Assignment for TEE December 2025 and TEE June 2026

BPYC-105 Logic

Course code: BPYC-105

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 detailed note on informal fallacies. 20

Or

What is the difference between deductive and inductive reasoning? Discuss in detail.

2. What is a proposition? Write a note on the modern categorization of proposition. 20

Or

a) Write a detailed note on the square of opposition. 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 the difference between mediate and immediate inference? Elaborate with the help of adequate example. 10

b) Distinguish among Tautologous, Contradictory and Contingent logical forms. 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

(P v Q) • (R⊃S)

(S v T)• U

∴ P • U

d) What do you understand by propositional logic? 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) Construct formal proof of validity. 5

1) (∃x) [Jx Λ Kx]

2) (x) [Jx => Lx]

∴ (∃x) [Lx Λ Kx]

c) Write a short note on the Truth Functions. 5

d) Write a short note on Indian Logic. 5

e) State whether the subject and predicate terms in the following propositions are distributed or undistributed. 1*5=5

1. All goats are mammals.

2. Some buildings are tall.

3. Some fruits are not sweet.

4. All officers in the Indian navy are trained in swimming.

5. No government employee is illiterate

f) Identify the subject term, predicate term, quantifier and copula in the following categorical propositions: 1*5=5

1. All animal rights activists are people who are motivated by empathy.

2. Some mangoes are not sweet fruits.

3. Some knives are sharp objects.

4. No bachelors are married men.

5. All trucks are vehicles..

5. Write a short note on any **five** of the following in about **100** words each.   5*4=20

a) Pararthanumana   4

b) Modus Tollens   4

c) Connotation of a term   4

d) Fallacy of Equivocation   4

e) Quantity (Categorical Proposition)   4

f) Dilemma   4

g) Existential Import   4

h) Three kinds of definition   4