# 2021软件工程期中随堂考试

**学号： 姓名： 成绩：**

1. 单选题（2分X20=40分）
2. Which question does the modern software engineer no longer concern?( a )

A. Why does computer hardware cost so much？

B. Why does software take a long time to finish?

C. Why does it cost so much to develop a piece of software?

D. Why can’t software errors be removed from products prior to delivery?

1. Software is . (d)  
   A. instructions (computer programs) that when executed provide desired

features, function, and performance;

1. data structures that enable the programs to adequately manipulate information;
2. descriptive information in both hard copy and virtual forms that describes the operation and use of the programs.
3. all the above
4. Software deteriorates rather than wears out, because ( c )
5. Software suffers from exposure to hostile environments
6. Defects are more likely to arise after software has been used often
7. Multiple change requests introduce errors in component interactions
8. Software spare parts become harder to order
9. Which one of the following is a functional requirement? (d)  
   A. Maintainability  
   B. Portability  
   C. Robustness  
   D. None of above
10. What is the first step of requirement elicitation? (d)  
    A.Identifying Stakeholder  
    B.Listing out Requirements  
    C.Requirements Gathering  
    D. All of above
11. What are the types of requirement in Quality Function Deployment(QFD) ? (d)  
    A. Known, Unknown, Functional  
    B. User, Customer ,Developer  
    C. Functional, Non-Functional  
    D. Normal, Expected, Exciting

7.Process models are described as agile because they ( b )

A. eliminate the need for cumbersome documentation

B. emphasize maneuverability and adaptability

C. do not waste development time on planning activities

D. make extensive use of prototype creation

8.The linear sequential model （waterfall）of software development is ( a ).

A. reasonable approach when requirements are well defined.

B. A good approach when a working core product is required quickly.

C. The best approach to use for projects with large development teams.

D. A revolutionary model that is not used for commercial products.

9.The incremental model of software development is ( b ).

A. A reasonable approach when requirements are well defined.

B. A good approach when a working core product is required quickly.

C. The best approach to use for projects with large development teams.

D. A revolutionary model that is not used for commercial products.

10.The prototyping model of software development is ( b ).

A. A reasonable approach when requirements are well defined.

B. A useful approach when a customer cannot define requirements clearly.

C. The best approach to use for projects with large development teams.

D. A risky model that rarely produces a meaningful product.

11.Evolutionary software process models ( d )

A. Are iterative in nature

B. Can easily accommodate product requirements changes

C. Do not generally produce throwaway systems

D. All of the above

12.The spiral model for software development ( c )

A. Ends with the delivery of the software product

B. Is more chaotic than the incremental model

C. Includes project risks evaluation during each iteration.

D. All of the above

13.The things that make requirements elicitation difficult are problems of ( d )

A.scope B. understanding

C. volatility D. all of the above

14.Which of following are NOT a UML diagram used creating a system analysis model? ( c )

A. usecase diagram B. Activity diagram

C. swimlane D.data flow diagram

15.Which of the following do NOTapply to agility to a software process? (c)  
A. Uses incremental product delivery strategy  
B. Only essential work products are produced  
C.Eliminate the use of project planning and testing  
D. All of above

16. Which of the following activities in a Generic Process Framework provides a feedback report from users? (d)  
 A. Communication B. Planning  
 C. Construction D. Deployment

17. Selection of a process model for software development is based on (d)  
A. Requirements B. Development team & Users  
C. Project type and associated risk D. all of above

18.According to generic activity frame work, the actions in modeling activity are (d)

A. Software engineering and design

B. requirement gathering and transition

C. requirement validation and production

D. requirement analysis and design

19.Which of the following is Not the feature in XP. (b )

A. Refactoring B.technic review

C. pair programming D.CRC model.

1. In which agile process model, the agile team includes operations staff who help to improve software quality by monitoring its performance in the production environment and proactively looking for possible problems before users find them. ( D)
2. Scrum B. Kanban C. XP D. DevOps

**二、多选题 (2\*15共30分)**

1. The nature of software applications can be characterized by their information about ( b c )

A. Complexity B. content

C. determinacy D. operation

1. Which of the items listed below are the software engineering layers? ( a c d )

A.Process B. Manufacturing

C. Methods D. Tools

1. The result of the requirements engineering elaboration task is an analysis model that defines which of the following problem domain(s)? ( a c d )

