

Total No. of Questions :6]

SEAT No. :

**P4189**

[Total No. of Pages :2

**[5255] - 687**

**M.E. (Computer Engineering)**

**SOFTWARE DESIGN AND ARCHITECTURE**

**(2013 Pattern) (Semester - II) (510108)**

*Time : 3 Hours]*

*[Max. Marks :50*

*Instructions to the candidates:*

- 1) Solve question number 1 or 2, 3 or 4 and 5 or 6.*
- 2) Neat diagrams must be drawn whenever necessary.*
- 3) Figures to the right indicate full marks.*
- 4) Assume suitable data, if necessary.*

- Q1)** a) How is Software Architecting different from Software Designing. [8]  
b) When and why is it important to describe multiple architectural views? [8]

OR

- Q2)** a) State and explain any Five benefits that a business and an IT organization can derive from a sound software architecture. [8]  
b) Describe the role of the architectural concept in knowledge transfer. What are the different types and challenges of knowledge. [8]

- Q3)** a) What are Component-and-Connector styles? Give examples of variation in implementation of the Component-and-Connector Styles. [8]  
b) Explain Views, Viewtypes and Styles. For a particular system how are the relevant views identified? Explain with an example. [8]

OR

- Q4)** a) Explain the two styles of interaction oriented software architecture, (MVC) Model - View-Controller and (PAC) Presentation-Abstraction-Control. [8]  
b) Explain (SOA) Service Oriented Architecture with its advantages. Give its applications in Web Services. [8]

**P.T.O.**

- Q5)** a) Explain layered architecture in Hierarchal architectures and comment on its application domain. [9]
- b) Define Customer Relationship Management (CRM). Discuss about CRM approaches and tools. [9]

OR

- Q6)** a) Describe Quantity archetype pattern and Rule archetype pattern with example. [9]
- b) Explain (MDA) Model Driven Architecture. What all steps are required to configure and automate it. [9]

