

**QP CODE**

**H2008**

**Enrollment Number:** .....

**Name:** .....

**M.A. DEGREE EXAMINATIONS, JANUARY 2026**  
**Fourth Semester**  
**M.A. Philosophy**  
**M23PH11DC – Philosophy of Science**  
**(2023 July admissions)**

**Time: 3 Hours**

**Max Marks: 70**

**Section A**

**Answer any ten of the following questions in a word or sentence each. Each question carries 1 mark.**

1. Which historical figures stressed the importance of mathematics and measurement in science?
2. Define Inductive Reasoning.
3. What is the "Explanandum" in a scientific explanation?
4. In the example of a falling ball, what serves as the general scientific law?
5. Who developed the Methodology of Scientific Research Programmes (MSRP)?
6. What is the name of the scientist who proved that planetary paths are elliptical rather than circular?
7. Which scientific model is commonly referred to as the "Covering Law Model"?
8. What is the name of the part of an explanation that must be testable?
9. What is the requirement for the premises used in an explanation?
10. Which approach builds general theories based on repeated and consistent observations?
11. What is the name of the principle that says a sentence is only meaningful if it can be verified?
12. What is the name of Karl Popper's view that a theory must be testable and potentially proven false?
13. Who proposed the idea of "paradigm shifts"?
14. What term describes theories that cannot be compared because they use different standards?
15. What is the final stage of Kuhn's cycle?

**(1X10=10)**

**Section B**

**Answer any five of the following questions in two or three sentences each. Each question carries 2 marks.**

16. How science and philosophy are historically connected?
17. What is inductive reasoning in science?
18. Explain Karl Popper's view on "testability".
19. What does "Approximate Truth" mean in scientific realism?

20. How does technology support scientific realism?
21. Why does Heidegger say the essence of technology is "nothing technological"?
22. Why does the "truth" condition present a philosophical challenge?
23. Define "Post-phenomenology" in Don Ihde's terms.
24. Explain Merleau-Ponty's concept of the "Body-Subject".
25. What is "Intentionality" in phenomenology?

**(2X5=10)**

### **Section C**

**Answer any five of the following questions in a paragraph each. Each question carries 4 marks.**

26. Describe the key features of the Scientific Method.
27. Discuss the nature and scope of philosophy of science.
28. Describe the main features of scientific realism.
29. Why is "Inference to the Best Explanation" important for Darwin's theory?
30. Describe the logical structure of a scientific explanation.
31. Explain the four essential conditions of Hempel's D-N Model.
32. Make a brief sketch on Inductive and Hypothetico-Deductive methods.
33. Contrast Karl Popper's Falsificationism with the traditional model of Inductivism.

**(4X5=20)**

### **Section D**

**Answer any three of the following questions in two pages each. Each question carries 10 marks.**

34. Explain Thomas Kuhn's concept of a paradigm shift and its impact on scientific progress.
35. Discuss the historical relationship between Philosophy and Science.
36. Discuss the core concept of Popper's Falsificationism and its role as a solution to the "Demarcation Problem".
37. Discuss the concept of "Incommensurability" and its implications for scientific progress.
38. Define the concept of "Verisimilitude" and explain why Karl Popper introduced it.
39. Briefly discuss Heidegger's view on technology.

**(10X3=30)**