

POKHARA UNIVERSITY

Level: Bachelor

Semester : Fall

Year : 2018

Programme: BE

Full Marks: 100

Course: Object Oriented Software Engineering

Time : 3hrs.

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

The figures in the margin indicate full marks.

Attempt all the questions.

1. a) What do you mean by agile development? Differentiate between Scrum and lean software development. 8
b) Explain the project management concepts? How do you estimate a software project? 7
2. a) What are the software risks? Explain briefly the different types of software risks. 7
b) A restaurant uses an information system that takes customer orders, sends the order to the kitchen monitors the goods sold and inventory and generates reports for management. List functional and non-functional requirements for this Restaurant Information System. 8
3. a) What do you mean by scenario based modelling and behavioural modelling? Explain with example for each modelling. 8
b) Obtain the Use case diagram for library management system. 3
4. a) How would you assure the quality of a software? Explain the software review and FTR. 7
b) Draw the different levels of DFD for safe home system where any person can enter to the home on matching his/her password at the entrance door. 8
5. a) What do you mean by verification and validation? Discuss the basis path testing and cyclomatic and complexity of white box testing with an example. 8
b) Why SCM is important during software development. Discuss the change control and version control in brief. 7
6. a) What do you mean by software reliability? Explain the statistical SQA and six sigma regarding in brief. 8
b) Explain the capability maturity model in detail. 7
7. Write short notes : (Any Two) 2x5
 - a) ISO standards
 - b) Cleanroom engineering
 - c) COCOMO model
 - d) Data Design