

Total No. of Questions : 12]

SEAT No. :

P852

[4659] - 230

[Total No. of Pages : 3

B.E (Computer)

**d - SOFTWARE ARCHITECTURE
(Elective - I) (2008 Course) (Semester - I)**

Time : 3 Hours]

[Max. Marks : 100

Instructions to the candidates:

- 1) *Answer (Q1 or Q2) and (Q3 or Q4) and (Q5 or Q6) and (Q7 or Q8) and (Q9 or Q10) and (Q11 or Q12).*
- 2) *Answers to the two sections should be written in separate books.*
- 3) *Neat diagrams must be drawn wherever necessary.*
- 4) *Figures to the right indicate full marks.*
- 5) *Your answer will be valued as whole.*
- 6) *Make suitable assumptions wherever appropriate and relevant.*

SECTION - I

- Q1)** a) Define Software Architecture. Why is Software Architecture important? [6]
- b) Which are process recommendations while designing architecture. [6]
- c) Define structure. Which are most common and useful software structures? Explain. [6]

OR

- Q2)** a) State and explain variety of sources that influences on an architecture. [6]
- b) Which are structures recommendations while designing architecture. [6]
- c) Define view. Explain three step procedure for choosing the views for a project. [6]

- Q3)** a) Draw a neat diagram to depict quality attribute 'Availability' general scenarios. How does one measure Availability. [8]
- b) Explain quality attribute 'usability'. [8]

OR

P.T.O.

- Q4)** a) Discuss two concerns of modifiability. [8]
b) State two categories of tactics for testing. Explain any one. [8]

- Q5)** a) When to use facade pattern? Explain benefits and drawbacks of Facade pattern. [8]
b) Draw consider example of compiler subsystem. Explain how facade makes Programmer's life easier, mention participants. [8]

OR

- Q6)** a) Write Short note on proxy pattern. [8]
b) Consider Example of dialog boxes in a graphical user interface and explain mediator pattern. [8]

SECTION - II

- Q7)** a) Explain in brief. [6]
i) Need for JDBC.
ii) JDBC statement.
iii) JDBC driver.
b) In context of Java what do you understand by terms RMI registry, remote object serializability. [6]
c) What is EJB? Which are the types of EJB? Explain any one type. [6]

OR

- Q8)** a) What are pros and cons of RPC as middleware? [6]
b) In short explain application scenario to illustrate need for messaging middleware like JMS. [6]
c) What is the role of following J2EE technologies-Servelets, JSP, compare the two for web development. [6]

- Q9)** a) What is AJAX? Give two examples of applications using AJAX. Explain how AJAX works. [8]
b) What is DOM? When to use DOM? Which are two nodes & how to search an element? [8]

OR

- Q10)a)** What are java applets? Explain advantages and lifecycle of java applets. [8]
- b) What is 3-tire architecture? Explain any 2 tiers in short. [8]

- Q11)a)** What is JSF? Specify advantages of JSF. Compare JSF and Struts. [8]
- b) Explain JAVA servlet life cycle. [8]

OR

- Q12)a)** Draw and explain entire process of JSP technology. [8]
- b) What are struts? Specify advantages of struts. Compare JSF and Struts. [8]

