

## POKHARA UNIVERSITY

Level: Bachelor

Semester – Spring

Year: 2020

Program: BE

Full Marks: 70

Course: Object Oriented Software Development

Pass Marks: 31.5

Time: 2 hrs.

*Candidates are required to answer in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

**Attempt all the questions.**

### Section - A: (5×10=50)

- Q. N. 1 "UML is a graphical language for visualizing, specifying, constructing and documenting the artifacts of a software intensive system." Explain this statement along with building blocks of UML and one good example. 10
- Q. N. 2 Change management is very important in Iterative and Incremental Development. How will you implement in your software engineering projects? 10

**OR**

You as a software developer are going to use unified process in software development. Explain different workflows of unified process with example.

- Q. N. 3 In object oriented software development, which design pattern is used to provide object creation mechanism? Explain it and its types with their applicability. 10
- Q. N. 4 Assume that you are building a web application and MVC (Model View Controller) architecture pattern is your choice. Now, explain MVC architecture along with listing different components of your application. 10
- Q. N. 5 Why do we need design pattern in software development? Explain the documentation of design patterns. 5+5

### Section - B: (1×20=20)

- Q. N. 6 Assume that you are team leader and main architect in a software development team. Your team is going to develop an **ONLINE FLOOD DAMAGES AND LOSSES RECORDING SYSTEM**. You are free to assume any 2-3 entities like casualties, missing, injuries, houses, crops, etc. and every necessary things needed for recording. Answer the following questions. 10+10
- i) What type of software architecture and procedure you will recommend?
- ii) Develop Analysis Model and Use Case Model.