



- 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) Define software Architecture. Explain software Architecture and also explain how architectures are influenced by system stakeholders. **8**

b) Explain in detail how Architecture Business cycle works. **6**

OR

2. a) Define requirements. Describe various requirements of software architecture. **7**

b) What are the different architectural description languages and tools available? Explain **7**

3. a) Explain three techniques of availability tactics to achieve quality attributes. **6**

b) Define software quality. What are different parts of software quality attributes. **7**

OR

4. a) Explain modifiability quality attribute along with their general scenario and tactics for modifiability? **7**

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

5. a) What are the categories of Design pattern? Explain any two behavioural pattern. **8**

b) Explain the different ways of using patterns in software architecture. **6**

OR

6. Write short notes on **any three**. **14**

- i) Proxy Pattern.
- ii) Facade Pattern.
- iii) Iterator Pattern.
- iv) Observer Pattern.

7. a) What are the various advances in middleware technologies? Explain in detail. 6
b) Explain in detail architecture of CORBA. 7

OR

8. a) How Dynamic service selection and Invocation is handled? 6
b) Comment "Middleware as Infrastructure". 4
c) Write note on characteristics of Middleware technologies. 3
9. a) Differentiate client side technologies HTML and DHTML. 6
b) Explain n-Tier Web architecture in detail. 7

OR

10. a) Explain in detail various phases of Applet life cycle. 6
b) Write short notes on :- 7
i) AJAX
ii) DOM

11. a) Explain Java web services in detail. 6
b) Explain in detail what is JSP? How it differs from other technologies. 7

OR

12. Explain in detail **any three**. 13
i) SOA
ii) Servlet
iii) CGI
iv) JSP to servlet translation.
