<u>CHAPTER – VI</u> FUTURE SCOPE OF WORK

There is lots of future scope of work for the investigation in the three stage cascade refrigeration system.

1. In the Field of Refrigerant:

- (i) Hydrocarbon refrigerant will be considered as a long-term alternative for halogenated refrigerants, which are flammable. Hence the development of new refrigeration system with low refrigerant charge is essential.
- (ii) Inert nature of hydrocarbons with hydroflurocarbon refrigerant needs future investigation.

2. In the field of Energy & Exergy:

- (i) Energy consumption will minimum, when the all components of the system will be designed on based on optimal parameters.
- (ii) Exergy analysis and exergy destruction has been done based on II_{nd} law efficiency analysis. Components wise investigation based on II_{nd} law efficiency analysis has to be done to get the exergy destruction in each components, which has not been done during present investigation.