
	TANTA UNIVERSITY FACULTY OF COMPUTERS AND INFORMATICS		
	EXAMINATION FOR (LEVEL 2)		
	COURSE TITLE: INTRODUCTION TO SOFTWARE ENGINEERING	COURSE CODE: CS251	
DATE: 29/5/2024	TOTAL ASSESSMENT MARKS: 60	PAGES : 4	TIME ALLOWED: 2 HOUR

Model 2

Select true or false

a) true

b) false

1. By developing the software incrementally, it is cheaper and easier to make changes in the software as it is being developed. True
2. Do not assume that readers understand technical software engineering language. True
3. Plan-driven and agile processes are suitable for different types of software. true
4. A software process is a sequence of activities that leads to the production of a software product. true
5. Professional software is usually developed by teams rather than individuals. True
6. Developing trustworthy software is considered one of the most key challenges facing software engineering. True
7. Rapid prototyping with end-user involvement is the only sensible way to develop graphical user interfaces for software systems. true
8. Roughly 40% of software costs are development costs; 60% are testing costs. False
9. Plan-driven activities (ex. specification, development, and validation) are interleaved rather than separate, with rapid feedback across activities. false
10. Production of games products need to develop several versions of prototype. True
11. Software has maintainability attribute mean that, it should not make wasteful use of system resources such as memory and processor cycles. false
12. In software validation step, the software is modified to reflect changing customer and market requirements. False
13. User requirements can't be written in natural language supplemented by appropriate diagrams and tables. False
14. A use case model can be taken as a simple scenario that describes what a user expects from a system. true
15. System managers are not considered as stakeholders. False
16. The process of finding out, and checking these services and constraints is called requirements engineering. true
17. One of the most IEEE codes of ethics, Software engineers shall not act consistently with the public interest. False
18. Structural models of software display the organization of a system in terms of the components that make up that system and their relationships. True
19. Plan-driven processes are processes where all of the process activities are planned in advance. True
20. Software validation mean that it meets the expectations of the system customer, while software verification mean that it conforms to its specification true
21. In extreme programming, requirements are expressed as scenarios (called user stories), which are implemented directly as a series of tasks. True
22. Class diagrams in the UML can not be expressed at different levels of detail. false
23. In web-based systems, it is expensive to change and upgrade the software. false
24. The term 'system requirements' means the high-level abstract requirements and 'user requirements' means the detailed description of what the system should do. False
25. Graphical models are most useful when you need to describe a sequence of actions. True
26. A system stakeholder is anyone who should have some direct or indirect influence on the system requirements. True
27. Open interviews, where the stakeholder answers a pre-defined set of questions. False

28. Consistency checks mean that, Requirements in the document should not conflict. True
29. Software engineers shall not advance the integrity and reputation of the profession consistent with the public interest. False
30. Sequence diagrams, which are used to model interactions between system components, although external agents may also be included. True

Choose the correct answer:

31. In system modelling, external perspective is represented using

a. context models	b. use case diagrams	c. sequence diagrams	d. class diagrams
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32. are stand-alone systems that are marketed and sold to any customer who wishes to buy them.

a. Generic products	b. Customized products	c. a,b	d. prototype
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33. In system modelling, behavioural perspective is represented using

a. Class diagrams	b. activity diagrams	c. state diagrams	d. b and c
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34. What are the key challenges facing software engineering?

a. Coping with increasing diversity	b. developing trustworthy software	c. a,b	d. None of the above
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35. In, the customers and engineers define the software that is to be produced and constraints.

a. Software specification	b. Software development	c. Software validation	d. Software evolution
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36. The Software includes a range of characteristics including reliability, security and safety.

a. Maintainability	b. Dependability	c. Efficiency	d. Acceptability
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37. is an initial version of a system used to demonstrate concepts and try out design options.

a. Software Prototyping	b. Incremental Delivery	c. Spiral Model	d. None of the above
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38. The interaction between the components of the system or between actors and system components is represented using.....

a. use case diagrams	b. sequence diagrams	c. class diagrams	d. a and b
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39. is the activity of translating the information gathered during the analysis activity into a document that defines a set of requirements.

a. Requirements specification	b. Requirements validation	c. Requirements elicitation	d. Requirements analysis
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40. The are application systems that run on a local computer, such as a PC.

a. Stand-alone applications	b. Interactive transaction-based applications	c. Embedded control systems	d. a,b
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41. In sequence diagrams, the interactions between objects are

a. listed on the bottom of the diagram.	b. listed on the top of the diagram.	c. indicated by annotated arrows.	d. indicated by dotted rectangle
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42.systems are software control systems that control and manage hardware devices.

a. Batch processing	b. Interactive transaction-based applications	c. Embedded	d. Entertainment
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43. is the process of grouping the common characteristics (attributes or methods) of similar classes in one general classes.

a. Generalization	b. Aggregation	c. Localization	d. None of the above
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44. considers whether the proposed system will be cost-effective from a business point of view and if it can be developed within existing budgetary constraints.

a) Requirements elicitation	b) Feasibility study	c) Requirements specification	d) Requirements analysis
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45. are constraints on the services or functions offered by the system.

a. User requirements	b. System requirements	c. Functional requirements	d. Non-functional requirements
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46. is the process of deriving the system requirements through observation of existing similar systems, discussions with potential users, task analysis, and so on.

a) Requirements elicitation	b) Requirements analysis	c) a,b	d) Feasibility study
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47.design, where you design the system data structures and how these are to be represented in a database.

a) Architectural	b) Database	c) Interface	d) Component
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48. means that all services required by the user should be defined.

a. Completeness	b. Consistency	c. Robustness	d. None of the above
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49. means that requirements should not have contradictory definitions.

a. Completeness	b. Consistency	c. Robustness	d. None of the above
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50. Which of the following metrics can be used to specify non-functional system properties?

a. Speed	b. Size	c. Reliability	d. All the above
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51. The user and system requirements should be

a. clear and unambiguous	b. easy to understand	c. complete and consistent.	d. All the above
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52. Natural language specification is

a. Expressive and intuitive	b. Ambiguous	c. universal	d. All the above
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53. Software is defined as

a. set of programs, documentation & configuration of data	b. set of programs	c. documentation and configuration of data	d. None of the mentioned
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54. What is Software Engineering?

a. Designing a software	b. Testing a software	c. Application of engineering principles to the design a software	d. None of the above
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55. Define Agile scrum methodology, project management that emphasizes

a) incremental progress	b) decremental progress	c) neutral progress	d) no progress
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56. Why do bugs and failures occur in software?

a) Because of Developers	b) Because of companies	c) Because of both companies and Developers	d) None of the mentioned
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57. is computer programs and associated documentation.

a. Software	b. Software Engineering	c. Web service	d. None of the above
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58. is an engineering discipline that is concerned with all aspects of software production.

a. Software	b. Software Engineering	c. Web service	d. None of the above
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59. is intended to show that, did the system do what was required correctly?

a. Verification	b. Validation	c. Efficiency	d. Acceptability
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60. is an initial version of a system used to demonstrate concepts and try out design options.

a. Software Prototyping	b. Incremental Delivery	c. Spiral Model	d. None of the above
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Best wishes
Dr. Marian Wagdy