CONCLUSION

This thesis titled Fuzzy EOQ Model exaggerates different notions that extent on the loftiness of inventory model with uncertainty. It devises some complicated methods that are apt to the fuzzy EOQ model. Triangular and trapezoidal fuzzy numbers are chosen to portray the parameters which are not precise. Numerical examples are carried out to investigate the behaviour of our proposed models and the results are compared with those obtained from the crisp model.

FINDINGS

- The optimal fuzzy replenishment quantity is formulated using the extension of Lagrangean method.

- The optimal ordered quantity for single supplier multiple cooperative retailer inventory models is determined by using the Kuhn Tucker conditions after the defuzzification of the profit function.

- The analytical solution is possible to be obtained using the signed distance defuzzification method.
• Yager’s ranking method is considered to resolve the inventory model with linear and fixed backorder cost.

• Through fuzzy geometric programming and by Zadeh’s Extension Principle, two main programs are transformed to a pair of two levels of mathematical programs. The upper and lower bound of the objective value are obtained by solving the pair of geometric programs.

• On the basis of $\alpha$-cut representation and the extension principle, a pair of mathematical program is formulated to describe the family of crisp model via parametric non-linear programming particular measures are derived and also the optimal threshold value is obtained.

The decision maker should adopt a better trade of judgement for accounting flexibility in the characteristics of the model in order to tackle the uncertainty which fits to the real situations. Our solution procedure can be used in developing more complex inventory models. Future research can also be done to consider other kinds of uncertainty environments.