

3. (a) Explain what is meant by an *Abstract Syntax Tree*. Illustrate with an outline of the process to generate an AST for a Boolean expression. [7]
- (b) Discuss the advantages and disadvantages of representing intermediate code in the form of dags instead of trees. [8]
- (c) Show how the decimal value of a binary number can be generated using *attributes*. Explain the difference between *inherited* and *synthesized* attributes. [10]