CS 635 Final Exam

Name _____

Answer 10 of the following problems. Indicate which problems you wish to have graded by marking the problems to be graded.

1. In a language with multiple inheritance one does not need the Bridge pattern. True or false. Explain your answer.

2. The builder pattern uses a director and a builder.
a. What is the role of the director and the builder?

b. Combining the director and the builder into one class would make for a simpler implementation as one would not have to deal with passing data between the directory and builder. Why does the pattern use two components instead of one?

3. List one pattern (other that the Flyweight) that is often implemented using the Flyweight?

4. What pattern is suggested to use in implementing the "Sweeping it Under the Rug pattern"?

5. The interpreter pattern could be considered an application of which pattern?

6. In what way might the Façade and Mediator patterns be considered similar?

7. The mediator pattern is often abused in what way?

8. What is the difference between a structural pattern and a behavioral pattern? Give an example.

9. What makes a pattern an architectural pattern?

10. The façade is used to provide new functionality to the system. True or false? Justify your answer.

11. Explain intrinsic and extrinsic state.

12. Why does the Big Ball of Mud pattern suggest postponing working on architecture when developing software?

13. What justification(s) does the Piecemeal Growth pattern given for not using a master design that is produced at the beginning of a project.

14. What is the role of the Controller in the MVC pattern?

15. What is the function of an active filter in the Pipes & Filter pattern?

16. What are some of the benefits of the Broker pattern?