

**BACHELOR IN INFORMATION
TECHNOLOGY (BIT)**

Term-End Examination

December, 2011

00931

CSI-08 : QUALITY MANAGEMENT PRINCIPLES

Time : 3 hours

Maximum Marks : 75

*Note : All questions from section A are compulsory. Answer
any three questions from the rest.*

SECTION - A

1. (a) Express the number of entities to which another entity can be associated via a relationship set : 10
- (i) Cardinality (ii) Relationship
(iii) Primary key (iv) Secondary key
- (b) We can show parallel activities using :
- (i) PERT chart (ii) Decision tables
(iii) Decision tree (iv) Gantt chart
- (c) Which is not a project control method ?
- (i) Gantt chart
(ii) PERT chart
(iii) Work Breakdown structure
(iv) Decision table

- (d) System review is done after :
 - (i) Analysis phase
 - (ii) Design phase
 - (iii) Programming
 - (iv) Testing
- (e) Which is not true ?
 - (i) Unit testing is done before system testing.
 - (ii) Integration is not required before implementation.
 - (iii) Beta testing is done at user site
 - (iv) All of the above
- (f) The probability that the software will operate as expected over a specified interval is called :
 - (i) Correctness
 - (ii) Reliability
 - (iii) Fault tolerance
 - (iv) Robustness
- (g) E - R is used in :
 - (i) Analysis
 - (ii) Design
 - (iii) Project monitoring
 - (iv) Testing

- (h) Gantt chart does not help in :
- (i) Identifying the activities of a project
 - (ii) Scheduling the activities of a project
 - (iii) Budgeting the project
 - (iv) Resource planning
- (i) Which of the following testing methods is normally used as acceptance test for a S/W system ?
- (i) Regression testing
 - (ii) Integration testing
 - (iii) Unit testing
 - (iv) Functional testing
- (j) _____ deal with high level design, specification and analysis of software requirement.
- (i) Upper case tools
 - (ii) Lower case tools
 - (iii) Maintenance case tools
 - (iv) None of the above

2. (a) Why is data dictionary required ? What is its format ? 5
- (b) What are the important qualities of a good project manager ? Discuss. 10
- (c) Explain the difference between validation and verification with the help of an example. 5

SECTION - B

3. (a) You have been given the responsibility for improving the quality of software across your organization. What is the first thing that you should do ? What is the next ? 7
- (b) Explain in detail about adaptive maintenance. 8
4. Give an explanation for each of the following terms with appropriate examples. 15
- (a) Traditional Life Cycle Model
- (b) Quality Assurance Tools
- (c) Walk Through
- (d) Usability
- (e) Generalization and Specialization
5. (a) Discuss the difference between software configuration management and software maintenance. 8
- (b) Explain the purpose and process of Formal Technical Reviews ? 7
6. (a) Define the black box and white box testing with the help of suitable example. 5
- (b) How the quality manual influence a new computer S/W project ? 5
- (c) Construct an E - R diagram for withdrawing a book from library. It should describe entities, relationship and attributes of entities. 5