

Total No. of Questions : 10]

SEAT No. :

**P3676**

**[4758]-597**

[Total No. of Pages : 3

**T.E. (Information Technology)**

**SOFTWARE ENGINEERING**

**(Semester - I) (2012 Course) (End - Semester)**

*Time : 3 Hours]*

*[Max. Marks : 70*

*Instructions to the candidates:*

- 1) *Answer Q.No.1 or 2, Q.No.3 or 4, Q.No.5 or 6, Q.No.7 or 8, Q.9 or Q.10.*
- 2) *Draw neat diagrams wherever necessary.*
- 3) *Assume suitable data if necessary.*

**Q1) a)** Explain different aspects of software process model. **[5]**

b) Elaborate how software engineering is a layered technology. **[5]**

OR

**Q2) a)** What is extreme programming? List the drivers which are treated as XP values. **[5]**

b) Explain agile process model. **[5]**

**Q3) a)** Describe the steps of scenario based modeling with a suitable example. **[5]**

b) What is requirements engineering. **[5]**

OR

**Q4) a)** Explain activities and the steps used for negotiating software requirements. **[5]**

**P.T.O.**

b) What is data modeling? Explain following term in data modeling. [5]

i) Data objects

ii) Data attributes

iii) Relationships

**Q5)** a) Explain following concepts in the context of software design. [8]

i) Abstraction

ii) Modularity

iii) Information Hiding

iv) Functional Independence

b) Illustrate how requirements model is translated to design model. [8]

OR

**Q6)** a) Explain software design model with reference to process and abstraction dimension. [8]

b) What is data-centered architecture? Explain with an example. [8]

**Q7)** a) Discuss the user-centered design process. [8]

b) Explain Shneiderman's Golden Rules of UI design. [8]

OR

**Q8)** a) Discuss in details. [8]

i) Fitt's law.

ii) Hick's law.

b) Explain the analysis and design process of user-interfaces. [8]

- Q9)** a) What is the goal of cleanroom testing? Discuss in brief the statistical use testing. How do we certify a software component in cleanroom testing[10]
- b) What is software configuration management repository? Discuss role and features of SCM repository. [8]

OR

**Q10)** Write short notes on ANY THREE: [18]

- a) CASE tools
- b) Technology evolution
- c) Test driven development
- d) Model driven development

EEE