## ASSIGNMENT 11

## MTH101 (2014)

- (1) Define supremum and infimum (greatest lower bound) of a non empty subset of  $\mathbb{R}$ .
- (2) What is the difference between minimum and infimum? Explain with the help of an example.
- (3) Prove that an increasing sequence of real numbers  $\{x_n\}$  which is bounded above, converges to its supremum.