Multiple-Choice Questions:

1. What often-false assumption does the waterfall model made about requirements specifications?

    a. Specifications are predictable

    b. Specifications are stable

    c. Specifications have low change rates

    d. All of the above

    e. None of the above

2. True or false? It is better to discover defects later in the development process. That way, you can have more of the system finished before you worry about fixing things.

    a. True

    b. False

3. An empirical process model iterates between…

    a. … feedback and adaptation

    b. … design and implementation

    c. … requirements gathering and design

    d. … user studies and testing

    e. None of the above

4. True or false? In iterative software development, it is recommended that iterations be 3 to 6 months in length.

    a. True

    b. False

5. If your project has unstable requirements (i.e., that are prone to change), you should use a waterfall process model.

    a. True

    b. False

6. In iterative development, how long should an iteration generally be?

    a. 1 week

    b. 2–6 weeks

    c. 2–4 months

    d. 6 months to a year

    e. None of the above

7. Which of the following is meant by a *software development process*?

    a. A running instance of a program; for example, a UNIX process is a softw. devel. process

    b. Something developers <u>do</u> to accomplish a goal during a project; for example, planning poker is a softw. devel. process for estimation

    c. Something developers <u>use</u> to accomplish a goal during a project; for example, Subversion is a softw. devel. process for configuration management

    d. A structure imposed on the development of a software product; for example, developing iteratively and incorporating best practices might be ingredients in a softw. devel. process

    e. None of the above

8. Which one of the these is a <u>bad</u> length for an iteration?

    a. 1 week
    b. 2 weeks
    c. 4 weeks
    d. 6 weeks
    e. All of the above

9. Which one of these is appropriate in an agile and iterative development process?

    a. Gather a complete set of requirements before designing/building anything.

    b. Implement the backend of the system first—that is, before implementing the frontend functionality with which users interact.

    c. Generate and maintain complete, detailed design documents, which comprehensively model all aspects of the design.

    d. Implement the system incrementally, building it up bit by bit.

    e. Test the code at the end, after the system has been completely implemented.

10. Which of the following is not an agile value?

    a. Individuals and interactions over processes and tools

    b. Working software over comprehensive documentation

    c. Customer collaboration over contract negotiation

    d. Responding to change over following a plan

    e. None of the above (i.e., all are agile values)

11. Which of the following problems does iterative development directly address?

    a. Design erosion

    b. Unstable requirements

    c. Program comprehension

    d. All of the above

    e. None of the above

12. Which type of process control model is appropriate for software development?

    a. A "defined" process control model

    b. An "empirical" process control model

    c. A "remote" process control model

    d. A "parallel" process control model

    e. None of the above

Solutions:

1. d

2. b

3. a

4. b

5. b

6. b

7. d

8. a

9. d

10. e

11. b

12. b