

## Midterm Preparation

- What is software engineering?
- What is a software process?
- Explain the Types of Process Flow.
- Show the differences between the Waterfall prototyping and spiral model.
- What is Pair Programming (team working), Why? Explain briefly Scrum and/or crystal
- What is eXtreme Programming (XP)? Explain briefly ASD.
- Differences between models for ex. waterfall vs spiral, prototyping vs waterfall, v-model what is agile soft. devl.?
- what is extreme programming?
- write the main steps of extreme programming?
- Software Requirements Engineering Steps. (Inception, Elicitation, ...)
- Software Analysis (Scenario-based, Class, Flow, Behavioral Models)...
- Explain UML, Use Case, Activity Diagram, DFD, ERD, and all other UML diagrams...
- Explain main use of Behavioral, Interaction and Structural Diagrams/modelling.
- Explain Requirement Model, Specification, Elicitation. Software Requirements
- What does Domain Analysis do?

\*These questions may be also in exam questions.

Theoretical Exercises from Sommerville book: Ex-2.1, 2.2, 3.1, 3.2 and 3.3, 4.1, 5.1, 6.3, 7.2, 7.8

Try to solve also the following exercises... Ex. 4.5, 4.7, 4.8, 5.3, 5.4, 5.5, 5.6, 5.7, 5.9, 6.5, 6.6,

Pressman Book

Learn and solve for yourself (to increase knowledge in SE and solve easily theoretical questions in exam): Ex. 5.1 to 5.5, 5.10, 5.11 and 5.14. - Ex. 6.1 to 6.4 and 6.10. Solve -> Ex. 5.9, 6.5, 6.6

2. Provide two examples of software projects that would be amenable to the waterfall model, incremental model, prototyping model and to the incremental model. Be specific.

3. Is it possible to combine process models? If so, provide an example.