

[Total No. of Questions: 12]

[Total No. of Printed Pages: 2]

UNIVERSITY OF PUNE

[4364]-804

B. E. (IT) Examination - 2013

Software Architecture (2008 Course)

[Time: 3 Hours]

[Max. Marks: 100]

**Instructions:**

- 1 *Answer 3 Que. from Section I and 3 Que. from Section II*
- 2 *Answers to the two sections should be written in separate answer-books.*
- 3 *Black figures to the right indicate full marks.*

**SECTION –I**

Q.1	A	Explain documentation required for Software Architecture.	04
	B	Explain Architecture Business Cycle activities in detail.	08
	C	What is the difference between Software Architecture and Software Engineering?	06
<b>OR</b>			
Q.2	A	Why software architecture is important? Explain architecture pattern references, models and reference architectures.	10
	B	Explain Architecture structures and views in detail.	08
Q. 3	A	What are quality attributes? What is the need of quality attributes.	08
	B	Explain business Qualities and Architecture Qualities.	08
<b>OR</b>			
Q. 4	A	Write short note on: 1. Modifiability Tactics. 2. Security Tactics.	08
	B	Give scenario for performance and usability quality attribute.	08
Q. 5	A	What is design Pattern? Explain design pattern template in detail.	08
	B	With structure explain observer pattern. Give examples of the same	08

**OR**

Q. 6	A	What are the types of design Patterns? Explain with example.	08
	B	Explain when proxy pattern can be used? With example explain types of Proxy.	08

**SECTION II**

Q. 7	A	Explain three tier architecture in detail.	08
	B	What is coupling in XML? What are its advantages?	08

**OR**

Q. 8	A	What are different architecture styles? Explain each in detail.	08
	B	With example explain structure of XML.	08
Q. 9	A	Explain EJB Architecture in detail. Describe Entity, Session and Message beans in detail.	10
	B	Explain Application Server in detail with example	08

**OR**

Q. 10	A	Explain lifecycle and Architecture of Java Applet and Java Servlet.	08
	B	Write short note on following: i. JSP ii. JSF iii. JMS	10

Q. 11	A	What is the significance of IUnknown interface? Explain methods of IUnknown interface.	08
	B	Explain DLL Servers in detail.	08

**OR**

Q. 12	A	Describe .NET Architecture. What is role of CLR, CLS, CTS, and CLI in it?	08
	B	Write note on .NET web services.	08