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Master of Science in Computer Science  
Cohort – 5 Foundation Programme

Sample Exam Questions

Software Engineering

1. Describe the phases in the Software Lifecycle?
2. Describe the waterfall model and the related advantages and disadvantages.
3. Describe the issue-based model.
4. Describe the Rational Unified Process. How are activities and iterations organized in this model?
5. Describe with examples the two types of hierarchies for organizing classes.
6. A business scenario is given and you need to produce the use case diagram and a simplified class diagram.
7. Explain the differences between failure, error and fault.
8. Discuss fault avoidance, fault detection and fault tolerance.
9. Discuss model-based testing.
10. Briefly describe the types of testing.
11. Discuss static and dynamic analysis.
12. Discuss black-box testing. Give an example.
13. Discuss white-box testing. Give an example.
14. Discuss the types of clients that could be encountered.
15. Discuss technological climate.
16. Discuss XP day-to-day practice.
17. Discuss planning and modeling in XP.
18. Discuss SCRUM as a methodology.
19. Sketch and describe an overview of SCRUM sprints and deliverables.
20. Discuss SCRUM activities.