



**Telemark University College**

Faculty of Arts and Sciences

**EXAM**

**IN**

**4501-002 ALPINE ECOLOGY**

**OCTOBER 23. 2015**

Time: 4 hours

Language: English

Number of pages: 2 pages including the front page

Aid: English-dictionaries

Appendix: None

## Questions

- 1 Describe important ecological factors that can limit the elevational distribution of birch trees and forests.
- 2
  - a) Describe patterns in plant establishment and soil development during a primary autogenic succession in the front of a retreating glacier.
  - b) Describe active and passive factors in alpine soil development.
- 3
  - a) Describe important ecological factors that affect the reindeer population at the Hardangervidda mountain plateau.
  - b) Describe biological and environmental factors characteristic for alpine lakes in Norway.
- 4 Explain the following terms briefly:
  - a) Permafrost
  - b) Chionophobic plant – give some examples.
  - c) Forest limit ecotone (Alpine timberline ecotone)
  - d) Podzol
- 5
  - a) Describe criteria that can be used to separate between the Low alpine and the Middle alpine vegetation zone.
  - b) Describe floristic and environmental characteristics of Scandinavian snow-beds.