A. information B. domain model

C. behavioral D.functional

4. which the following are the UP (unified process) phases (bce)

A. communication B. inception

C. transition D. elicitation E.production

5. which the following are the umbrella activities (b d)

A. requirement analysis B. measurement

C. modelling E.software configuration management

6. Software specification may include ( bcd)

A. A software development plan B. A prototype

C. A written document D. A set of analysis model

7. The relations in the classes are ( bcd )

A. Inheritance B. dependency

C. generalization (or is a kind of) D. Association (or has a knowledge of)

8. The index card in CRC model consists of (a c d)

A. The class description B. class instance

C. class responsibility D. collaborator

9. The structure of class includes (abc )

A. Attribute B. Operation C. Class name D. State

10.In the analysis model, the scenario-based model includes ( a c d) .

A. usecase diagram B.sequence diagram

C. usecase specification D. activity diagram

E. state chart diagram

1. The principle artifacts in Scrum process are ( a c d )
2. the product backlog, B. user stories

C.the sprint backlog, D. the code increment. E. the increment buid

1. Kanban process is a kind of agility process, which is focused on ( b c )
2. continuous testing, B. change management

C. service delivery, D. increment delivery

1. Software Engineering is the application of a （ABE ）approach to the development, operation, and maintenance of software; that is, the application of engineering to software.

A. disciplined B. systematic

C. reasonable D. economic E. quantifiable

14. Process flow describes how the framework activities and the actions and the tasks that occur within each framework activity are organized with respect to sequence and time, process flow includes (ACD ).

1. Linear flow B. Cyclic flow C. Iterative flow

D. Evolutionary flow E. Increment flow

15.DevOps attempts to apply agile and lean development principles across the entire software supply chain, which involves several stages: (ABCDE )

A.Development B. testing C. Intergation

D. deployment E.Monitoring

二、判断题 （1.5\*20=30）

1. Software is a product and can be manufactured using the same technologies used for other engineering artifacts. ( X )
2. In the unified process model， requirements are determined iteratively and may span more than one phase of the process.( 对 )
3. In general software only succeeds if its behavior is consistent with the objectives of its designers.( X )
4. The best software process model is one that has been created by the people who will actually be doing the work.( 对 )
5. It is generally accepted that one cannot have weak software processes and create high quality end products.( 对 )
6. Software engineering umbrella activities are only applied during the initial phases of software development projects. ( X )
7. Agility is nothing more than the ability of a project team to respond rapidly to change.(X )
8. More than one software process model can be used in software development. (对)
9. The object-oriented method is to separate the data from its processing. (X)
10. The software process defines 5 framework activities, each framework activity defines a set of tasks which can NOT be adjusted according to the characteristics of the project （X）
11. In XP, the work on a task will be integrated into the whole system as soon as it is completed. （对）
12. A Use-case actor is always a person having a role that different people may play.（X）
13. Functional requirements capture the intended behavior of the system.（对）
14. Requirements elicitation is an iterative process.（对）
15. Activity diagrams can be used to model the processing of data.(对)
16. Process pattern can be used to solved common problems that are encountered as part of the software process.(对)
17. Waterfall model is a useful process model in situation where requirements are well defined and reasonably stable (对)
18. Prescriptive process models sometimes called “traditional” process models, Which strive for structure and order in software development. (对)
19. Elicitation is also called requirements gathering, the goal is to Establish basic understanding of the problem, the people who want a solution, the nature of the solution that is desired, and the effectiveness of preliminary communication and collaboration between the customer and the developer. (X)
20. The intent of negotiation in requirement engineering is to develop a project plan that meets developers needs reflecting the constraint in budget that have been placed on the software team. (X)

一、

1.a 2.d 3.c 4.d 5.d 6.d 7.b 8.a 9.b 10.b 11.b 12.c 13.d 14.d 15.c 16.a 17.d 18.d 19.d 20.d

二、

1.bc 2.acd 3.acd 4.bc 5.ace 6.ac 7.bcd 8.acd 9.acd 10.ace 11.ace 12.ad 13.abe 14.acd 15.abcde

三、

1.F 2.T 3.T 4.T 5.T 6.F 7.F 8.T 9.F 10.F 11.T 12.T 13.T 14.T 15.T 16.T 17.F 18.T 19.T 20.T