

POKHARA UNIVERSITY

Level: Bachelor

Semester: Spring

Year : 2021

Programme: BE

Full Marks: 100

Course: Object Oriented Software Development

Pass Marks: 45

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) Explain about Object Oriented Analysis and Design with suitable examples. 7
b) "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. 8
2. a) When is it ideal to use Iterative and Incremental model for software development? Explain the various phases in it. 8
b) Explain 4 P's of software development. 7
3. a) What is Unified Process? Explain core workflows of unified process. 7
b) What is Design Pattern? Write about importance of Design Patterns. 8
4. a) In object oriented software development, which design pattern is used to provide object creation mechanism? Explain it and its types with their applicability. 8
b) Explain about concurrency pattern. 7
5. a) Explain about the documentation and criticism of Design Pattern. 8
b) What is Software Architecture? Describe an architecture using UML. 7
6. a) What do you mean by architectural pattern? Explain about Model View Controller (MVC) architectural pattern. 8
b) Explain Multi-Layer Architecture Pattern with design principles. 7
7. Write short notes on: (Any two) 2×5
 - a) Behavioral Design Pattern
 - b) Worker, Activity, Artifact and Workflow
 - c) Life Cycle of Unified Software Development Process