



www.nagpurstudents.org



Elective-II : Software Architecture

P. Pages : 2

Time : Three Hours

**NIR/KW/18/3580**

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 whenever necessary.

1. a) Define software process. What are the activities include in software Architecture? Explain in detail. 7

b) What is design process of software? Explain the importance of s/w design? 6

OR

2. a) Write short note on Architectural Patterns. 6

b) Explain scalability and interoperability issues. 7

3. a) Explain in detail how quality attributes are understand. 8

b) How can we decide the quality of s/w architecture. 5

OR

4. a) What are the six characteristics of a scenario for quality attributes specification. 7

b) Explain the process of achieving quality attributes. 6

5. a) Explain principles and expectations of Design patterns. 7

b) What is Design pattern? How particular design pattern is selected for our problem? 7

OR

6. a) Write short notes on : **any four.** 14

i) Singleton

ii) Facade

iii) Proxy

iv) Observer

v) Adapter

7. a) Explain Internal architecture of web service using neat diagram. 7
b) Illustrate and explain conventional Architectural styles. 6

OR

8. a) Explain Decentralized Architecture in detail. 7
b) Write note on service-oriented Architecture. 6
9. a) Write notes on:- 7
i) Programming models
ii) Economics - Driven Architecture.
- b) Enlist different components of middleware along with their features? 7

OR

10. a) What are the different system qualities of middleware and COTS? 7
b) Explain Architecture of middleware. 7
11. a) Explain Multi-tier web architecture in detail. 7
b) Give overview of Three-tier web architecture. 6

OR

12. Write short note on **any three**. 13
i) Common Gateway Interface (CGI)
ii) Servlet
iii) DOM
iv) Applet
v) AJAX



~ **Sam Walton**

