Logic [PY 1070]

Introductory reading


(Note: formal logic does not figure as such in the examination for this paper, but some knowledge of elementary formal logic is necessary for the subject as a whole. And this is a gentle introduction to that subject.)


Sample examination questions

1. What is it for an argument to be valid?
2. Why might one doubt that entailment is transitive?
3. Examine one challenge to the correctness of classical logic.
4. Is there an adequate account of indicative conditionals in terms of truth-conditions?
5. Does Frege’s puzzle about identity show that there is more to the meaning of a proper name than its reference?
6. ‘To know the meaning of a name is to know its reference.’ Say precisely what you take this claim to amount to, and discuss whether or not it is true.
7. Explain and discuss Russell’s analysis of sentences containing definite descriptions in grammatical subject place.
9. Are there any logical reasons to affirm or deny that there are non-existent things?
10. ‘Many things don’t exist.’ Can this claim be refuted?
11. What is the best way to explain the concept of analyticity?
12. Discuss whether the following would be a good formulation of Leibniz’s Law (that identicals are indiscernible): ‘If a sentence a=b is true, then any sentence containing a must have the same truth-value as a corresponding sentence in which a is replaced by b.’
13. ‘Everything is necessarily itself. So all true identity statements are necessarily true.’ Discuss.
14. How should one give the logical form of English sentences containing modal idioms (e.g. ‘must’, ‘can’, ‘necessarily’)?
15. How, if at all, can contingent truths be known a priori?
16. What does the Liar Paradox tell us about truth?

17. Can there be a satisfactory account of the notion of correspondence employed in the claim that ‘a proposition or statement is true if it corresponds to the facts’?

18. ‘Asserting that P is true is equivalent to asserting simply that P exists.’ Does it follow that there is no substantive account of truth?

19. ‘Truth entails coherence, not vice versa.’ Does this refute coherence theories of truth?