

TCLF - Exer 9

1-a) $G = (V, T, P, S)$

$$V = \{A, B\}$$

$$T = \{a, b\}$$

$$S = \{A\}$$

$$P = \{A \rightarrow aA \mid B$$

$$B \rightarrow bB \mid \epsilon\}$$

b) $G = (V, T, P, S)$

$$V = \{A, B, C\}$$

$$T = \{a, b, c\}$$

$$S = \{A\}$$

$$P = \{A \rightarrow aA \mid aB$$

$$B \rightarrow bB \mid bC$$

$$C \rightarrow cC \mid c\}$$

c) $G = (V, T, P, S)$

$$V = \{A\}$$

$$T = \{a, b\}$$

$$S = \{A\}$$

$$P = \{A \rightarrow aAbb \mid abb\}$$

d) $G = (V, T, P, S)$

$$V = \{A, B\}$$

$$T = \{a, b\}$$

$$S = \{A\}$$

$$P = \{A \rightarrow aaaa \mid aaaaB,$$

$$B \rightarrow bBx \mid bxx\}$$

e) $G = (V, T, P, S)$

$$V = \{S, A, B\}$$

$$T = \{a, b, c, d\}$$

$$S = \{S\}$$

$$P = \{S \rightarrow AB,$$

$$A \rightarrow aAb \mid \epsilon,$$

$$B \rightarrow cBd \mid \epsilon\}$$

$$p) G = (V, T, P, S)$$

$$V = \{S, A, C\}$$

$$T = \{a, b, c\}$$

$$S = \{S\}$$

$$P = \{S \rightarrow ABC,$$

$$A \rightarrow aA \mid \epsilon,$$

$$C \rightarrow ccC \mid \epsilon\}$$