Software Engineering - Final Exam SAMPLE

- 1. What is Software Engineering? (2 points)
- 2. Why is the Waterfall method described as a plan-driven development methodology? (2 points)
- 3. What do you think that some companies opening software product beta testing public? (2 points)
- 4. What is the most commonly used V&V activity in testing? (2 points)
- 5. What is the difference between Functional Requirements and Non-Functional Requirements? (2 points)
- 6. What are the advantages of Test-driven development in Software Engineering? (2 points)
- 7. What is the main difference between Requirement Elicitation and Requirements Specification? (2 points)
- 8. What are Software Design Patterns? (2 points)
- 9. Why is the scrum (agile) method convenient in modern software engineering? (2 points)
- 10. What is the difference between Release testing & User testing? (2 points)
- 11. What kind of methods/activities are there in Requirements Elicitation? (2 points)
- 12. How do companies get benefits and earn money from open-source software solutions? (2 points)
- 13. Why is the Activity Diagram widely used between software developers and non-software developers (salespeople, logistics people, finance people, etc)? (2 points)
- 14. Please draw UML diagrams to describe WSP (University-based information exchange application) (2 points)
- 15. Where do we use State Machine Diagrams? (2 points)
- 16. What is the availability of the principal dependability properties of software engineering? (2 points)
- 17. What is the 4 + 1 view model of software architecture? (2 points)
- 18. What are Context models in System Modelling? (2 points)
- 19. Why do you think that modern software operation system turns off automatically when processors heat up (at a higher temperature than the allowed temperature)? What are the principles behind this dependability property? (2 points)
- 20. Please describe how GitHub helps software developers (2 points)