

2023

PHILOSOPHY

Paper : PHLHE6036

(Philosophy of Science)

Full Marks : 80

Pass Marks : 32

Time : 3 hours

The figures in the margin indicate full marks for the questions

1. Choose the correct answer (any six) : 1×6=6

(a) What is the fallacy involved in inductive justification of induction?

- (i) Fallacy of arguing in a circle
- (ii) Fallacy of posy hoc ergo propter hoc
- (iii) Fallacy of single cause
- (iv) Fallacy of division

(b) The conclusion of a scientific inductive argument is

- (i) certain
- (ii) probable
- (iii) observation
- (iv) experience

(c) Among the following philosophers, who proposed a model of scientific change?

- (i) Thomas S. Kuhn
- (ii) Karl Popper
- (iii) Paul K. Feyerabend
- (iv) David Hume

(d) Which of the following philosophers does not accept necessary connection between cause and effect?

- (i) Hume
- (ii) Bain
- (iii) Aristotle
- (iv) Kuhn

(e) Name a book written by Thomas Kuhn.

- (i) Patterns of Discovery
- (ii) The Structure of Scientific Revolutions
- (iii) Observation, Discovery and Scientific Change
- (iv) The Logic of Scientific Discovery

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(f) What is the ground of matter of fact?

- (i) Reason
- (ii) Belief
- (iii) Faith
- (iv) Experience

(g) 'Conjuncture and Refutation' is related to

- (i) T. Kuhn
- (ii) K. Popper
- (iii) Hume
- (iv) Dilworth

(h) 'Epistemological anarchism theory' is related to

- (i) Feyerabend
- (ii) K. Popper
- (iii) Hanson
- (iv) Ladyman

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(Turn Over)

(4)

(i) Who is regarded as the famous historian of the philosophy of science?

(i) T. Kuhn

(ii) K. Popper

(iii) Hume

(iv) M. Norman

(j) Which of the following books is written by Feyerabend?

(i) The Structure of Scientific Revolutions

(ii) Against Method

(iii) A Treatise of Human Nature

(iv) The Logic of Scientific Discovery

2. Briefly answer the following questions
(any five) : 2×5=10

(a) What is paradigm shift?

(b) What is pseudoscience?

(c) Write the name of any two books written by David Hume.

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(5)

(d) What is the meaning of observation in philosophy?

(e) Write the distinction between 'relations of ideas' and 'matter of fact' according to David Hume.

(f) What is normal science?

(g) Define scientific induction.

3. Answer any six of the following questions : 5×6=30

(a) What is corroboration according to Popper?

(b) Distinguish between falsifiability and falsification.

(c) Discuss Karl Popper's the 'problem of demarcation'.

(d) Write a note on falsifiability.

(e) Discuss Harman's theory of 'inference to the best explanation'.

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(6)

- (f) What does Karl Popper mean by the logic of scientific discovery? Explain in brief.
- (g) How does Hume explain the problem of induction? Discuss.
- (h) Discuss Lakatos' theory of scientific research programme.
- (i) Elucidate the distinction between science and non-science.
- (j) Discuss Hume's notion of causality.

4. Answer any two of the following questions :

10×2=20

- (a) What is the problem of demarcation according to Popper? What solution does he suggest for it? Discuss.
- (b) Explain Kuhn's account of change and progress in science.
- (c) Why does Feyerabend want to defend society against science? Discuss.
- (d) What is the nature of reasonings concerning matter of fact? Discuss.

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(7)

5. Answer any one of the following questions : 14

- (a) What is the problem of induction in philosophy of science? Give a critical account of Hume's response to this problem.
- (b) Why does Popper regard the theories of Marx, Freud and Adler as being non-scientific? Discuss in detail the scientific method according to him.
- (c) Do you agree with Hanson that all observation is laden? Explain.

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