Conclusion
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In this section we analyze the results obtained in the main body of the thesis in chapters IV-VI.

The optimal solution of model I of chapter IV, shows that profit per day could be maximized by the bus service providing agency with new E(2by1) class on the Silchar –Guwahati route. The model II is the extension of Model I, with additional conditions imposed on the different types of buses. Then we find that profit per day could be maximized with new buses of D(2by2) class and E(2by1) class. In model III we observe that expenditure per day would be minimum with new E(2by1) class bus. Similarly the optimal solution of model IV with additional conditions on the number of different types of buses reveals that the daily expenditure could be minimized with new D(2by2) class and E(2by1) class buses.

Presently communication on Silchar –Aizwal route is mainly based on Sumo- Service. Here also similar study was carried out and it is found in model V –VI that daily profit and expenditure of a sumo – service agency remain in favor running new sumo.

The study made on the age of replacement of Omni Bus in the route in model VII it is found that its optimal age of replacement is 6.

On the Silchar- Agartala route, communication being mainly based on undertaking buses of Assam State Transport Corporation (ASTC) the study in model VIII reveals how state transport can maximize its daily share collection from undertaking buses on this route. In model IX, we showed how present passenger fare could be minimized on Silchar-Guwahati.
route. From, above we can say that in silchar – Guwahati route new
buses will give comfort to the passengers with a justified fare. Even on the
other routes new vehicles always will provide comfort to the passengers.
The introduction of new vehicle mainly depends on the replacement age
of the vehicle in use. Our study also suggests an optimal age for
replacement. The maximum share collection by ASTC from its
undertaking buses on different routes will help the organization to provide
better service to its passengers and good annual returns to the state.

Related to goods transportation problems in chapter VI inventory
study was carried out as first model on the data obtained from Food
Corporation of India, Silchar Division and calculation was made to find
how much quantities of the essential items like rice, wheat, sugar should
be brought at a time to meet the demand of this region so that the
carrying cost and order processing cost could be minimized.

Besides the government organization some other private suppliers
are also engaged to fulfill the demand of this region. In this respect we
collected the relevant data from those suppliers engaged in supplying rice
to different parts of Mizoram. An optimal transportation schedule has been
developed with an optimal transportation cost. If the suppliers follow this
schedule, they can reduce costs on transportation which on other hand
would help the people to get the things with more justified price.

Our case study can be further extended with considering similar
data of the whole state and then modeling for the related issues and
solving them for optimality and thereby adding economy to the state.