

Total No. of Questions : 12]

SEAT No. :

P1454

[4759]-211

[Total No. of Pages : 3

B.E. (Computer Engineering)

d: SOFTWARE ARCHITECTURE

(2008 Course) (Semester - I) (Elective -I) (410444)

Time : 3 Hours]

[Max. Marks :100

Instructions to the candidates:

- 1) *Answers to the two sections should be written in separate answer books.*
- 2) *From Section -I, answer (Q1 or Q2) and (Q3 or Q4) and (Q5 or Q6).*
- 3) *From Section -II, answer (Q7 or Q8) and (Q9 or Q10) and (Q11 or Q12).*
- 4) *Neat diagrams must be drawn wherever necessary.*
- 5) *Figures to the right side indicate full marks.*
- 6) *Assume suitable data, if necessary.*

SECTION - I

- Q1)** a) With neat diagram explain architecture business cycle in brief. [6]
- b) What is Software Architecture? Explain in brief.
Comment on the architecture activity: Creating the business case for the system. [8]
- c) Comment “Architecture is a high level design”. [4]

OR

- Q2)** a) Explain decomposition, uses and class with reference to module based structures. [8]
- b) Define and explain architectural pattern, reference models and reference architectures. [4]
- c) Write note on documenting Software Architecture. [6]

P.T.O.

- Q3)** a) Explain quality attributes of a web application. [8]
b) With the help of appropriate diagram explain availability scenario and testability scenario. [8]

OR

- Q4)** Explain following in the context of quality attributes [16]
a) Quality attribute scenario.
b) Usability aspect observed in MS-WORD.
c) Business qualities.
d) Maintain data confidentiality.

- Q5)** a) Write note on Chain of responsibility and mediator pattern. [8]
b) Define Design pattern. Write C++ or JAVA code for Singleton pattern. [8]

OR

- Q6)** a) With structure and example explain Abstract Factory pattern. [8]
b) What is proxy pattern? Explain variants of proxy pattern? [8]

SECTION - II

- Q7)** a) With neat diagram explain how MVC is supported by Java. [8]
b) Explain the need of JDBC. [2]
c) What is Enterprise Java Beans? Explain entity, message and session beans. [8]

OR

- Q8)** a) Explain role of middleware in 3-tier architecture. [6]
b) Explain following [12]
i) RMI
ii) JMS

- Q9)** a) Explain Java applet life cycle. [8]
b) Explain various technologies used to develop client side. [8]

OR

- Q10)**a) Compare XML and HTML. [4]
b) Explain 3-tier architecture with diagram. [8]
c) Write note on AJAX. [4]
- Q11)**a) Enlist and explain various server side technologies. [8]
b) What is java web service? Explain the relationship between web services and SOA. [8]

OR

- Q12)**a) Explain with diagram struts architecture. [8]
b) Explain following: [8]
i) JSP
ii) Java Servlet

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