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

P. Pages : 2

Time : Three Hours

1057

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.   Assume suitable data whenever necessary.
          10. Use of non programmable calculator is permitted.

1. a) Define software Architecture. Explain Software Architecture and also explain how architectures are influenced by system Stakeholders? **8**

   b) What are the different requirements of software Architecture? Explain. **6**

OR

2. a) What are the different opportunities and advances are available in software architectures. **6**

   b) Write notes on: **8**
      i)   Architecture structure & views.
      ii) Software architecture documentation.

3. a) What are the distinguished quality attributes are available? Explain need of quality attributes. **6**

   b) Explain Architecture and quality attributes in detail. **5**

   c) Define term system quality attributes. **2**

OR

4. a) Explain way to derive quality attributes for software architecture. **6**

   b) Explain three techniques of Availability tactics to achieve quality attributes. **7**

5. a) Enlist and explain principles and expectations of Design pattern. **7**

   b) How designing of the architecture is accomplish using Attribute-Driven Design Approach? **6**

OR

6. a) Explain ways of using Design pattern. **4**

b) Write short notes on **any three.** 9

    i) Observer pattern.

    ii) Singleton pattern.

    iii) Mediator pattern.

    iv) Proxy pattern.

    v) Facade pattern.

7. a) Comment "Middleware as infrastructure". 4

b) Explain in detail Dynamic service selection and Innovation. 6

c) What are different types of middleware? 4

OR

8. a) Explain in detail RPC and CORBA. 6

b) Write a note on Recent advances in Middleware Technologies. 4

c) Explain the characteristics of Middleware Technologies. 4

9. a) What is three-tier architecture of web? Explain in detail. 6

b) Explain in detail various phases of Applet life cycle. 7

OR

10. a) What is the need of client side technology in multi-tier architecture? 4

b) Write notes on **any three.** 9
    i) DOM   ii) AJAX
    iii) DHTML   iv) HTML

11. a) Explain Java web services in detail. 7

b) Define SOA. What are the features of SOA? Also explain benefits of software oriented Architecture. 6

OR

12. a) Explain three different components of web service Architecture using diagram. 6

b) Explain in detail, What is JSP? How it differs from other technologies? 7

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