**SARDAR VALLABHBHAI PATEL INSTITUTE OF TECHNOLOGY, VASAD**

**INFORMATION TECHNOLOGY**

**ACADEMIC YEAR 2018-2019(EVEN)**

**SEMESTER VI**

**ADVANCED JAVA (2160707)**

**Assignment-1**

1. Discuss the URL and URLConnection class with their use in network programming. Use of the URL class.
2. Write an UDP client and server program Client send any string and server respond with its capital string.
3. Write a concurrent client-server program using TCP sockets to echo the message send by the client.
4. What is JDBC? What are the various types of JDBC Driver? Write code snippet for each type of JDBC connection.
5. Explain Java Database connectivity steps using an example (code snippet).
6. What is the role of DriverManager Class? Explain various methods of the DriverManager Class.
7. Explain Statement, Prepared Statement and Callable Statement with suitable example
8. Compare the Execution control of Statement and Prepared Statement.
9. Explain the use of ResultsetMetadata with an example

**Assignment-2**

1. Explain Servlet Life Cycle with example to demonstrate every state.
2. What is Deployment Descriptor? Show it with example web.xml file.
3. What is filter? What is its use? List the different filter interfaces with their important methods.
4. Explain Life Cycle of a filter. List the application of the filter.
5. What is ServletContext and ServletConfig object? Explain with example. Differentiate between the ServletContext and ServletConfig Object.
6. Explain Life Cycle of a JSP page.
7. Explain the JSP implicit objects with their use.
8. Explain JSP tag library with examples.
9. Explain JSP actions & Directives tags.

**Assignment-3**

1. Give the hibernate architecture and discuss each part in brief.
2. What is HQL? How does it differ from SQL? Give its advantages.
3. Explain MVC architecture in detail with figure.
4. Write a short note on 1). JSF Facelets 2) JSF Standard Component