Tribhuvan University
Faculty of Humanities & Social Sciences
OFFICE OF THE DEAN
2025

Bachelor in Computer Applications
Course Title: Software Engineering
Code No: CACS 253
Semester: IV

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

Candidates are required to answer the questions in their own words as far as possible.
Group B

Attempt any SIX questions. [6×5 = 30]

2. What are the key challenges that the software engineering is facing? What are the attributes of good software? [2+3]

3. What is Model View Controller, Explain? [5]

4. What is the role of Human-Computer Interaction (HCI) in User Interface Design?

5. What do you mean by software re-engineering? Briefly explain the re-engineering process with the aid of a suitable block diagram. [5]

6. Differentiate between cohesion and coupling. With proper example. [5]

7. What are the skills necessary to handle software project? Explain different software – projects management skills? [1+4]

8. Explain Software Project Management Plan(SPMP). [5]

Group C

Attempt any TWO questions. [2×10 = 20]

9. Explain spiral model of software development? In what kind of project we recommend to use this model of software development.

10. Discuss the steps involved in Software Requirement Elicitation and Analysis. Explain how interviews, use cases, and scenarios are used in this process.

11. a) Explain the basic concept of the COCOMO model and its significance in software project estimation. [5]

    b) Explain the difference between Black-box and White-box testing techniques. [5]