

## JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT

TEST-3 EXAMINATION- DEC 2017

B. Tech VII Semester

COURSE CODE: 12B1WCI733

MAX. MARKS: 35

COURSE NAME: ADVANCED JAVA

COURSE CREDITS: 3

MAX. TIME: Two Hours

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*Note: All questions are compulsory. Carrying of mobile phone during examinations will be treated as case of unfair means.*

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1. Write a web based application where an employee enters his employee identity through an HTML form, which is being passed as a parameter to call a servlet called *EmpSalary*. The servlet then searches for the employee's identification number from a table called *Emp* (*empid* varchar2, *ename* varchar2, *salary* double). On the basis of this identification number, the salary of the employee is displayed on the browser's window. [6 marks]
2. Write a JSP program using Java Bean to register users into a web-site. The registration details of the users are kept in *USER* table with attributes as *userid* varchar2 (10), *username* varchar2 (15), and *email\_id* varchar2 (15). [6 marks]
3. Write a distributed application using RMI where a user running an application on client's JVM invokes a remote method *String getName (String)*, running on the server's JVM. After invoking this method, the name entered by the user is displayed on the client's application. [6 marks]
4. Write an enterprise based application to find the sum of first *n* numbers. A positive integer number is passed through an HTML form to invoke a servlet called *SumServlet*. *SumServlet* calls the method *int sum(int)* that has been defined inside a stateless session bean *SumBean*. Assume that the web container and the EJB container are available on the same server. [6 marks]
5. Explain the concept of Marshalling and Unmarshalling in RMI. [3 marks]
6. Differentiate between the following terms:
  - i. Servlet and Java Server Pages
  - ii. Stateless and stateful session bean.
  - iii. Java Bean and Enterprise Java Bean
  - iv. `Locate.createRegistry()` and `Locate.getRegistry()`

[4×2=8 marks]