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MANIPAL INSTITUTE OF TECHNOLOGY
(Constituent Institute of Manipal University)
MANIPAL-576104

SIXTH SEMESTER B.TECH.(CSE) DEGREE END SEMESTER EXAMINATION
MAY 2014
BUILDING ENTERPRISE APPLICATIONS(Elective-I)[CSE 326]
DATE: 12-5-2014

TIME: 3 HOURS   MAX.MARKS: 50

Instructions to Candidates
- Answer **any five** full questions.
- Missing data if any can be suitably assumed.

1A. Define an Enterprise Application(EA). Explain 4 main measuring factors for the success of an Enterprise Application?

1B. Consider the Initiate Loan use case in a Bank. The loan can be initiated either by customer or bank representative. As per loan initiation requirement, preapproved loan amount will be fetched along with the credit rating from the credit rating system in case the preapproved amount is not updated in the last six months. Another use case Provide customer information is always used by the Initiate Loan use case. Draw 3 diagrams showing the relationships between various use cases for the above.

((1+4)+5)

2A. Describe the development activities of the process patterns of the Agile process SCRUM.

2B. Which are the typical elements of Software Requirement Specification? Give the brief description of each of them.

2C. Explain 3 key nonfunctional requirements(NFRs) of an Enterprise Application.(EA)   (4+3+3)

3A. With a diagram, describe the sub architectures of TOGAF.

3B. Give the two approaches of caching in detail.

3C. Describe the four components of the business layer of an EA (5+2+3)

4A. The following is a scenario at State Bank of India ATMs: The Customer inserts the card in the Card Reader. The Card is verified to be of State Bank of India by the ATM. The PIN is entered at the Customer Console and session is created and the system is ready for transactions of debit from the account. The amount to be withdrawn is entered and the amount is dispensed by the ATM. The session is then closed. Draw the complete Sequence diagram for the above scenario.

4B. Describe the key design aspects of the data access layer.   (5+5)

5A. What are the key activities followed to set up a development environment for an Enterprise application? Explain.

5B. Describe the session management features of any commercial application server of an EA.

5C. Differentiate between EJB 3.0 and Spring framework.   (3+3+4)

6A. With a diagram, describe briefly the primary areas that are focused on while preparing the static code analysis.

6B. Which are the high level strategies for rolling out enterprise applications? Explain.   (5+5)