



Register Number:.....

**B.TECH DEGREE EXAMINATIONS: NOV/DEC 2014**

(Regulation 2009)

Seventh Semester

**INFORMATION TECHNOLOGY**

ITY124: Building Enterprise Applications

**Time: Three Hours**

**Maximum Marks: 100**

**Answer all the Questions:-**

**PART A (10 x 1 = 10 Marks)**

1. Productivity is a widely-used method for measuring a company's
  - a) Cost
  - b) Quality
  - c) Marginal Review
  - d) Efficiency
2. The goal of business process re-engineering is to
  - a) improve the productivity and/or the quality of business processes.
  - b) make processes faster
  - c) upgrade old technology
  - d) find work for staff to complete during down periods
3. The tools used to create wireframe are
  - (i) Dreamweaver
  - (ii) Microsoft visio
  - (iii) Adobe illustrator
  - a) (i) only
  - b) (ii) and (iii) only
  - c) (i) and (ii) only
  - d) (i), (ii) and (iii)
4. The estimation techniques that depends on software sizing is
  - a) Ballpark estimation
  - b) Use Case Point estimation
  - c) Function Point estimation
  - d) LOC estimation
5. The highest abstraction of the business layer is
  - a) Service orchestration layer
  - b) Data layer
  - c) business service layer
  - d) System layer
6. To overcome the problem of crashing due to receiving too many concurrent requests is

- a) Struts
  - b) Deployment
  - c) Caching
  - d) Integration
7. The mechanism to direct all requests which are part of a session to a particular node of the clustered environment is
- a) Session affinity
  - b) Session tracking
  - c) Session integration
  - d) Persistent session
8. The process of acquiring, training, developing, motivating, and appraising a sufficient quantity of qualified employees to perform the activities necessary to accomplish organizational objectives, can be defined as
- a) human resource management
  - b) Production
  - c) process engineering
  - d) sales management
9. The testing that is investigated holistically from the perspective of functional as well as non functional requirements is
- a) Unit Testing
  - b) Integration Testing
  - c) Acceptance Testing
  - d) System Testing
10. The open source web services tool to test web service inspection, web service invocation, load testing, compliance testing is
- a) Loader
  - b) Runner
  - c) QTP
  - d) SoapUI

**PART B (10 x 2 = 20 Marks)**

11. State the relationship between Business Process Reengineering (BPR) and Enterprise Resource Planning (ERP).
12. How to verify and validate functionalities of ERP system packages?
13. State the various kinds /categories of requirements that need to be elicited.
14. What is a requirements traceability matrix? Identify the tools to create a requirements traceability matrix.
15. State the functions of software architecture pattern and its use.
16. What are the roles and responsibilities of middleware in enterprise applications?
17. Distinguish between a static code analysis and a dynamic code analysis.
18. List the services of a spring framework in an n-tier enterprise application.
19. State the need for black box testing and white box testing. Is both needed in an enterprise application.
20. Write the steps involved in a typical rollout.

**PART C (5 x 14 = 70 Marks)**

21. a) (i) State and explain the principle of Agile software development and compare and contrast the characteristics of XP and scrum (7)
- (ii) Discuss the best practices followed in the architecture and design of an enterprise application. (7)

**(OR)**

- b) (i) What are the three key issues which determine the success in raising an enterprise application? Explain the factors measuring the success of the enterprise applications. (6)
- (ii) State and explain the life cycle of enterprise application with software engineering methodologies. (8)

22. a) Enterprise application implementation requires a great deal of attention to behavioral issues. What are the phases that a company goes through when planning and implementing the systems? What are the requirements objectives? Explain requirement elicitation till requirement validation.

**(OR)**

- b) Explain the business modeling process for Financial service organization to manage its money transactions in providing the Loan to the customer from the deposits received. State the process in the creation of high level domain. Explain with use case diagram listing all the elements of use case specifications

23. a) Discuss in detail the design aspects of presentation layer and business layer. Explain with a neat sketch the request processing in the presentation layer.

**(OR)**

- b) (i) Describe and tabulate the major key elements of SAD. (5)
- (ii) Illustrate the building blocks of Infrastructure architecture that influence the design and implementation of an enterprise application. (9)

24. a) Explore the features of Java enterprise application development IDE and explain the software construction map.

**(OR)**

- b) (i) State the primary steps followed in the process of unit testing and explain the test cases and planning of unit test with illustrations. (8)
- (ii) Describe the three most dreaded application security vulnerabilities. (6)
25. a) (i) Explain the requirements of different testing levels and application environments and state the importance of regression testing in an iterative development process. (10)
- (ii) State and explain the different enterprise application testing approach. (4)

**(OR)**

- b) Explain with neat sketches the performance engineering life cycle and the application security engineering life cycle.

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