**Unit 3.2: Computer Hardware (Week 6: Weekly Test )**

1) For this logic statement:

X = 1 if (( A is 1 AND B is 1 ) OR ( B is 1 AND C is NOT 1 ))

(a) Draw the logic circuit.

(b) Complete the truth table for the given logic statement

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **A** | **B** | **C** | **Working Space** | **X** |
| 0 | 0 | 0 |  |  |
| 0 | 0 | 1 |  |  |
| 0 | 1 | 0 |  |  |
| 0 | 1 | 1 |  |  |
| 1 | 0 | 0 |  |  |
| 1 | 0 | 1 |  |  |
| 1 | 1 | 0 |  |  |
| 1 | 1 | 1 |  |  |