

Total No. of Questions : 12]

SEAT No. :

P2359

[4758]-100

[Total No. of Pages : 3

T.E. (I.T)

SOFTWARE ENGINEERING

(2008 Course) (Semester-I) (310253)

Time : 3 Hours]

[Max. Marks : 100

Instructions to the candidates:

- 1) *Answers to the two sections should be written in separate 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) *Use of Calculator is allowed.*
- 6) *Assume suitable data if necessary.*

SECTION-I

- Q1)** a) Define software engineering. What are the software characteristics? What are the various categories of software? [10]
- b) State and explain customer's myths. [4]
- c) Explain in detail software crises. [4]

OR

- Q2)** a) What is software process model? Explain the incremental process model. [8]
- b) Explain in detail process pattern. [6]
- c) What are the management myths? [4]

OR

- Q3)** a) Explain the scenario based elements of analysis model in detail. [8]
- b) Explain in detail requirement engineering task. [8]
- Q4)** a) What are the characteristics that requirement must meet? [6]
- b) Draw and explain the traceability table for requirement management. [6]
- c) Describe two real time situation in which the customer and the end-user is same. Describe two situation in which they are different. [4]

P.T.O.

- Q5) a)** What are the design quality guidelines? [8]
b) What are the elements in data design? What are the guidelines for the data design? [8]

OR

- Q6) a)** Explain the Web Application Architecture. [8]
b) What are the interface design principles and guidelines? [8]

SECTION-II

- Q7) a)** What is importance of testing practices? What are the principles of testing practices? [8]
b) Explain in detail: [8]
i) Top-down integration testing.
ii) Bottom-up testing.

OR

- Q8) a)** What is cyclomatic complexity? How is it determined for a flow graph? Illustrate with example. [8]
b) Explain following testing types: [8]
i) Validation testing.
ii) Acceptance testing.
iii) Smoke testing process.

- Q9) a)** What are the categories of stakeholders? What are the characteristics of effective project manager? [8]
b) What are the attributes of effective software metrics? Explain in detail Defect Removal Efficiency. [8]

OR

- Q10)**a) How do you measure software quality in terms of maintainability and integrity? [6]
- b) What is Object Oriented metric? [6]
- c) Explain size oriented metric? What data should we collect to derive size oriented metrics? [4]

- Q11)**a) What are the software quality factors? Explain any four. [12]
- b) What are the types of risks? Explain in brief. [6]

OR

- Q12)**a) What is configuration audit? What is status reporting? [8]
- b) Write short note on: [10]
- i) RMMM.
- ii) Change control process.

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