

PHI 452A
Mid-Sem Exam (Sept 2024)
Marks: 30; 2 Hours

Instructions

- Read questions carefully
- Part A questions: 1.5 marks each; one-two statements type.
- Part B questions: 7.5 marks each; critical analysis/long answer type (500-750 words tentative).

Part A

1. What are propositional attitudes having meaning or semantic properties? Use 'aardvarks' example.
2. What is Cartesian 'method of doubt' and what's its significance to cognitive science?
3. What, according to Cain, is the fundamental property of thinking?
4. State the relevance of Meno's paradox for learning. What does it offer on innateness?
5. State the relevance of Quine's thesis.
6. Develop a case against $K=JTB$.
7. Analyse ontologically the difference between atomism and dynamism.
8. What led to the bankruptcy of the behaviourist approach, how?
9. Does Turing machine favour representationalism, how?
10. What is Aristotelian teleology and his schema of scientific inquiry?

Part B (Any 2)

1. Write a critical note of four major ideas that led to the birth of cognitive science (Behaviorism, Representations, Computation, Functionalism, etc).
 2. Write an essay on how Hume and Hartley's psychology (in the light of laws and Newtonian principles) could be welded into one as against Cartesian and Locke's. How does Kant attempt to resolve the issue?
 3. Conceptually and critically analyze the issues associated with Materialism in all three senses (Hobbe's, Mettrie's and Churchland's); Do you think that psychology does better as a branch of biology; develop your points from Aristotle and Evolution.
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Instructions

- Read questions carefully
- Part A questions: 2 marks each; short answer type.
- Part B questions: 15 marks each; critical analysis/long answer type.

Part A
(Attempt 5)

1. What is multiple realizability and the associated problem?
2. Make a diagrammatic representation of two neurons interacting. Name 5 major parts/lobes of the brain and their functions.
3. Make a critique of Three worlds hypothesis from emergence of cognitive and knowledge evolution.
4. What do we understand by a plastic brain? How does it connect with Hebbian learning and Ramachandran's research?
5. Full forms of fMRI, LGN, PET, EEG,
6. What is blindsight, inattentional blindness, change-blindness? What philosophical problem they highlight as?

Part B (Any 2)
Write an essay on:

1. Evaluate:
 - a. Strengths and limitations of Classical Computationalism.
 - b. Does Connectionism do any better on these challenges posed by Computationalism; how? Can they marry? Evaluate based on Learning, Systematicity, and graceful degradation?
 - c. How do you respond to the argument "whether Otto's notebook is part of his mind" from extended mind hypothesis?
2. A detailed note on:
 - a. All different contrasting theories of Concepts and representations by Cain. Which one do you adhere to and why?
 - b. Are concepts atomistic? Does Fodor support representations for concept acquisition? Support your point.
 - c. Twin Earth Thought experiment and its significance
3. Write a critical essay on
 - a. i) Nervous systems and their roles in cognition (anatomy and physiology),
 - b. ii) Different visual perceptual pathways (double dissociations), brain data, and consciousness from Cain
 - c. iii) Vision as brain-bound process (Marr's, computationalism) vs Vision as bodily-activity (Enactive) debate.