Total No. of Questions : 12]

SEAT No. :

P1423

[Total No. of Pages : 3

[4858] - 190

T.E. (Computer Engineering) (Semester - II)

SOFTWARE ENGINEERING

(2008 Pattern)

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 Three questions from section - I and Three questions from Section - II.***
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) What is a process model? Explain the general process framework activities of the Software Process. **[6]**

b) Explain the prototyping model with its advantages and disadvantages. **[6]**

c) State the myths and realities of a practitioner? **[6]**

OR

Q2) a) Explain the spiral model as an evolutionary process model. **[6]**

b) Explain the characteristics of software that differ from hardware. **[6]**

c) What are the advantages of an agile process? Explain with a process model. **[6]**

Q3) a) Explain the flow oriented modeling in requirement analysis. **[8]**

b) How to build the behavior model with a state diagram? Explain with an example. **[8]**

P.T.O.

OR

Q4) a) Identify the actors, usecases and give the Use case diagram for "Online taxi booking system" with three functionalities. **[8]**

b) State the tasks of Requirements Engineering. Explain any one requirement elicitation method. **[8]**

Q5) a) Explain Layered and Call and return architectural styles. **[8]**

b) Explain Abstraction and Functional independence in software design. **[8]**

OR

Q6) a) Explain any two user interface design issues. **[8]**

b) Explain the design elements of interface and data design. **[8]**

SECTION - II

Q7) a) Give the importance of software testing. Explain the unit testing strategy. **[6]**

b) Explain any two white box testing methods. **[6]**

c) Explain the debugging process. **[6]**

OR

Q8) a) Explain any two system testing methods. **[6]**

b) What is loop testing and how test cases are derived in loop testing. **[6]**

c) How validation testing methods test the conformity with requirements? **[6]**

Q9) a) Compare and explain the size oriented and function oriented metrics. **[8]**

b) Explain the LOC based estimation method. **[8]**

OR

Q10) a) Explain the COCOMO II model for estimation. **[8]**

b) Explain the role of people in project management. **[8]**

Q11) a) Explain the following in brief. **[8]**

i) Risk Identification

ii) Change management

b) Explain the quality factors of software. **[8]**

OR

Q12) a) Explain the scheduling of project with task network. **[8]**

b) Explain in brief the layers of Software Configuration Management process. **[8]**

⌘⌘⌘