



NEPAL COLLEGE OF INFORMATION TECHNOLOGY

Level: Masters

Faculty: Computer Engineering, Computer Science

Subject: Object-oriented Software Engineering, Spring 2016

Time: 3 hours

Full marks: 75

Pass marks: 45

Candidates are required to give their answers in their own words as far as practicable.

ANSWER FOLLOWING QUESTIONS

1. How different views help analyze different aspects of business workflows? Explain system's view and its role in simplifying a system model. Why multiple-models are required to study features of a complex system? **5+5+5**
2. Differentiate between prototyping model and evolutionary model of software development process. For projects with large set of software modules, which development process would you recommend and why? **5+5**
3. How things and relationships are modeled using UML? Explain with examples of all the things and relationships. **10**
4. Why non-functional requirements are crucial for requirement analysis? How non-functional requirements are modeled and documented? Develop a set of non-functional requirements of your project. **5+5+5**
5. Differentiate between activity diagram and sequence diagram with suitable example of both. **10**
6. Develop a scenario of workflow of your project. Identify the use cases and initial analysis objects. Draw use case diagrams by identifying actors and their relationship with use cases. **5+5+5**