B.E. (Computer Technology) Semester Seventh (C.B.S.)
Elective - I : Software Architecture

P. Pages : 2

Time : Three Hours

|| *0856* ||

Max. Marks : 80

_____

Notes : 1. All questions carry marks as indicated.
2. Solve Question 1 OR Questions No. 2.
3. Solve Question 3 OR Questions No. 4.
4. Solve Question 5 OR Questions No. 6.
5. Solve Question 7 OR Questions No. 8.
6. Solve Question 9 OR Questions No. 10.
7. Solve Question 11 OR Questions No. 12.
8. Due credit will be given to neatness and adequate dimensions.
9. Assume suitable data wherever necessary.
10. Use of non programmable calculator is permitted.

1. a) Explain in detail how Architecture Business cycle (loop) works? **7**

   b) What is software architecture? Explain in detail. Also explain why it is important? **6**

OR

2. a) Explain all functional and non-functional requirements of software architecture in detail. **8**

   b) Explain the three different broad categories of Architecture structure and views. **5**

3. a) What are the guidelines for quality design decision. **7**

   b) Enlist the elements of quality attribute specification scenario. **6**

OR

4. a) Explain each quality attribute in detail. **7**

   b) How quality attributes are derived for software architecture? Explain. **6**

5. a) Explain in detail the principles and expectations of Design pattern. **7**

   b) Define Design pattern. And explain singleton pattern along with its advantages & disadvantages. **7**

OR

6. a) Write short notes on: **any three.** **9**

   i) Adaptor pattern

   ii) Observer pattern

   iii) Mediator pattern

   iv) Proxy pattern

solveout.in

	b)	Explain the ways of using design pattern.	5
7.	a)	Explain different types of Middleware.	4
	b)	Write a note on RPC.	3
	c)	Explain in detail the architecture of CORBA.	7

OR

8.	a)	How Dynamic service selection and Invocation is handled?	6
	b)	Write short notes on:	8

    i)   Characteristics of Middleware Technologies.

    ii)   Recent Advances in Middleware Technologies.

9.	a)	Explain the need of client-side technology in multi-tier architecture.	5
	b)	Explain different phases of Java Applet Life cycle.	4
	c)	Differentiate HTML & DHTML.	4

OR

10.	a)	Explain n-tier web architecture in detail.	6
	b)	Write short notes on **any two.**	7

    i)   DOM   ii)   AJAX
    iii) Active X controls.

11.	a)	Explain in detail the need of server side technology in multi-tier architecture.	6
	b)	How JSP to servlet translation is achieved at server side?	7

OR

12.	a)	Define service oriented Architecture (SOA). What are the benefits of it?	5
	b)	Explain Java web services in detail.	8

****

solveout.in