

## POKHARA UNIVERSITY

Level: Bachelor

Semester: Fall

Year : 2022

Programme: BE

Full Marks: 100

Course: Enterprise Application 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) What characteristics determine an enterprise application? Explain Zachman Framework based on matrix. 2+6  
b) Define Web service. Explain WSDL and UDDI. 7
2. a) Why source code management is important? How does source code management work? 4+4  
b) What are significant of software testing? Explain any 5 types of software testing concisely. 7
3. a) Define Design pattern. Explain lazy initialization with suitable example with java source code. 8  
b) What is motivational factor of convention over configuration? Explain Factory pattern. 3+4
4. a) Explain Layered architecture web application with figure. 8  
b) How MVC solves a design problem? Explain MVC pattern with suitable real time case. 7
5. a) Write introduction of Service oriented architecture. What is significance of SOA? 2+6  
b) Write your opinion for securing enterprise web application. 7
6. a) What factors motivate to follow Agile than other SDLC Methodology? Explain Sprint Methodology. 2+6  
b) Explain Behaviour Driven Development with significance. 7
7. Write short notes on: (**Any two**) 2×5
  - a) Inversion of Control
  - b) Singleton pattern
  - c) Enterprise Java Bean