**SWE 4663 - Software Project Management Due: 6:30 PM (ET)**

**EXAM II**

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**Instructions:** Answer the following 13 multiple-choice/true-false questions (1 point each) and four essay questions (3 points each) total of 25 points.

**Half of** **one point (out of 25) will be deducted for each minute that your submission is late.**

You may consult your book, your notes, D2L discussions, and any other reference material, including online references. You may *not* discuss the examination with others, whether they are members of the class or not.

**Multiple-Choice/True-False Questions** (**highlight your answer**)

* + - 1. Project resource planning is about

1. Tools and Equipment
2. Human resources
3. Methodologies and processes
4. All of the above
   * + 1. Which of the following activities is considered *indirect* project activity?
   1. Coding
   2. Status monitoring
   3. Testing
   4. They are all direct project activities.
      * 1. Which of the following is NOT true?
   5. The process provides the *macro* steps
   6. Methodologies provide *micro* steps that never transcends the macro steps.
   7. Methodologies provide *micro* steps that sometimes may transcend the macro steps.
   8. A methodology is a prescribed set of steps to accomplish a task.
      * 1. Which of the following is NOT true?
5. **Process map** is used to show users the steps to perform before moving on to the next step.
6. **Process flow** shows users which task to go after they complete the current task.
7. **Processes and sub processes** can be viewed as the transformation from high level process plan to project-specific model by identifying and organizing the major steps of the process, and providing the details of sub processes if necessary.
8. They are all true.
   * + 1. An organizational structure in which people are grouped based on the functions they perform is called:

* 1. Hierarchical structure
  2. Functional structure
  3. Matrix structure
  4. None of the above
     + 1. Which of the following is true about EV (Earned Value)?

1. EV = Budgeted Cost of Work Performed - Budget at Completion
2. EV = Budget at Completion / Planned Value
3. EV = Budgeted Cost of Work Performed / Budget at Completion
4. None of the above
   * + 1. Which of the following is true about Cost Performance Index (CPI)?
5. If CPI = 0 then we are on cost target.
6. If CPI < 1 then cost over-run.
7. Both A and B.
8. None of the above
   * + 1. Regarding planned adjustments, we need to make adjustments that are
9. Incremental *and* large
10. Incremental *and* small
11. Incremental
12. Small
    * + 1. Which of the following is not true about Release Management Council?
13. RMC needs a person who guides and leads the group, and is usually a midlevel manager or an experienced project manager
14. Members are allowed to carry full-time development or other assignment workloads
15. Members should participate in the regular project status meetings
16. They are all true
    * + 1. Which format is especially helpful for presenting productivity and defect related data?
17. Bar charts
18. Histograms
19. Control charts
20. Pie charts
    * + 1. The goals for a project is normally defined and set during the *organizing* phase of software project management.
21. True
22. False
    * + 1. In activity graphs, an activity with precursor can start as soon as one of the activities making the precursor is complete.
23. True
24. False
    * + 1. Requirements process planning includes the management of changes and modifications.
25. True
26. False

**Essay Questions** (For questions with multiple parts, answer each part separately, **do not combine** them (points will be deducted if combined).

1. Explain what issues the software project manager *must consider* when selecting tools for the project.

1. (a) What does the COCOMO stand for?

(b) Explain the purpose of its use.

(c) COCOMO I was originally based on 56 projects reflecting 3 modes. List these modes.

(d) Explain these 3 modes.

1. Suppose for a risk item, say X, there are three mitigation alternatives as follows:

* The cost of mitigation for alternative 1 is $8500, for alternative 2 is $6000, and for alternative 3 is $9000.
* The probability of failure for alternative 1 is 50%, for alternative 2 is 75%, and for alternative 3 is 45%.

1. As a project manager, who is concerned about both, the cost and probability of failure, which mitigation approach (alternative 1, 2 or 3) you choose?
2. Explain *how* you decided which mitigation approach is the best for you (For full credit, you should show the formal process/method covered in this course).
3. The traditional approach to making unplanned project adjustments in response to problems detected via project monitoring follows a four-step approach. Explain these four steps.