PRINCE OF SONGKLA UNIVERSITY

FACULTY OF ENGINEERING

Final Examination : Semester II   Academic Year : 2005

Date : 24 February 2006   Time : 9.00 - 11.00

Subject : 217-452   Real-time Software   Room : R300

Attempt all questions.

1. Detail

    (a) the role of diagrams in software development.   (4)

    (b) the basic diagram types used in your Modbus device class assignment.   (6)

2.

  (a) Describe the use of UML in the Modbus device class assignment for,

- requirements analysis   (1)

- design   (1)

- implementation   (1)

- testing, integration and debugging   (1)

- maintenance   (1)

  (b) How does documentation supports the various phases of the software life cycle?   (5)

3. In the Modbus device class assignment, show the need for and use of the following software development tools:

- Software debuggers   (5)

- Hardware debuggers   (5)

4. In your Modbus device class assignment,

   (a) Explain the underlying concepts of your software testing.   (5)

   (b) Explain your static and dynamic testing.   (5)

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