

**BACHELOR IN INFORMATION
TECHNOLOGY (BIT)**

**Term-End Examination
December, 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 the rest.

SECTION - A

1. (a) Define in brief the following terms related to software product : 5
- (i) Efficiency
 - (ii) reliability
 - (iii) maintainability
 - (iv) modifiability
 - (v) flexibility
- (b) Mention whether true or false. 10
- (i) Boundary value analysis is used for software designing.
 - (ii) Black box testing is functional testing.
 - (iii) GUI is used as output interface.
 - (iv) Object oriented design is not dependent on any specific language.
 - (v) DFD indicates interactions between two module.

- (vi) TQM is used as reverse engineering design approach.
 - (vii) Size of program is most important software metrics.
 - (viii) Cardinality is used in DFD.
 - (ix) Data dictionary stores output generated by a program.
 - (x) A good SRS should be unambiguous.
- (c) Explain following terms in context of software quality. 6
- (i) Quality assurance
 - (ii) Quality planning
 - (iii) Quality control
- (d) Fill in the blanks in the following 5
- (i) Last phase of s/w development is _____ .
 - (ii) _____ feasibility is related with the cost of software .
 - (iii) A good s/w design should be _____ . (efficient/lengthy)
 - (iv) In E - R diagram entities are joined with _____
 - (v) O level DFD indicates the _____ .
- (e) Explain the purpose and process of Formal Technical Reviews (FTR). 4

SECTION - B

2. (a) Define the black box and white box testing with the help of suitable example. 4
- (b) What is a software test documentation ? What items should it include ? 3
- (c) Draw the level 0 and level 1. Data flow Diagrams that models the process of assignment submission, evaluation and communication of assignment results. Make suitable assumptions. 8
3. (a) List the salient features of object oriented software development methodology compare it with conventional approach of s/w development. 10
- (b) Explain the use of PERT chart with the help of an example. 5
4. (a) What is ISO 9000 standards series ? List at least 10 points covered under these standards. What is the difference between ISO 9000 and SEICMM ? 10
- (b) Explain the important legal aspects of software and data. 5

5. Explain the following :

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- (i) CASE tools and their use.
 - (ii) Data Dictionary and its use.
 - (iii) Preventive maintenance and its importance.
 - (iv) Corrective maintenance.
 - (v) Project manager and his/her roles.
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