

05. Write short notes on any four of the followings.

- i. Direct Method of truth table.
- ii. Aristotelian laws of thought.
- iii. Logical constants and variables.
- iv. Stylistic variants.
- (v) Truth and Validity.
- (vi) Universe of Discourse.

(05x4=20 Marks)

PART II

06. a) Briefly examine the characteristics of a science according to Karl Popper's demarcation principle.

(10 Marks)

b) Identify and write separately the Social Sciences and Humanities out of following given disciplines.

Geology, Sociology, Mathematics, Fine Arts, Linguistic, Psychology, English, Biology, History, Buddhist Studies, Archeology, Philosophy, Music and Zoology

(10 Marks)

07. a) Examine the difference between scientific observations and scientific experimentations with examples.

(10 Marks)

b) Explain following research methods with examples.

- i. Case study Method
- ii. Participant observation Method

(05x2=10 Marks)

P.T.O.

08. a) How do you understand the concept of “objectivity”?.
(05 Marks)
- b) Write an essay on “the objectivity in Social Sciences”.
(15 Marks)
09. a) What are the attributes of a sound scientific hypothesis.
(10 Marks)
- b) Outline the general steps in forming of a scientific hypothesis by a scientist.
(10 Marks)
10. Write short notes on any **four** (04) of followings:
- i. Francis Bacon’s Inductivism.
 - ii. John S. Mill’s laws of causality.
 - iii. Deductive Falsificationism.
 - iv. Standard Deviation.
 - v. Classical Interpretation of Probability.
 - vi. Auxiliary hypotheses
- (05x4=20 Marks)