

Scientific Foundations of Philosophy

Philosophy And Science · Practice Test · 15 Questions

1. Which philosophical position asserts that all knowledge is derived from sensory experience, a concept that aligns with the empirical methods of modern science?

- A) Rationalism
- B) Empiricism
- C) Idealism
- D) Dualism

2. Who is credited with introducing the 'cogito, ergo sum' argument, which marks a foundational shift toward subject-centered epistemology in Western philosophy?

- A) John Locke
- B) David Hume
- C) René Descartes
- D) Immanuel Kant

3. In the philosophy of science, what is the term for the process of drawing general conclusions from specific observations?

- A) Deduction
- B) Induction
- C) Abduction
- D) Reductionism

4. Which principle states that among competing hypotheses, the one with the fewest assumptions should be selected?

- A) Occam's Razor
- B) The Principle of Utility
- C) Categorical Imperative
- D) The Law of Non-Contradiction

5. What is the primary focus of the 'Mind-Body Problem' in philosophy of mind?

- A) The evolution of the nervous system
- B) The relationship between mental states and physical brain states
- C) The social structure of human civilizations
- D) The ethics of biological experimentation

6. What is the logical fallacy that involves attacking the character of the person making an argument rather than the argument itself?

- A) Post hoc ergo propter hoc
- B) Ad hominem
- C) Straw man
- D) Circular reasoning

7. According to the theory of physicalism, what is the fundamental nature of reality?

- A) Non-material spirits
- B) Mathematical abstractions
- C) Physical matter and energy
- D) Subjective consciousness

8. Which 20th-century movement argued that statements are only meaningful if they are either tautologies or empirically verifiable?

- A) Existentialism
- B) Logical Positivism
- C) Phenomenology
- D) Stoicism

9. In formal logic, which statement form is considered a logical contradiction?

- A) P and not P
- B) If P then Q
- C) P or not P
- D) All P are Q

10. Which scientific paradigm shift fundamentally challenged the Aristotelian view of a geocentric universe?

- A) Quantum Mechanics
- B) The Copernican Revolution
- C) Plate Tectonics
- D) Cell Theory

11. What is the core premise of 'Determinism' in the context of causality?

- A) Human free will is absolute
- B) Every event is necessitated by preceding events and natural laws
- C) Biological organisms have no genetic predisposition
- D) Probability governs all subatomic interactions

12. What field of philosophy specifically investigates the nature, sources, and limits of human knowledge?

- A) Ontology
- B) Epistemology
- C) Axiology
- D) Teleology

13. What is the name of the cognitive bias where individuals favor information that confirms their existing beliefs?

- A) Availability heuristic
- B) Confirmation bias
- C) Gambler's fallacy
- D) Sunk cost fallacy

14. Which philosopher proposed the 'falsifiability' criterion as a demarcation line between science and pseudoscience?

- A) Karl Popper
- B) Bertrand Russell
- C) Thomas Kuhn
- D) Ludwig Wittgenstein

15. In evolutionary biology and philosophy of science, what term describes the process where traits that increase survival are passed on to offspring?

- A) Teleological causation
- B) Natural selection
- C) Spontaneous generation
- D) Lamarckian inheritance