

CSE420 Assignment 1

Fall 25

Total Marks: 10

1. Convert the following regular expression to a Deterministic Finite Automaton (DFA) using the **direct method**: [8]

$(alb)^*a(bb^*)a$

Note: You must have to show the steps.

2. (b) Will the DFA accept any string that ends with a single **a** but no **b** before it, for example "aa"? Justify your answer briefly. [2]