

Total No. of Questions : 12]

SEAT No. :

P3229

[Total No. of Pages : 2

**B.E. (Computer Engg.)**  
**SOFTWARE TESTING AND QUALITY ASSURANCE**  
**(2003 Course)**

*Time : 3 Hours]*

*[Max. Marks : 100*

*Instructions to the candidates:*

- 1) Answers to the two sections should be written in separate answer books.*
- 2) Answer any three questions from each section.*
- 3) Neat diagrams must be drawn wherever necessary.*
- 4) Figures to the right side indicate full marks.*
- 5) Assume suitable data if necessary.*

**SECTION - I**

- Q1)** a) Explain different types of scales used for measurement. **[8]**  
b) What is good data? What are different characteristics of good data? **[8]**

OR

- Q2)** a) Explain four principles of investigation.  
b) Illustrate the process of CMM in detail.

- Q3)** a) What is Albrecht's Approach. Explain with an example. **[8]**  
b) What are different metrics used in Object oriented measures. **[8]**

OR

- Q4)** a) What is sequencing and nesting? Explain with an example.  
b) Define modularity. What are different types of modularity.

- Q5)** a) Write short notes on: **[18]**  
i) Domain testing  
ii) Equivalence partitioning  
iii) Goal Question metric

*P.T.O.*

OR

- Q6) b)** Write short notes on:
- i) Requirement based testing
  - ii) Graph based testing
  - iii) User documentation testing

**SECTION - II**

- Q7) a)** Write short notes on: [18]
- i) Test plan
  - ii) Scenario testing
  - iii) Integration testing

OR

- Q8) b)** Write short notes on:
- i) Acceptance testing
  - ii) GUI testing
  - iii) Regression testing

- Q9) a)** Explain six sigma process in detail. [8]  
**b)** Draw a cause effect diagram to depict the typical factors causing failure of software projects. [8]

OR

- Q10)a)** Explain Total Quality Management.  
**b)** Explain with examples following software maintenance metrics:
- i) Fix backlog and backlog management index.
  - ii) Percent delinquent fixes.

- Q11)a)** Explain in brief the steps involved in problem reporting phase. [8]  
**b)** What are the contents of configuration management repository? [8]

OR

- Q12)a)** What are patch bundles? Explain its advantages?  
**b)** Explain the roles of support analyst?

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