



Department of Computer Science and Engineering
Bangladesh University of Engineering and Technology

CSE 309 (Compiler)

Class Test: 2, Full Marks: 20, Time: 20 minutes

Monday 7th June, 2021

There are 4 questions in 1 pages. Please make sure that you got all of them.

1. Consider the grammar, (8)

$$S \rightarrow a A d \mid b B d \mid a B e \mid b A e$$
$$A \rightarrow c$$
$$B \rightarrow c$$

Augment the grammar and hence construct the initial set of LR(0) items and the three sets of items generated from the initial set.

2. For the grammar in Question 1, write down the first two lines of the SLR parsing table. (3)
3. Augment the grammar in Question 1 and hence construct the initial set of LR(1) items and the three sets of items generated from the initial set. (6)
4. Comment in detail on the relative number of states for SLR, CLR, and LALR parsing tables. (3)