

Logic 1, WS 2006. Exam Long Version Jan 25, 2007

(Only the relevant subjects have been kept.)

NAME:

MATRIKELNR.:

1. Find the value of $\wedge\emptyset$ and $\vee\emptyset$.
2. Find the value of $\wedge\Phi$ and $\vee\Phi$ when the set of formulae Φ contains \mathbb{T} .
3. Formulate the verification conditions for the program:

$$F[x] = \mathbf{If} (x = 0) \mathbf{then} G[x] \mathbf{else} H[x, F[x - 1]]$$

using as input and output conditions for F, G, H : $I_F[x], I_G[x], I_H[x, y], O_F[x, y], O_G[x, y], O_H[x, y, z]$.