Carnegie Mellon University

Software Engineering Institute

SEI-CERTIFIED PSP DEVELOPER EXAMINATION: SAMPLE QUESTIONS

September 2015

Listed below are sample questions representative of those found on the PSP Developer Exam.

1. Given the information below, what is the to-date % time in phase for code review?

Time in Phase (minutes)	Plan	Actual	To Date
Planning	146	166	710
Detailed Design	425	332	1220
DLD Review	200	123	543
Code	390	333	1639
Code Review	150	162	754
Compile	30	16	288
Unit Test	105	31	749
Postmortem	90	58	737
Total Time	1536	1221	6640

- A. 4
- B. 11
- C. 18
- D. 25

2. Which of the following is NOT a criterion for selecting an estimate proxy?

- A. The proxy is easy to visualize early in the development process.
- B. The proxy correlates with development effort.
- C. The proxy is insensitive to implementation variations.
- D. The proxy is a physical entity that can be measured and automatically counted. (see answers below)

3. Which of the following statements best describes earned value tracking?

- A. It establishes a value for every task and credits that value based on percent completed.
- B. It establishes cumulative time planned and credits completion based on actual time spent.
- C. It establishes a sequence for all tasks and credits only those tasks completed in sequence.
- D. It establishes a value for every task and credits that value when the task is complete. (see answers below)

4. On a project, the following minutes were recorded per phase: design review + code review 50; compile 10; test 20; total 150. Using this information, determine which of the following is the percent Failure COQ.

- A. 20%
- B. 33%
- C. 66%
- D. 150% (see answers below)

5. Which of the following design templates describes how the program interacts with the user?

- A. operational specification template
- B. logic specification template
- C. functional specification template
- D. state specification template (see answers below)

6. A defined process is helpful because it

- A. ensures the process does not change over time
- B. enables an individual to make complete and accurate plans
- C. ensures that everyone uses the organization's standard planning factors
- D. facilitates the use of standard planning models such as COCOMO (see answers below)

7. The term "time in phase" is a measure of the time that is

- A. needed for individuals to transition from one project phase to the next
- B. spent in the phase definition parts of a project
- C. spent by individuals in each phase of a process
- D. spent by individuals on phase activities rather than on project-related activities (see answers below)

8. The relative size table is used to do which of the following?

- A. Estimate the relative sizes of programs.
- B. Determine the relative sizes of products.
- C. Record the sizes of new developed parts.
- D. Estimate the sizes of proxy parts. (see answers below)

9. Which of the following is a PSP planning principle?

- A. Make a plan before committing to or starting a project.
- B. Do not make a plan until the requirements are completely defined.
- C. Make a plan only for large, complex projects.
- D. Make a plan only for projects that have visible external commitments. (see answers below)

10. If a defect removal rate (defects/hour) is 10 in design, 25 in code review, 50 in compile, and 5 in unit test, what is the value of the highest defect removal leverage?

- 1. 1
- 2. 10
- 3. 25
- 4. 50 (see answers below)

Answers

- 1. B
- 2. C
- 3. D
- 4. A
- 5. A
- 6. B
- 7. C
- 8. D
- 9. A
- 10. B

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