The questions can be answered in any order. You may need to consult the resources to look for help or check your answers.

Comparison of methods

- 1. Explain the difference between the terms "incremental" and "iterative"
- 2. Explain "without looking" what the abbreviation RAD stands for. Then state some of the techniques used in RAD
- 3. What is the metaphor "Spiral" meant to convey (in the term "The Spiral Model")
- 4. What is the difference between a "process model" and a "systems development method".
- 5. In terms of the three types of situations (routine, problem solving, problem definition): Can the different phases in UP be said to be designed with any of these situations in focus? Justify the answer.
- 6. What is the major (often questionable) assumption behind the waterfall Model?
- 7. What is the term "Agile" referring to when used in the context of software development?

Areas of knowledge + Experiments

- 1. Describe ("without looking") the 6 areas of knowledge (Kensing)
- 2. Explain the difference between having abstract knowledge about the users present work and having concrete experience with the same (Kensing)
- 3. Which areas of knowledge does the use of XP practices support?
- 4. Explain the similarities and differences between a technological spikes and experimental prototyping
- 5. Why do we need co-operation with end users in the development process?
- 6. Explain the meaning of the 2 areas in the middle of table 1 (Kensing). If necessary, look for answers in the text.
- 7. Give an example of a systems development situation where conducting an experiments could be helpful.
 - then suggest an outline of the experiment
- 8. Explain the difference between inductive reasoning and deductive reasoning

- 9. Give an example of (not necessarily related to IT)
 - a. inductive reasoning
 - b. deductive reasoning
- 10. What is a hypothesis?
- 11. Explain the difference between
 - a. the empirical-inductive method
 - b. the hypothetical -deductive method

Choosing and adjusting a method

- 1. State (without looking) the "dimensions" in the diagram over the 5 critical factors affecting method selection (Boehm/Turner)
- 2. Why may a team consisting of technical very skilled developers fail to succeed in an agile project?
- 3. Describe the three critical factors that relate to the type of project
- 4. Could a project that scores low on Dynamism still be suitable for an agile approach?
- 5. How can UP be applied in an agile form (what is done in a special way)?
- 6. How can XP be adjusted to fit special needs?

Outsourcing

- 1. Give examples of potential benefits and pitfalls of outsourcing
- 2. State 2 things to consider before making a decision to outsource a task
- 3. Explain the reason why you selected the specific freelancer
- 4. Explain the procedure you set up or followed during the outsourcing part of your project
- 5. What would you do differently if you should do outsourcing again?
- 6. Explain advantages and disadvantages of the way you communicated with you freelancer