B.E. Seventh Semester (Computer Technology) (C.B.S.)

Elective - I : Software Architecture

P. Pages : 2

Time : Three Hours

|| *0132* ||

Max. Marks : 80

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

1. a) Define software. Explain the role of modeling and analysis in software architecture. **7**

    b) Enlist various software architectures. How software architectures are analyze. **6**

OR

2. a) What are the different architectural description languages and tools are available? Explain. **7**

    b) Explain Architecture Business cycle. **6**

3. a) What do you mean by Quality? What are the various attributes are used to measure-quality of s/w. **6**

    b) Explain Modifiability quality attribute, along with their general scenario and tactics for modifiability. **8**

OR

4. a) Describe the process of deriving quality attributes for software architectures. **7**

    b) Explain quality attributes in software architecture templates. **7**

5. a) Write and explain about observer and mediator pattern. **7**

    b) What is factory method? Where it is used? Explain with example. **6**

OR

6. a) What are the categories of Design patterns? Explain any three Behavioral Patterns. **9**

    b) Write a short note on singleton pattern. **4**

7. a) Explain in detail various types of Middleware. **6**

    b) Explain in detail architecture of CORBA. **7**

OR

8.	a)	Describe different characteristics of Middleware Technologies.	**6**
	b)	What are the various advances in Middleware Technologies? Explain in detail.	**7**
9.	a)	Explain n-Tier web architecture in detail.	**7**
	b)	Explain the need of client side technology in multi-tier architecture.	**6**

OR

10.	a)	Explain following client side technologies: **any two.**	
		i) DOM	**6**
		ii) AJAX	**7**
		iii) HTML	**6**
11.	a)	What is the need of server side technology? Explain in detail.	**7**
	b)	Explain Enternal Web service architecture along with their main components.	**7**

OR

12.	a)	Write detailed note on:	
		i) JSP	**7**
		ii) SOA	**7**

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