

**Assignment No. 01**  
**Introduction to Computing CS101**

Fill the empty columns for the following truth table where A, B and C are three binary inputs in the truth table.

**Solution:**

| Inputs |   |   | Output    | Output    | Output   | Output                 | Output               |
|--------|---|---|-----------|-----------|----------|------------------------|----------------------|
| A      | B | C | $(A'.B)'$ | $(A'+B)'$ | $(B+C)'$ | $(A.B)' \oplus (B+C)'$ | $(A \oplus B).(B+C)$ |
| 0      | 0 | 0 | 0         | 0         | 1        | 0                      | 0                    |
| 0      | 0 | 1 | 0         | 0         | 0        | 1                      | 0                    |
| 0      | 1 | 0 | 1         | 0         | 0        | 0                      | 1                    |
| 0      | 1 | 1 | 1         | 0         | 0        | 0                      | 1                    |
| 1      | 0 | 0 | 1         | 1         | 1        | 0                      | 0                    |
| 1      | 0 | 1 | 1         | 1         | 0        | 1                      | 1                    |
| 1      | 1 | 0 | 1         | 0         | 0        | 1                      | 0                    |
| 1      | 1 | 1 | 1         | 0         | 0        | 1                      | 0                    |