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| **CSE 420**  **Section 01**  **Surprise Quiz 01**  **19th January, 2016**  **Total Time: 10 minutes** | **SET C** |

**Student Name:**

**Student ID:**

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1. Define transition diagram.

* Transition Diagrams (TD) are used to represent the tokens
* As characters are read, the relevant TDs are used to attempt to match lexeme to a pattern
* Each TD has:
  + States : Represented by Circles
  + Actions : Represented by Arrows between states
  + Start State : Beginning of a pattern (Arrowhead)
  + Final State(s) : End of pattern (Concentric Circles)
  + Edges: arrows connecting the states

1. Convert the following NFA to DFA using subset construction method.



