**Subject:Logic and Critical Thinking Course Code: PH101**

**Time Allowed: 2hrs Instructor: Mehboob Alam**

**Total Marks: 30 Mid Term**

NOTE: ATTEMPT ALL QUESTIONS

Q1:a. Determine whether each of the following arguments is valid. If an argument is invalid, explain why. (05)

(a) All mammals have fur. Lassie is a mammal. Therefore, Lassie has fur.

Ans…………………………………………………………………………………………… ………………………………………………………………………………………………… ………………………………………………………………………………………………… ………………………………………………………………………………………

(b) Molly is a cow. Molly has horns and wears a cowbell. Cowbells are used to keep track of cows. Molly’s cowbell is loud. Therefore, Molly wears a cowbell.

Ans…………………………………………………………………………………………… ………………………………………………………………………………………………… ………………………………………………………………………………………………… ………………………………………………………………………………………

(c) All fish can swim and have gills. A salmon is a fish. Salmon can swim and have gills.

Ans…………………………………………………………………………………………… ………………………………………………………………………………………………… ………………………………………………………………………………………………… ………………………………………………………………………………………

(d) Maryam dyes her hair blond or Maryam dyes her hair green. Maryam dyes her hair blond. Therefore, Maryam does not dye her hair green.

Ans…………………………………………………………………………………………… ………………………………………………………………………………………………… …………………………………………………………

Q.5: b. Briefly discuss the use of each symbol in symbolic logic. (05) Dot(.)…………………………………………………………………………………………… …………………………………………………………………………………………………..

Wedge (v)………………………………………………………………………………………

…………………………………………………………………………………………………

Q:2. Some premises do support conclusion, others do not. Premises, also support conclusions directly or indirectly. Discuss in the light of deductive and inductive conclusions with self-articulated examples.

Q.:3. Explain the different functions of language. Also highlight emotively neutral language.

 <><><><><><><><><><><><><><><><>