Computing Machinery And Intelligence

Alan Turing, Quiz edition

How does Turing propose to answer the question “Can machines think?”

A. By defining the terms “Machine” and “think” (Incorrect. In the first paragraph, Turing states: “lf the meaning of the words ‘machine’ and ‘think’ are to be found by examining how, they are commonly used, it is difficult to escape the conclusion that the meaning and the answer to the question, ‘Can machines think?’ is to be sought in a statistical survey such as a Gallup poll. But this is absurd. Instead of attempting such a definition I shall replace the question by another…”p. 524)
B. By discovering whether machines have brains (Incorrect. There is no discussion in the article of whether machines have brains)
C. By devising a test that would require a machine to act like a human. (Correct. This is what Turing calls “The Imitation Game”. See especially the last paragraph of section 1.)
D. By hiring an engineering team to build a thinking machine. (Incorrect. While Turing does talk about engineering teams, he does not discuss this as a way to discuss the question of whether machines can think.)

What is true about Turing's "Imitation Game"?

A. Anything that could win the game is a thinking thing. (Correct. Turing writes: "The game may perhaps be criticized on the ground that the odds are weighted too heavily against the machine... May not machines carry out something which ought to be described as thinking but which is very different from what a man does? This objection is a very strong one, but at least we can say that if, nevertheless, a machine can be constructed to play the imitation game satisfactorily, we need not be troubled by this objection." p. 526)
B. Any thinking thing could win the game. (Incorrect. see above)
C. The game includes demonstrations of physical abilities and characteristics. (Incorrect. The imitation game is specifically formatted so that physical characteristics are NOT demonstrated.)

What is the “Heads in the Sand” objection to Turing’s view?

A. Machines cannot have sand in them or they will not function properly. (Incorrect)
B. It would be awful if machines could think, therefore they cannot. (Correct. Turing writes: “The ‘Heads in the Sand’ Objection[:] ‘The consequences of machines thinking would be too dreadful. Let us hope and believe that they cannot do so.’” p. 528
C. Machines have no souls, so therefore cannot have minds. (Incorrect. This is the Theological Objection.)
D. Mathematics shows that there are limits to the powers of discrete-state machines. (Incorrect. This is the mathematical objection.)

How does Turing answer the "Argument from Consciousness"?

A. God could give souls to any being God wants, including machines, and beings with souls have consciousness. (Incorrect. This is Turing's response to the theological argument.)
B. Machines indeed cannot write poetry, but can still be conscious. (Incorrect. Turing specifically allows the possibility of machines writing poetry.)
C. The description of thinking is not evidence for actual thinking, so machines cannot be conscious. (Incorrect. This *is* the argument from consciousness, not Turing's *response to* the argument from consciousness.)
D. Winning the imitation game would be good enough reason to attribute consciousness. (Correct. See pp. 529-530)