Part 1

1. Is emotion computation? Why or why not?

2. Consider this syllogism that Descartes proposed as proof that the mind is not a physical object:

     Minds can do X.
     No physical object can do X.
     Therefore, minds are not physical objects

What is the flaw in this syllogism?

3. In terms of the tri-level hypothesis, how was young Frederic Gauss able to solve a really complicated math problem so much faster than the other kids?

4. What are the philosophies of monism and dualism? Provide three pieces of evidence for the philosophy which has much more support than the other.

5. Give two examples NOT FROM CLASS of a structural kind and two examples NOT FROM CLASS of a functional kind.

6. Many people have a hard time imagining that a computer could possibly have a mind. Given what we learned in class, why is that?

7. In Searle's Chinese room, Searle argues that the man in the room does not understand Chinese, even though the man is manipulating symbols and giving appropriate responses by using a rule book to translate the symbols. He then argues that computers won't have understanding because they are like the man in the room. According to what we learned in class, what is the biggest flaw in Searle's argument?

8. What part of the brain may play a special role in consciousness?

Part 2

1. Babies who are breast-fed have higher IQs than babies who are not breast-fed. What is the main reason this is so?

2. What technique would I use to teach my dog how to bark the song "Jingle Bells"?

3. How does a Bayesian approach to hypothesis testing differ from typical hypothesis testing?

4. How would you train your dog to salivate whenever they hear a Taylor Swift song?

5. One of the main reasons structuralism wasn't effective is because…

6. Why does the moon appear to follow us when we drive in a car and the moon is on our right above the horizon?

7. What is the motion after effect and why does the motion after effect occur?

8. Why do we see motion in the rotating snakes illusion?

Part 3

1. According to what we learned in lecture, how large is iconic memory?

2. What is the capacity of visual working memory?

3. What is the capacity of working memory measured by repeating digits?

4. How is working memory search different from visual search?

5. If you have problems with the Wisconsin card sorting task (e.g. colors, shapes and numbers), then the part of working memory that is impaired is…

6. Briefly explain the results of the experiment on chess memory with grandmasters and normal chess players.

7. Give two examples of implicit learning.

8. Explain the results of the explicit-implicit study on memory that looked at the effects of three different types of encoding on explicit and implicit memory.

Part 4

1. When asked 'What % of a cube is taken up by a sphere dropped inside?',most people estimate 74% because…

2. A bat and a ball together cost $21, with the bat costing $20 more than the ball. How much does the ball cost? The correct answer is $0.50 although most people would answer $1. Why do people answer questions like this incorrectly so often?

3. People are given two questions:

    Question 1: How happy are you with your life in general?
    Question 2: How many dates did you have last month?

How does the question order affect the correlation of the answers, and what does that mean about happiness assessment?

4. In an experiment, if I experience ending pain level 50 and maximum pain level 64, then what would be my remembered pain level from the experiment?

5. Given an example of the violation of dominance that WAS NOT USED IN CLASS.

6. When given the choice between a 100% chance of 1 million dollars and 1% chance of 500 million dollars, what will most people choose and why will they choose that option? Name someone who would be likely to choose the 1% chance of 500 million dollars.

7. What are the components of well-defined problem solving?

8. Give an example of a problem from class where the solution depends upon re-representing the problem.

9. Tell me what you learned about free will from our discussion (Maximum 400 words).