4.

Batch Weighing Machine

A microprocessor based system is to be designed as a batch weighing machine.

The system is interfaced to three load cells by means of an 8 bit A/D converter.

The conditioned output of the load cells is given by the equation: Vout = 0.025 x weight (Kgs.)

The system monitors the output of the load cells and finds out the total weight by taking the average of

the three values that are sensed by each load cell.

This value is displayed on a seven-segment display.

When this value exceeds 99 kgs, an output port, which is connected to a relay, is switched on to sound an

alarm.

Once the objects are placed on the load cell user presses a switch labelled

weigh.