## 63/1 (SEM-6) DSE3/PHLHE 6036

## 2024

## **PHILOSOPHY**

Paper: PHLHE 6036

(Philosophy of Science)

Full Marks: 80

Pass Marks: 32

Time: Three hours

## The figures in the margin indicate full marks for the questions.

1. Choose the correct answer: (any six)

1×6=6

- (a) D. Hume is an empiricist philosopher from which nation (country)?
  - (i) German
  - (ii) Scottish
  - (iii) British
  - (iv) Greek

(b) "Scepticism may be theoretically irrefutable, but even the sceptic must 'act.. and live, and converse, like other men', since human nature gives him no choice."

Who quoted the above statement?

- (i) Berkeley
- (ii) Wolf
- (iii) D. Hume
- (iv) Kant
- (c) The conclusion of a scientific inductive argument is
  - (i) probable
  - (ii) experimental
  - (iii) observatory
  - (iv) certain
- (d) What is the full form of N. R. Hanson?
  - (i) Norwood Russell Hanson
  - (ii) Noor Rafi Hanson
  - (iii) Norman Russell Hanson
  - (iv) Nancy Russell Hanson

- (e) Pattern of Discovery by N. R. Hanson wast first published in
  - (i) 1968
  - (ii) 1958
  - (iii) 1946
  - (iv) 1971
- (f) Who coined the tern IBE (Inference to the best explanation)?
  - (i) John Hick
  - (ii) N. Hartmann
  - (iii) N. Harman
  - (iv) T. Kuhn
- (g) Who said philosophy deals with conjectures and refutations?
  - (i) K. Popper
  - (ii) N. Harman
  - (iii) R. Nola
  - (iv) R. Swinburne

- (h) Which book is not written by Feyerabend?
  - (i) Philosophy of Nature
  - (ii) Against Method
  - (iii) Epistemological Anarchism
  - (iv) An Enquiry Concerning Human Understanding.
- (i) Who disagreed with K. Popper?
  - (i) Imre Lakatos
  - (ii) Bain
  - (iii) D. Hume
  - (iv) Dilworth
- (j) Among the following philosophers, who proposed a model of scientific change?
  - (i) Karl Popper
  - (ii) P. Feyerabend
  - (iii) Thomas S. Kuhn
  - (iv) Lakatos

- 2. Briefly answer the following questions:

  (any five) 2×5=10
  - (a) What is an argument?
  - (b) What are the two different types of theory ladenness?
  - (c) Mention two demarcation criteria of Popper.
  - (d) Give an example of conjecture.
  - (e) Name two books written by Lakatos.
  - (f) What do you mean by falsifiability?
  - (a) Define normal science.
- 3. Answer **any six** of the following questions: 5×6=30
  - (a) What are different conditions of observation? Explain
  - (b) Distinguish between science and non-science.
  - (c) What is the disadvantage of inductive method?
  - (d) Explain two solutions to the problem of induction.
  - (e) Did Karl Popper solve Hume's problem of induction?

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- What is Harman's theory of inference to the best explanation?
- Briefly analyse the importance of demarcation
- What is the theory-laden process?
- Distinguish between induction and (i) deduction.
- What are the characteristics of a conjecture? Discuss briefly.
- 4. Answer any two of the following questions:  $10 \times 2 = 20$ 
  - (a) What is the problem of demarcation according to K. Popper? Discuss fully.
  - (b) Discuss Lakato's theory of scientific research programme.
  - Explain Kuhn's views on change and progress in science.
  - Discuss Hume's theory of causality.
- 5. Answer any one of the following questions: 14
  - (a) What is the traditional problem of induction? Give a critical account of Hume's response to this problem.

- (b) Explain change and rationality in science according to Karl Popper.
- On what ground Feyerabend wants to (c) defend society against science? Elaborate.