

MAT-42106 Applied Logics
Examination 24.1.2011.

No material allowed – no calculators allowed – return the attached file clean!

1. Describe the general mathematical principles and objectives of the GUHA method
2. Prove that Modus Ponens is a sound rule of inference
3. Consider the following contingency table

	$\neg\phi$	ϕ
ϕ	25	9
$\neg\phi$	37	110

Is $\phi \approx \neg\phi$ true if \approx is a) founded implication b) founded equivalence, and assuming that $p = 0.6$ and Base = 20?

With reference to the attached file, prove

4. First exercise
5. Ninth exercise