

Daffodil International University

Class Test 2

Section: 67_G

Marks-15

Date:21/07/2026

Q1. Convert the following CFG into non left recursive: [5 marks]

$$S \rightarrow Af | b$$

$$A \rightarrow Ac | Sd | Be$$

$$B \rightarrow Ag | Sh | k$$

Q2. Convert the following CFG into left factored: [3 marks]

$$S \rightarrow \text{stmt} | \text{stmt block} ; \text{stmt} | \text{stmt block} , \text{stmt}$$

$$\text{stmt} \rightarrow \underline{\text{while expr do stmt}} | \underline{\text{while expr do stmt block}}$$

Q3: Construct LL(1) parsing table: [7 marks]

$$S \rightarrow Bb | cd$$

$$B \rightarrow aB | \epsilon$$

$$C \rightarrow cC | \epsilon$$