Task No 01:

Implement 8 – 3-line encoder and 3 – 8 line decoder on Multisim.

Solution:

Output:

Task No 02:

Implement 2 to 4 lines decoder with an active low enable and active low outputs on

Multisim by making use of NAND gates and inverters. The line of reasoning should be

that:

- All outputs will be high if enable pin is high i.e. the IC will be disabled.

- Chip will be enabled only when enable is low.

- Once the chip is enabled, output corresponding to the address pins will be low and

the rest of all outputs will be high.

Solution:

Output:

Task No 03:

Implement an encoder circuit in Multisim based on the following table for encoding numbers.

Solution:

Output: