B.E. (Computer Science & Engineering) Semester Seventh (C.B.S.)
Elective - II : Software Architecture

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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 whenever necessary.
           10.   Illustrate your answers whenever necessary with the help of neat sketches.

1. a) Explain the architecture of software analysis.   **6**

        b) What is the design process of software? Explain the importance of s/w design.   **7**

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OR

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2. a) Describe scalability & interoperability issues in s/w design process & enlist different   **7**
            architectural pattern.

        b) Explain the architecture of web application with suitable example.   **6**

3. a) What are the different quality attribute? Explain it.   **7**

        b) What are the needs of quality attributes in s/w architecture.   **6**

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OR

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4. a) Explain achieving quality attributes in s/w architecture.   **6**

        b) What are the six characteristics of scenario for quality attributes specification.   **7**

5. a) What are the different principles of design patterns? Explain it in details.   **7**

        b) Explain design pattern and software architecture.   **7**

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OR

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6.   Write a short note on following pattern.
            i)   Singleton   **5**
            ii)   Adaptor   **3**
            iii) Iterator   **3**
            iv)   Mediator   **3**

7.	a)	Explain web services architecture & it's elements in detail.	7
	b)	Describe conventional architectural style.	6

OR

8.	a)	Explain service-oriented architecture.	5
	b)	Enlist the benefits of using styles.	4
	c)	What are the basic properties of architectural styles?	4

9.	a)	Explain different components of middle-ware along with their features.	7
	b)	How does the programming models implementing in middleware.	7

OR

10.	a)	Explain in detail the architecture of middleware.	7
	b)	Write a short note on:	
		i) Economics-Driven Architecture.	4
		ii) COTS	3

11.	a)	What is the need of client side technology in multi-tier architecture?	6
	b)	Give overview of three-tier web architecture .	7

OR

12		Write a short note on	
		i) Servlet	5
		ii) Appled	5
		iii) AJAZ	3

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