

B. N. Bandodkar College of Science, Thane

S. Y. B. Sc. Semester IV Examination, March 2014

Course Code: USCS403

Duration: 2 Hrs.

Total Marks: 60

- Note: i. All questions are compulsory.
ii. Figures on right indicate maximum marks.

Q. 1 a What is Software Engineering? What are the objectives of Software Engineering? 8
Explain object oriented approach to system development.

OR

a Write notes on: 8

- i. Spiral Model ii. Incremental Model

b Discuss Software Development Life Cycle (SDLC) in detail. 7

OR

b What is feasibility study? Explain its type and purpose. 7

Q. 2 a What is Software Requirement Specification Document (SRS)? Why is it needed? 8
Explain its characteristics.

OR

a Write notes on: 8

- i. Decision trees ii. Data Dictionary

b Explain Data Flow Diagram with suitable example. 7

OR

b Briefly discuss Object Oriented modeling. 7

Q. 3 a Explain Input design, output design and user interface in detail? 8

OR

a What is Verification and Validation? Explain the types of Verification and 8
Validation activities.

b Compare and contrast Coupling and Cohesion. 7

OR

b Explain with an example UML Activity diagram. 7

Q. 4 a Discuss advantages and disadvantages of RAD (Rapid Application Development) 8
model for software development.

OR

a Explain ER Diagram in detail. 8

b Discuss in detail Cost / Benefit analysis for a project. 7

OR

b Discuss in detail Top Down and Bottom Up strategies of coding. 7