CONCLUSION

The above thesis entitled ‘Contribution to the study on transportation problem in fuzzy environment’ is the consolidation of different notions that enrich the realm of decision-making where the environment is fuzzy. More particularly the thesis contemplates interlaced methods pertaining to the fuzzy transportation problems. While dealing with decision-making problems in the fuzzy environment, a significant departure is made from the earlier methods available in the literature. We have chosen triangular and trapezoidal fuzzy numbers to depict the vagueness governing fuzzy transportation problems. Conclusively we record below the findings of this thesis.

Considering the supply as a fuzzy parameter, it attempts to solve fuzzy transportation problem. By introducing Kuhn-Tucker condition parametric study has been done for both balanced and unbalanced problems.
- Converting it to a fuzzy two-stage transportation problem and introducing fuzzy parameters to find the optimal solution for a Two-stage transportation problem.

- Considering the supply and demand values as a fuzzy trapezoidal number and converting it to a classical transportation problem with aspiration level, it attempts to solve interval transportation problem.

- To find optimal solution for multi-objective transportation problem, different ways are found using fuzzy nature. The preemptive goal programming is introduced and separate solution is found for each and every objective by considering separate goals.

- Several ways are used to solve a fuzzy solid transportation problem by considering it as an interval fuzzy solid transportation problem, then with $\alpha$-optimal parameter converting it to a classical interval solid transportation problem and finally into a linear programming problem with linear programming technique.