

		T	1	
Reg. No.:				

Question Paper Code: 65019

M.Sc. (5 Year) DEGREE EXAMINATION, MAY/JUNE 2013.

Second Semester

Software Engineering

XSE 121/10677 SW 203 — SOFTWARE ENGINEERING I

(Regulation 2003/2010)

Time: Three hours

Maximum: 100 marks

Answer ALL questions.

PART A —
$$(10 \times 2 = 20 \text{ marks})$$

- 1. Write down the law of software evolution.
- 2. Define software process.
- 3. What is the need for software requirement specification (SRS)?
- 4. List out the major steps in Problem analysis.
- 5. Identify the major issues in project planning.
- 6. Differentiate top-down from bottom-up estimation model.
- 7. Define the term modularity.
- 8. What is the specialty of Process design language.
- 9. When a memory leaks occur?
- 10. What is meant by exhaustive testing?

PART B —
$$(5 \times 16 = 80 \text{ marks})$$

11. (a) Elaborate the challenges in software engineering approach.

Or

(b) Compare various processing models and highlighting their advantages and disadvantages.

12. (a) Explain in detail, the various software requirements for engineering process functions.

Or

- (b) How to validate the requirement specification? Explain in detail.
- 13. (a) For a student project being done in a semester course, list the major risks and risk mitigation Strategies for them.

Or

- (b) (i) For a project to manage the enrollment and activities in a contest, design a suitable Quality plan. (12)
 - (ii) Identify the steps in cost estimation.
- 14. (a) Use the structured design methodology to produce a design for the a system that acts as a Calculator with only basic arithmetic functions.

Or

- (b) Extend the PDL with contructs to support classes. Write the detailed design for class: Queue.
- 15. (a) How to inspect codes? What are the checklists for a code to be reviewed? Explain.

Or

(b) Describe mutation testing with suitable test cases.

2

(4)