

**BACHELOR IN INFORMATION
TECHNOLOGY (BIT)**

Term-End Examination

June, 2010

**CSI-08 : QUALITY MANAGEMENT
PRINCIPLES**

Time : 3 hours

Maximum Marks : 75

*Note : All questions from Section-A are compulsory. Answer
any three questions from Section-B.*

SECTION-A

1. (a) Explain the following types of errors with the help of an example in the context of corrective maintenance. 4x1½ =6
 - (i) Program logic errors
 - (ii) System errors
 - (iii) Operation errors
 - (iv) User errors
- (b) Mention true or false in the following : 10
 - (i) In structured design DFD indicates flow of data.
 - (ii) A design should exhibit a hierarchical organization among elements of software.

- (iii) Object is an entity, that define a "thing" or "item".
 - (iv) Interface errors are identified in write box testing.
 - (v) Static analysis is used for designing.
 - (vi) Gantt chart is used for flow analysis.
 - (vii) Entity is defined on relationship.
 - (viii) Relationship between entities can be binary.
 - (ix) Data dictionary is repository of data.
 - (x) On site observation is done to get a close look to the real system.
- (c) Explain the following : 5
- (i) Notations used in data flow diagram.
 - (ii) General guidelines and rules for constructing DFD with the help of an example.
- (d) Explain the following terms with the help of an example, if needed. 9
- (i) Software configuration management and its need
 - (ii) Software quality and its importance
 - (iii) Formal Technical reviews and their use

SECTION-B

Answer *any three* questions from this section :

2. (a) What is CASE ? What are uses of CASE tools ? Explain various types of CASE tools. 8
(b) With the help of suitable examples explain the issues of project management. 7
3. (a) Explain the diagrams used in the process of object oriented analysis and design. 7
(b) Describe the use of PERT and Gantt charts with the help of an example of each. 8
4. (a) Define encapsulation; inheritance and polymorphism. Give one example of each. 6
(b) What is the need of adaptive maintenance ? How is it different to perfective and preventive maintenance ? Explain the process of adaptive maintenance with the help of an example. 9
5. Explain the following terms : 15
 - (a) SEI's Capability Maturity Model
 - (b) Total Quality Management (TQM)
 - (c) Types of Testing
 - (d) Test documentation
 - (e) ISO standard on quality