

# POKHARA UNIVERSITY

Level: Bachelor Semester: Spring Year : 2018  
 Programme: BE Full Marks: 100  
 Course: Enterprises 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. 8  

```
<?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 Java Bean? What are the technologies provided by the Java Enterprise edition? Explain. 7
2. a) Explain various types of VCS? Explain any one testing frameworks for java. 7
- b) Differentiate between verification and validation. What are the advantages and disadvantages of Black Box, White Box and Grey Box Testing methods? 8
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 8

- connection class as singleton 1
4. a) What is MVC Pattern? Demonstrate MVC architecture with the help of Servlet, JSP, POJO classes and JDBC. 7
- b) 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
5. a) Compare SOAP and REST web services. Also compare SOA and Web services? 8
- b) What is cross-site scripting? What are the do's and don'ts of client authentication? 7
6. a) Define Test Driven approach of development? What does TDD gives us we can't get by building tests after the fact? 7
- b) What are the differences and similarities 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) Convention vs Configuration
  - b) Continuous integration
  - c) SQL injection