

# TIME EXAM STUDY GUIDE

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Intro Metaphysics

- Wednesday, December 21, 4pm, in our usual classroom
- Closed-book, closed notes

The format will be a mixture of true/false or multiple choice type questions, on one hand, and short-answer/short essay on the other. The short answer section will mostly focus on theories and arguments discussed in class, but I may also ask you to extract, explain, and evaluate a numbered-premise argument from a short paragraph.

It will stress understanding rather than memorization. For example, you don't need to memorize the exact wording of the numbered-premise arguments on the handouts. However, you do need to know the ideas of those arguments, and the main objections we made to them. Similarly, you need to be familiar with the main concepts and theories that were discussed in the readings and in class. I might, for example, ask you something like this: "What is one of the paradoxes of time travel, and how does Lewis resolve it?"

To prepare for the exam, the handouts will be useful. They contain the main theories and arguments we discussed, as well as the main concepts. But familiarity with the handouts won't be enough. For example, although the handouts contain many arguments, they rarely contain the justifications for or the objections to the premises that we discussed in class. So if you don't have good class notes, you probably should find someone who does.

Below are examples of short essay questions I might ask. Present your answers concisely. If you use philosophical jargon, explain it. For example, if you use the term 'presentism', you must define it. Important: be sure you know how to present, explain, and evaluate arguments (see the assignment sheet for paper #1). When you present arguments, it isn't important to word them exactly the way I do, but the basic meaning and logical structure should be the same.

1. What does McTaggart mean when he says that time is unreal? (Answering this question involves distinguishing between the A-series and the B-series.)

2. What is McTaggart's overall argument that time is unreal?
3. What is McTaggart's argument from change? Be sure to explain the strongest reasons we considered in class for believing the premises.
4. In the argument from change, one of the premises was that change isn't possible if there is no A-series. Explain McTaggart's reason for thinking this is true, and explain the objection to this reason based on Russell's theory of change. What does McTaggart say in response?
5. What is McTaggart's argument that the A-series is incoherent? How did we respond to this argument in class?
6. Describe Smart's B-theory of time. This should include explaining tenseless predication, the temporal parts account of change, and the token-reflexive theory of tensed statements.
7. What are Smart's hyper-time and "how fast does time pass?" arguments against the A-theory?
8. Present the moving spotlight and growing block theories of time. How are they the same and how are they different? Explain the problem that each of them faces in explaining what it means for time to pass—what it means for the present moment to change.
9. What does Broad say about the truth values of judgments about the future?
10. What is presentism? Contrast it with the other theories of time (B-theory, moving spotlight, growing block). Illuminate the contrast by comparing it with the contrast between the two views of "existence in Greek mythology" and "existence in the mind" that Prior considers.
11. What is the "Thank goodness that's over" argument? How might a B-theorist reply?
12. "...*he may even now — if I may use the phrase — be wandering on some plesiosaurus-haunted oolitic coral reef, or beside the lonely saline seas of the Triassic Age*". What is the apparent contradiction suggested by these words? What is the two-dimensional time solution to this problem? What is Lewis's objection to that solution? Describe Lewis's preferred solution (distinguishing personal and external time).

13. In case A, a time traveler goes back in time to the time of the dinosaurs. In case B, someone walks into a room and is killed by a demon; but also, at the time of the dinosaurs, another evil demon had decided to create a person, who just happened to be exactly similar to the person the first demon killed. How does Lewis distinguish between these cases? Be sure to mention the theory of persons as space-time worms.
14. Describe what a time traveler would look like to a non-time-traveling bystander, in a case where the trip is non-instantaneous (i.e., it takes up time in the time traveler's personal time), and in which the time machine and traveler are located throughout the trip in ordinary space and observable to watchers.
15. What is wrong with the following argument for the impossibility of time travel?

If you time traveled, you would change the past. For example, *right now, it is true that there was a certain tree in the Triassic period.* But if I time travel back and destroy the seeds from which it sprang, *then it is no longer true that in the Triassic period, there is such a tree.* This would be possible, if time travel is possible. But it isn't possible: since B-series judgments are permanent, the two italicized sentences are inconsistent.

Be sure to compare the conception of changing the past presupposed by this argument with a parallel conception of changing the present.

16. What is the grandfather paradox? How does Lewis resolve it?
17. What is Lewis's contextual notion of ability ('can')? Illustrate with the example of speaking Finnish. Apply to the case of killing Grandfather.