

Question 1

$$G = \{V, \Sigma, R, S\}$$

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

$$\Sigma = \{0, 1\}$$

$$R = \{S \rightarrow A1A1A1, A \rightarrow \epsilon \mid A1 \mid A0\}$$

Question 2

$$G = \{V, \Sigma, R, S\}$$

$$V = \{S\}$$

$$\Sigma = \{0, 1\}$$

$$R = \{S \rightarrow 0 \mid 0S0 \mid 1S1 \mid 0S1 \mid 1S0 \mid \}$$

Question 3

$$G = \{V, \Sigma, R, S\}$$

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

$$\Sigma = \{0, 1\}$$

$$R = \{S \rightarrow aScc \mid A, A \rightarrow \epsilon \mid bBc\}$$