CIS 350 – Introduction to Software Engineering
Winter 2013, Quiz #1, Friday, February 22, 2013

Topics: Software Engineering and Software Process Models

Student Name: _____

1. A software _____ is a coherent set of activities that leads to the production of a software product.

   a) technique b) method c) process d) tool

2. What process model requires producing formal documentation at the end of each phase?

   a) Cleanroom b) Waterfall c) Prototyping d) XP

3. _____ maintenance refers to reactive modification of a software product performed after delivery to fix discovered problems.

   a) Corrective b) Preventive c) Perfective d) Adaptive

4. Which process model incorporates risk analysis (risk assessment and reduction) explicitly?

   a) RUP b) Waterfall c) Spiral

5. _____ maintenance refers to modification of a software product performed after delivery to keep a software product usable in a changed or changing environment.

   a) Corrective b) Preventive c) Adaptive d) Perfective

6. The _____ model should only be used when the requirements are well understood and unlikely to change radically during system development.

   a) waterfall b) spiral c) prototyping d) cleanroom

7. Prototyping is an effective mechanism for identifying software requirements.

   a) True b) False

8. Extreme programming is a/an _____ process model.

   a) document-driven b) agile c) risk-driven d) heavy-weight

9. Pair programming is an integral part of _____ process.

   a) waterfall b) XP c) prototyping d) spiral

10. _____ maintenance refers to modification of a software product after delivery to upgrade functionality, or improve performance or maintainability.

    a) Corrective b) Preventive c) Adaptive d) Perfective

11. Which process model relies primarily on reuse-oriented approach to software development?

    a) XP b) waterfall c) prototyping d) component-based software engineering

12. _____ process model is based around the development and delivery of very small increments of functionality, customer involvement in the process, constant code improvement, and pair programming.

    a) Waterfall b) Spiral c) Prototyping d) XP

13. Which process model focuses on integrating existing parts rather than developing them from scratch?

    a) XP b) waterfall c) component-based software engineering d) prototyping

14. _____ process model is also commonly known as the classic life cycle model.

    a) Waterfall b) XP c) Prototyping d) Spiral

15. User stories are associated with the _____ process model.

    a) Waterfall b) Spiral c) Prototyping d) XP

16. Incremental development helps you improve your _____ where as iterative development helps you improve your _____.

    a) process, product b) product, process c) product, product d) process, process

17. In RUP, the four phases in the correct order are:

    a) Elaboration, Inception, Construction, and Transition
    b) Inception, Elaboration, Construction, and Transition
    c) Elaboration, Inception, Transition, and Construction
    d) Inception, Transition, Elaboration, and Construction

18. In RUP, the focus of the *construction phase* is to _____.

    a) define software architecture
    b) specify scope of the project
    c) deliver final product ("public release")
    d) produce first external release ("beta") of the software

19. Which process model recommends the use of these six best practices – develop software iteratively, manage requirements, use component-based architectures, visually model software, verify software quality, and control changes to software?

    a) Waterfall b) Spiral c) RUP d) XP

20. List any three key practices of extreme programming (XP).