

4. a) Draw the use case diagram for Bank's ATM System. 7
- b) What is MVC Pattern? Demonstrate MVC architecture with the help of Servlet, JSP, POJO classes and JDBC. 8
5. a) What is Presentation Layer and what are its components? What approach you follow to develop Presentation layer architecture? Also discuss about its design considerations. 8
- b) What is Rest? Explain in detail. 7
6. a) What is cross-site scripting? Explain how prepared statement prevent SQL injection? 7
- b) What is the difference and similarity between Agile and Scrum? Is there any drawback of the Agile model? If yes, explain. 8
7. Write short notes on: (**Any two**) 2×5
 - a) Levels of TDD(Test driven Development)
 - b) Resource Oriented Architecture
 - c) Convention vs Configuration

POKHARA UNIVERSITY

Level: Bachelor	Semester: Fall	Year : 2021
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) Convert following XML code to JSON code. 7


```
<?xml version="1.0"?>
<ROWSET>
<ROW>
<id>1</id>
<name>Johnson, Smith, and Jones Co.</name>
<amount>345.33</amount>
<Remark>Pays on time</Remark>
</ROW>
<ROW>
<id>2</id>
<name>Sam &quot;Mad Dog&quot; Smith</name>
<Remark></Remark>
</ROW>
</ROWSET>
```
- b) What is web services architecture? Explain with its components. 8
2. a) What is and what is not Source code Management(SCM)? Explain Concurrent Version System(CVS) in detail. 8
- b) What is continuous integration? Explain any one continuous integration tools. 7
3. a) Explain Spring IOC container. What is the difference between design patterns and frameworks? 7
- b) What is lazy initialization? Design and implement a database connection class as singleton. 8