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| **National University of Computer and Emerging Sciences, Lahore Campus** | | | | |
| C:\Users\saif\AppData\Local\Microsoft\Windows\Temporary Internet Files\Content.Word\final design.jpg | **Course Name:** | **Theory of Automata** | **Course Code:** | **CS301** |
| **Degree Program:** | **BS(CS)** | **Semester:** | **Spring 2024** |
| **Section:** | **BCS – 6D** | **Marks:** |  |
| **Assignment** | **3** | **Deadline** |  |
|  | | | | |

**Q1: Convert the following CFG to CNF:(CLO-3) (3\*10)**

**A)** S → T U | V

T → aT b | ε

U → cU | ε

V → aV c | W

W → bW | ε

1. S → ASA | aB

A → B | S

B → b | ε

X → A

1. S → a | aA | aB

A → aBB | ε

B → Aa | b