

[5254] - 167
B.E. (Computer Engineering)
SOFTWARE ARCHITECTURE
(2008 Pattern)

Time : 3 Hours]

[Max. Marks : 100

Instructions to the candidates :

- 1) Answers to the two sections should be written in separate answer books.*
- 2) Neat diagrams must be drawn wherever necessary.*
- 3) Assume suitable data, if necessary.*

SECTION - I

- Q1)** a) Compare and contrast and also give relationship between requirements and design. Illustrate with examples. **[6]**
- b) Write short notes on **[12]**
- i) Architecture VIEWS
 - ii) Module Structures

OR

- Q2)** a) Write short note on Layered architecture. **[8]**
- b) Write short note on Opportunities and Advances in software architectures. **[10]**

- Q3)** Explain the given terms in context of QUALITY. **[16]**

- a) Importance of achieving 'performance' for any system.
- b) Quality attributes
- c) Testability
- d) Relationship between design and quality

OR

P.T.O.

Q4) Explain and illustrate the following concepts (in context of quality attribute/tactics) with examples, in brief : **[16]**

- a) USABILITY
- b) Interfaces and ease of modifiability
- c) Authentication as a security tactic
- d) Performance, response time, throughput

Q5) a) Give code for factory method design pattern in C++. **[8]**

b) Write short note on design pattern. **[8]**

OR

Q6) a) Explain behavioral pattern. **[8]**

b) Write short note on MEDIATOR and adaptor pattern. **[8]**

SECTION - II

Q7) a) Write short note on application servers. **[8]**

b) What is the role of JAVA SE, JAVA EE technologies? **[8]**

OR

Q8) a) Explain working of RPC. **[8]**

b) What is the need of J2ME and Java APIs? **[8]**

Q9) In brief explain the concept and give good examples to illustrate. **[18]**

- a) URL, domain names
- b) XML DOM
- c) REST
- d) Need for JSF

OR

Q10) Explain following concepts through simple examples. **[18]**

- a) Custom controls through VB
- b) Use of active X controls
- c) XHTML
- d) Java applets

Q11) a) Explain distributed application. **[8]**

b) Explain use of .NET for web applications. **[8]**

OR

Q12) a) Explain interfaces and DLL servers in context of COM/.NET. **[8]**

b) Compare COM and .NET. **[8]**

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