

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY

M. E. - SEMESTER – II • EXAMINATION – WINTER • 2013

Subject code: 725302

Date: 27-12-2013

Subject Name: System Development Methodology

Time: 10.30 am – 01.00 pm

Total Marks: 70

Instructions:

1. Answer any FIVE questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

- Q.1** (a) Explain concepts of good design in appropriate sequence? [7]
(b) What Best practices should be followed during Software Development? [7]
- Q.2** (a) List and Explain principal activities of a modern quality system. [7]
(b) Explain "Spiral Model" with suitable diagrams. Explain advantages and [7]
limitations of this model. For which kind of project Spiral Model is useful and
why.
- Q.3** (a) Explain in details about Critical Chain Project Management. [7]
(b) Mentions four Goals of Software Engineering and Explain [7]
- Q.4** Explain ISO and all of its 9000 series certification. What is CMM model? [14]
Explain each levels of CMM. Explain relative merits of ISO 9001 certification
and the SEI CMM based quality assessment.
- Q.5** (a) Explain following things about Risk Management. [7]
i) What is Risk?
ii) Explain the Risk management life cycle.
(b) Explain how Software Configuration Management is done. Also name some of [7]
the tools for the same.
- Q.6** (a) Explain Use-Case Model with all its elements and their interrelations. [7]
(b) Explain the Sequence and Collaboration Diagrams for the University [7]
Management System.
- Q.7** (a) Explain the following 4 techniques for generating 'White Box' Test cases. [7]
i. Statement Coverage
ii. Decision Coverage
iii. Condition Coverage
iv. Loop Testing
(b) Draw and Explain the "V-Model" of Software Testing [7]
