

BRAC UNIVERSITY
Department of Computer Science and Engineering

Examination: Midterm

Semester: Summer 2024

Duration: 80 minutes

Set - B

Full Marks: 40

CSE 420: Compiler Design

Figures in the right margin indicate marks.

Answer all the questions

<u>COs</u>	<u>Questions</u>	<u>Marks</u>
CO2	1. Construct the DFA from the following RE using <u>Direct Method</u> $(x \mid \epsilon) (x^* \mid y \mid z^* \mid \epsilon)^* (y \mid z)^*$	15
CO3	2. Consider the following <i>SLR Grammar</i> . Draw <u>LR(0) automaton</u> and construct <u>SLR parse table</u> 1. $V \rightarrow P Q$ 2. $P \rightarrow int$ 3. $P \rightarrow float$ 4. $Q \rightarrow \epsilon$ 5. $Q \rightarrow [size] Q$	10
CO3	3. Consider the <u>SLR parse table</u> from <u>Question 2</u> . Show the parsing simulation using <u>stack</u> for the input string, <i>float [size]/[size]/[size]</i>	10
CO1	4. Explain the <u>Errors</u> in compiler	5