

## **CHAPTER 5**

### **CONCLUSION**

This chapter had included summary and recommendation for future project. The summary overview about the advantages, disadvantages, problems and objective has been achieved or not. The recommendation overview about for future project.

#### **5.1 Summary**

As part of the criteria to obtain my Bachelor's degree in engineering, it is needed for all students of the University Malaysia Perlis to carry out a Final Year Project (FYP) with respect to academic center's area of specialization.

The conclusion for this project is the input dc voltage is fixed at a certain value. The sinusoidal pulse width modulation control is used to control the inverter switches using VHDL programming. Practical inverters normally produce the non-sinusoidal waveform and contain certain harmonics. The advantage of this project is suitable in some applications such as for designing the uninterruptible power supplies (UPS), high purity sine wave output is required and to reduce the high frequency harmonics. The disadvantage of this project need for the inverter circuit with high flexibility to change the control signal in order to get the output waveform as close as the purely sine wave as generated by the ideal inverter.

The main objectives of the task undertaken were to design the control circuit for the bridge inverter switching and to program the suitable pulse switching using Quartus II software and to test and investigate the result of the control circuit had been achieved.

## **5.2 Recommendation for future project**

Recommendation for future project; student need to troubleshoot the problem that had facing or clearly from problems till done this project. School can set up a joint venture with other company to provide the title project; which is student can complete their project in real plant or working areas at that company.