

B.TECH SEM – V (2007 COURSE) (INF. TECH.) : WINTER - 2017

SUBJECT : SOFTWARE ENGINEERING

Day **Saturday**
Date **20/01/2018**

Time **02.30 PM TO 05.30 PM**
Max. Marks : 80

W-2017-2473

N.B.:

- 1) **Q.No.1 and Q.No.5 are COMPULSORY.** Out of the remaining questions attempt **ANY TWO** questions from each section.
- 2) Answers to both the sections should be written in the **SEPARATE** answer books.
- 3) Draw neat and labeled diagrams **WHEREVER** necessary.
- 4) Figures to the right indicate **FULL** marks.
- 5) Assume suitable data if necessary.

SECTION – I

- Q.1**
- a) What is pair programming? Where is it used? [04]
 - b) What is a software scope? How is it defined? [05]
 - c) What are the elements of a computer based system? [05]
- Q.2**
- a) How does spiral model combine iterative nature of prototyping with controlled and systematic aspects of waterfall model? Explain with the help of a typical spiral model. [08]
 - b) Define software engineering. [02]
 - c) State and explain any one customer's myth and its associated reality. [03]
- Q.3**
- a) List and explain the basic principles that guide software project scheduling. [08]
 - b) What is risk projection? List the steps in risk projection. [05]
- Q.4**
- a) Define and explain baselines. [04]
 - b) Define Software Reliability. What are the measures of Reliability and Availability? [06]
 - c) Write short note on ISO 9000 quality standards. [03]

SECTION – II

- Q.5**
- a) What are the objectives of requirement analysis? [05]
 - b) What are the testing principles the software engineer must apply while performing the software testing. [05]
 - c) Explain State Diagram. [04]
- Q.6**
- a) Explain in detail about data modeling. [07]
 - b) What is ER Diagram? What is DFD? Explain with examples. [06]
- Q.7**
- a) What is coupling? What are the various types of coupling? [06]
 - b) Define White box testing. List and explain the techniques used in white box testing. [07]
- Q.8** Explain UML (Unified Modeling Language) through any one method. [13]

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