2. (a) Describe and contrast the following concepts: top-down parsing, recursive descent parsing, and LL(1) parsing.

[11]

(b) Construct an LL parse table for the following grammar, and explain the steps you have taken:

$$S \rightarrow A B C$$
 $A \rightarrow a A \mid c$ $B \rightarrow b \mid \epsilon$ $C \rightarrow c$

[14]