Day : Friday   Time : 10:00 AM-01:00 PM

Date : 30-12-2022   **W-20045-2022**   Max. Marks : 60

N.B.
1)   All questions are **COMPULSORY**.
2)   Figures to the right indicate **FULL** marks.

Q.1   Differentiate between Statement, PreparedStatement and Callable Statement   **(15)**
Object. Write Java Code to insert the employee details in "Emp" table by
using Statement and PreparedStatement.

OR

Write Java code to perform the following tasks by using command line
arguments "Create, Insert, Update, Delete, Select and Exit options. Insert
command will insert the student's details (roll No, Name ,marks) in 'Stud'
table. Update will Update the details, Delete operation to delete specific
record and select operation to show all records and exit to come out of
System.

Q.2   a)   Answer **ANY ONE** of the following   **(08)**

   i)   Describe different types of EJB. Also explain the difference
         between Stateless and Stateful EJB.
   ii)   Describe Servlet life cycle with suitable diagram and explain
         major tasks performed by Servlet.

   b)   Answer **ANY ONE** of the following   **(07)**

   i)   Write Java Code to create Remote Method Invocation
         Application which provides the functionality of Calculator.
   ii)   Draw and explain Model-View-Controller (MVC) Architecture.
         Also Discuss Struct application framework.

Q.3   Answer **ANY THREE** of the following   **(15)**
   a)   Differentiate between doGet () and doPost () .

   b)   Discuss different types of JDBC Drivers and State which two drivers
        are best suited for Web-based Multi-tired application.
   c)   Explain with an example five standard action tags in JSP.

   d)   Differentiate between TCP and UDP.

   e)   Describe ResultSet and ResultSetMetaData.

Q.4   Write a Note on (**ANY THREE**)   **(15)**
   a)   JNDI

   b)   Connection Pooling

   c)   InetAddress

   d)   Stubs and Skeleton

   e)   Transaction Management in JDBC

*   *   *   *