Directions for Final Exam

Bring two bluebooks available in the university bookstore with nothing written in or on them (not even your name). These may be redistributed at the time of the exam.

The exam will consist of the three parts, for which the instructions are below. Two of the questions require essays. There are different ways of addressing the essay questions that can result in an excellent grade. You will be judged on the overall quality of your answer, not whether your answer corresponds to a pre-set model. In general, a more thorough answer that explicates the key ideas will score higher than a skeletal answer. Don’t pad your answer, but strive to write as complete an answer as possible given the time constraints. You should aim your answer at a generally knowledgeable student who has not taken this class. Explain all that you would need to explain for them to understand your answer.

Part A. Answer each of the following six questions in two to three sentences each (not more). Each question is worth up to 5 points (30 points total). Six questions will be selected from those below:

1. What did Tolman mean by a cognitive map?

2. How does operant conditioning differ from classical conditioning?

3. What feature of perception was Bruner demonstrating with the anomalous playing card experiment?

4. What is the capacity limitation that Miller discovered for human short term memory?

5. How does the approach of cognitive psychologists compare with that of the behaviorists with respect to the kind of evidence that can be used to assess psychological explanations (theories)?

6. What is Chomsky’s poverty of the stimulus argument and what is it supposed to show?

7. What makes some Turing machines universal?

8. What use did Newell and Simon make of the problem:
   
   \[
   \begin{array}{c}
   \text{DONALD} \\
   + \text{GERALD} \\
   \hline
   \text{ROBERT} \\
   \end{array}
   \]
   \[D=5\]

9. How do (philosophical) functionalists characterize the relation of mental states to the brain?

10. How is the inverted spectrum objection to functionalism?
11. Why is it important to eliminative materialists to argue that folk or common-sense psychology is a theory? What alternative to it being a theory are they rejecting?

12. What is the difference between token and type identity claims?

13. What does Fodor take the special sciences to be in the business of providing?

14. What is the claim of the multiple realizability argument?

15. What would it be for a “syntactic engine” to emulate a “semantic engine”?

16. What consequence does Fodor draw from his assumption that learning is a process of hypothesis testing?

17. What does Fodor mean by saying that thought is productive?

18. What is meant by episodic memory?

19. What is meant by procedural memory?

20. What distinguishes the memory systems approach from the component of processing approach?

21. What is meant by a flash bulb memory?

22. What technique did Neisser develop for studying the accuracy of flash bulb memories?

23. What technique did Loftus develop for investigating the accuracy of eye-witness testimony?

24. What sorts of memory deficits does H.M. experience and what memory abilities does he retain?

25. What is meant by memory condensation?

**Part B. Address the following question in an essay (35 points). The essay question will be selected from one of the following:**

1. Cognitive psychology both rejected behaviorism and preserved important elements of behaviorism. Be as specific and concrete as possible about features of behaviorism that were rejected and those that were retained. As much as possible, tie your answer to specific psychologists we have discussed.

2. Cognitive psychologists cannot just observe the processes they think are operative in the mind. Describe the main ways in which they go about confirming or rejecting proposals as to how the mind works. Discuss at least one example of research in cognitive psychology that we have
examined sufficient detail to show how evidence is thought to support or discredit claims about how the mind works.

3. Describe in detail the situation of Searle’s Chinese room and explain how Searle uses it in his argument against the claim that a properly programmed computer could have a mind. Describe what you take to be the most compelling of the objections to the Chinese room argument and say why you think the objection either succeeds or fails to undercut the argument.

**Part C. Address the following question in an essay (35 points). The essay question will be selected from one of the following:**

1. Assess computer memory as a model for human memory, discussing both ways in which it is suggestive about the operation of memory and respects in which it is misleading. In evaluating the computer model, discuss a specific example of memory research that we discussed (e.g., Magnani’s paintings, Bartlett’s transformed drawings or *War of the Ghosts*, Linton’s study of her own forgetting).

2. How reliable (accurate) is human episodic memory? Focus on both respects in which it does seem to be reliable and respects in which it misleads. Selectively discuss evidence we have considered in class about the accuracy of memory. What do you think are the implications of this research for the ways memory figures in our society? Give your reasons for these implications.

3. Discuss the relation between episodic memory and personal identity. Does losing memory (as in the case of H.M.) or forgetting about specific events in a person’s life change a person’s sense of identity or understanding of himself/herself? Describe ways in which memory for events in one’s life typically changes over time and the implications of this for the relation between memory and personal identity.