



**UNIVERSITY EXAMINATIONS: 2020/2021**  
**EXAMINATION FOR BACHELOR OF SCIENCE IN SOFTWARE**  
**DEVELOPMENT**  
**BSD 2304: ADVANCED JAVA PROGRAMMING**  
**ORDINARY EXAMINATIONS**  
**FULL TIME**

**DATE: DECEMBER, 2021**

**TIME: 2 HOURS**

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**INSTRUCTIONS:** Question **ONE IS COMPLUSORY**, Choose **TWO OTHER** Questions

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**QUESTION ONE - (20 MARKS) COMPULSORY**

Describe how you will develop the following features for a simple Voter Registration module using JSP, Servlet, JDBC and MySQL database

- a) Creating a Voter Registration form using JSP **[5 marks]**
- b) Submit Voter Registration form with a POST request and URL **[5 marks]**
- c) After form submission a corresponding servlet will get called **[5 marks]**
- d) A class that handles all the request parameters and send it to a class to save this data to the database. **[5 marks]**

**QUESTION TWO - (15 MARKS)**

Write codes for a system for municipal corporations to improve the quality of the life of the citizens. The system manages the information about property tax, registration of birth, deaths, health, water, sewerage charge. This System will display government related services on the web to be able to be accessed by anyone and hence it will make the communication between government and citizen easy because it will provide the status of grievance of people and notify citizens once completed. People can check the status of their grievance and raise any concern. The system can be accessed by those with accounts using usernames and accounts.

**[15 marks]**

**QUESTION THREE - (15 MARKS)**

Write a JavaFx program to create a user interface for student's registration in a learning institution **[15 marks]**

**QUESTION FOUR - (15 MARKS)**

Using technologies such as servlets, JSP and JDBC write codes for a Hospital management system that provides features like appointments, cancellations, check-outs, drug management, employee management, and visual display of data statistics, etc. **[15 marks]**