



**Pokhara University**  
**Everest Engineering College**

**Final Internal Assessment**  
**Fall- 2024**

**Level: Bachelor**

**Program: BE CMP**

**Faculty: Science & Technology**

**Section: A/B**

**Subject: Software Engineering (5<sup>th</sup> Semester)**

**F.M. 100**

**P.M. 45**

**Time: 3hrs**

*Attempt all the questions.*

- 1 a) What is Software Engineering? What are Four P of Software Project Management. 7
- b) What is Agile Project Management. Why Prototype Model is better than Waterfall Model? 8

- 2 a) For a project with the size of 300 KLOC. Calculate the Effort, Scheduled time for development. Also Calculate the average resource size and productivity of the software for Organic Project Type. 8

Project Type	a	b	c	d
Organic	2.4	1.05	2.5	0.38
Semi Detached	3	1.12	2.5	0.35
Embedded	3.6	12	2.5	0.32

- b) Draw a Use Case Diagram of ATM Machine mentioning actors and all the relationship 7
- 3 a) What are the types of requirements? Explain the requirement elicitation techniques. 8
- b) What is Architectural Design? Explain about Interface, Component and Database Design. 7
- 4 a) What are the difference between Verification and Validation? What is Alpha Testing and Beta Testing? 7
- b) What is SQA? Mention Software Quality Assurance Activities. 8

- 5 a) What is Software Configuration Management? What are the different Software Configuration Items? *SDR DUP* 7  
b) Explain the role of Cloud and AI in Software Engineering. 8
- 6 a) What are test cases? Write about Boundary Value Analysis with an example and necessary steps. 7  
b) Draw a Sequence Diagram of Food Ordering System 8
- 7 Write short notes on: (Any two) (2\*5=10)  
a) Feasibility Study ✓  
b) Object Oriented Analysis and Design ✓  
c) Software Reengineering

***\*\*Best Wishes\*\****