LIB 28/11/13 FN

Reg. No. : | | | | | | | | | | | | |

Question Paper Code : 75590

5 Year M.Sc. DEGREE EXAMINATION, NOVEMBER/DECEMBER 2013.

Elective

Software Engineering

XSE 001/10677 SWE 11 — SOFTWARE REUSE

(Regulation 2003/2010)

Time : Three hours Maximum : 100 marks

Answer ALL questions.

PART A — (10 × 2 = 20 marks)

1. What is meant by Software reuse? State with an example.
2. What are the different types of reuse activities in a development project and how can it be managed?
3. Mention the different metrics used to analyze effects of reuse.
4. What is meant by computer supported cooperative working?
5. State the methods available for testing the reusable components.
6. What are the obstacles in object oriented based software development?
7. State the common processes available for reuse.
8. Mention the impact of reuse on the project development cycle.
9. What is meant by black box and white box reuse
10. State the methods used for retrieving the objects from a non-object oriented code.

PART B — (5 × 16 = 80 marks)

11. (a) Explain in detail the different ways to implement software reuse and explain how reusable concepts can be represented as patterns or embedded in program generators. (16)

Or

(b) What are the different roles in reuse projects and discuss the steps involved in implementing software reuse in a project? (16)

12. (a) Describe briefly the REBOOT component model and the integration of REBOOT toolset model. (16)

Or

(b) Illustrate the cost estimation model for reuse based software Products. (16)

13. (a) Discuss the architectural design phase for the development reusable software. (16)

Or

(b) Explain briefly the object oriented lifecycle including the analysis, design, implementation and testing phases. (16)

14. (a) Describe the iterative development life cycles utilized for the reuse of the components. (16)

Or

(b) Explain the assumptions made while approaching development with reuse. Also specify the requirements for identifying reusable components. (16)

15. (a) Discuss the different models, teams and interfaces based on which cleanroom software development work. (16)

Or

(b) Describe the box structures algorithm utilized by the cleanroom process and the modifications done in the algorithm to incorporate the development for reuse. (16)
