvan University
Institute of Science and Technology**

2068 (II)

Bachelor Level/ First Year/ First Semester/ Science

Computer Science and Information Technology (CSc. 351)

(Software Engineering)

Full Marks: 60

Pass Marks: 24

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

(10x6=60)

1. Explain the software engineering and its role in Nation Development.
2. Explain the waterfall model with its merits and demerits.
3. What are the important activities that are carried out during the feasibility study phase? Explain.
4. What are the different categories of software development projects according to the COCOMO estimation model? Explain.
5. What are the five desirable characteristics of a good software requirements specification (SRS) document?
6. What are the main advantages of using an object-oriented design approach over a function-oriented approach? Explain.
7. Differentiate between black box testing and white box testing.
8. What do you mean by functional and non-functional requirements? Explain.
9. Explain the rapid prototyping techniques.
10. Differentiate between interface specification and behavioral specification.
11. Explain class diagram with example.
12. Write short notes on(any two):
 - Software inspection
 - Software validation
 - Reverse Engineering