

Total No. of Questions :12]

SEAT No. :

**P3720**

**[4961]-301**

[Total No. of Pages :2

**S.Y.M.C.A. (Engg.)**

**ADVANCED JAVA**

**(2013 Pattern) (Semester - III) (410901)**

*Time : 3 Hours]*

*[Max. Marks :50*

*Instructions to the candidates:*

- 1) *Neat diagrams must be drawn wherever necessary.*
- 2) *Figures to the right side indicate full marks.*
- 3) *Assume suitable data if necessary.*

**Q1)** What is J2EE? Explain its components with diagram. **[8]**

OR

**Q2)** Explain Four Types of JDBC Drivers. **[8]**

**Q3)** a) What is servlet? Explain servlet lifecycle. **[4]**

b) What is the difference between Http Servlet and Generic Servlet? **[4]**

OR

**Q4)** Write a servlet program to read an text string of student for JSP/HTML Form, response back the same string in reverse. **[8]**

**Q5)** a) What is JSP? Explain JSP lifecycle methods. **[4]**

b) What is the difference between JSP and Servlet? **[4]**

OR

**Q6)** Write a program to accept the rollNo of student in JSP page and display their details for database using JDBC. Assume that STUDENT table already exists and contains the data. **[8]**

**P.T.O.**

**Q7)** What is EJB? Explain the types of EJB. [8]

OR

**Q8)** Write short notes on any 2: [8]

- a) Session Beans
- b) Entity Beans
- c) Container Manged Transactions

**Q9)** What is spring? Explain the spring bean life cycle. [9]

OR

**Q10)** Explain the core spring modules and aspect oriented beans. [9]

**Q11)** What is HQL? Explain any four HQL queries with example. [9]

OR

**Q12)** What is Hibernate? What do you mean by Object Relational Persistence. [9]

