



**FACULTY OF INFORMATICS**  
**B.E. 2/4 (I.T.) II Semester (Main) Examination, June 2010**  
**SOFTWARE ENGINEERING**

Time: 3 Hours]

[Max. Marks: 75

*Note : Answer all questions from Part A. Answer five questions from Part B.*

**PART – A**

**(Marks : 25)**

1. Define Software Engineering. 2
2. What is an Agile Process ? 2
3. What is a product engineering ? 2
4. What is system modeling ? 3
5. List the deployment principles. 3
6. Briefly explain the data modeling concepts. 4
7. What are the golden rules for user interface design ? 3
8. What is debugging ? 2
9. What is unit testing ? 2
10. What is Recovery Testing ? 2

**PART – B**

**(Marks : 50)**

11. a) Explain in detail the process patterns. Give few examples of it. 5  
b) Write about any two agile process models. 5
12. a) What is a use case ? Give template for detailed use-case taking any example. 5  
b) What is system engineering ? Explain about computer-based systems. 5



- 13. a) Give the guidelines for identifying objects in object oriented analysis. 5
- b) Define software design. What are the fundamental design concepts of design engineering? 5
  
- 14. Explain briefly the following : 10
  - i) Coupling between the modules.
  - ii) The internal cohesion of a module.
  
- 15. a) Discuss the techniques of program debugging. 5
- b) Give an overview of quality metrics. 5
  
- 16. a) Discuss the difference between white box testing and black box testing. 5
- b) Explain strategic approach to software testing.
  
- 17. Write short notes on **any two** of the following.
  - a) Waterfall model
  - b) Software reliability
  - c) Validation testing.