

2a) The syntax of FOL is that it consists of:

Constants which are named objects e.g. KingJohn, 2, UoE, ...

Predicates (Relations) e.g. Prime, >, HotterThan, ...

Functions such as Sqrt, LeftLegOf, ...

Variables such as x, y, a, b. By convention, variables start with lower-case letters (lest they might be confused with constants.)

Connectives such as  $\neg, \Rightarrow, \wedge, \vee, \Leftrightarrow$ , ...

Equality e.g.  $=$ . Equality compares whether two objects are equal, regardless of their name.

Quantifiers such as  $\forall, \exists, \exists!$ , ...

Sentences such as Brother(Richard, John)