

Assignment for TEE June 2024 and TEE December 2024

**BPYC-133 Logic
(TUTOR MARKED ASSIGNMENT)**

**Course code: BPYC-133
Marks: 100**

Note:

- 1. Give Answer of all five questions.**
- 2. All five questions carry equal marks.**
- 3. Answer to question no. 1 and 2 should be in about 400 words each.**
- 4. Some questions have more than one section, kindly read such questions carefully and attempt all the sections.**

1. Write a note on deductive reasoning. What are its' limitations? 20

Or

- a) Write a note on “various types of the terms”. 10
- b) State whether the subject and predicate terms in the following propositions are distributed or undistributed. 5*2=10
- i) All dogs are mammals
 - ii) All hill stations are hot places.
 - iii) Some trees are tall
 - iv) Some humans are not mortal.
 - v) No hill stations are hot place.

2. Write a note on the traditional square of opposition? Also discuss relations in traditional square of opposition. 20

Or

- a) Write a note on existential import. 10
- b) State contrary, contradictory, sub contrary, subaltern and superaltern of the following propositions. 2*5=10
- i) All triangles are polygon.
 - ii) Some Indian citizens are not Indian voter.

3. Answer any **two** of the following questions in about **200 words** each. 2*10=20

- a) What is *Pararthanuman*? Elaborate with the help of adequate example. 10
- b) Write a note on Fallacies in Indian Logic. 10
- c) What is a truth table? Test the validity of the following argument with the help of the indirect truth table method. 5+5=10
- $(A \vee B) \cdot (C \supset D)$
 $(D \vee E) \cdot F$

- . ∴ A • F
- d) What is a symbol? Discuss the various kinds of symbols? 10
4. Answer any **four** of the following questions in about **150 words** each. 4*5=20
- a) Write a note on the relation between truth and validity in Inductive Logic. 5
- b) Test the validity of the following arguments with the help of the venn diagram method. 5*2.5=5
- i) AAA-4
- ii) EIA-2
- c) Write a short note on the Truth Functions. 5
- d) Write a short note on Indian Logic. 5
- e) Translate the following statements to the standard form propositions. 1*5=5
- i) He does not hate tomato soup.
- ii) Every Indian citizen is a voter.
- iii) All cats meow.
- iv) If it is a Tiger, then it is an animal.
- v) Unless he gives an application, his request will not be entertained.
- f) Symbolize the following propositions. 1*5=5
- i) Some books are literary books and some books are non-literary books.
- ii) Either He is trustworthy or She is honest.
- iii) All girls are studious and all boys are studious.
- iv) Neither you nor me are trustworthy.
- v) All cities are polluted and overpopulated.
5. Write a short note on any **five** of the following in about **100 words each**. 5*4=20
- a) Fallacy of Amphiboly
- b) Modus Ponens
- c) Connotation of a term 4
- d) The Straw Man Fallacy
- e) *Hetvabhas* 4
- f) Refutation of a Dilemma 4
- g) Anumana
- h) Quality (Categorical Proposition)