**CSE-103**
Subject: Assignment from Book. Student Id: **1705069**
Chapter no.: **1** Verifying Student Id: **1705030**
Section no.: **1**
Exercise no.: **39**

**39.** Construct a truth table for $(p \leftrightarrow q) \leftrightarrow (r \leftrightarrow s)$.

Answer :

| p | q | r | s | $p \leftrightarrow q$ | $r \leftrightarrow s$ | $(p \leftrightarrow q) \leftrightarrow (r \leftrightarrow s)$ |
|---|---|---|---|---|---|---|
| F | F | F | F | T | T | T |
| F | F | F | T | T | F | F |
| F | F | T | T | T | T | T |
| F | T | F | F | F | T | F |
| F | T | F | T | F | F | T |
| F | T | T | F | F | F | T |
| F | T | T | T | F | T | F |
| T | F | F | F | F | T | F |
| T | F | F | T | F | F | T |
| T | F | T | F | F | F | T |
| T | F | T | T | F | T | F |
| T | T | F | F | T | T | T |
| T | T | F | T | T | F | F |
| T | T | T | F | T | F | F |
| T | T | T | T | T | T | T |
| F | F | T | F | T | F | F |