## 1077-91-2528 Ajanta Roy\* (ajantaro@mailbox.sc.edu), University of South Carolina - Salk, SC 29488. A Minimax Distribution Free Approach: Joint Vendor and Buyer Model.

It has been observed that mutual coordination between vendor and buyer systems is more profitable as compared to their individual system. The buyer's aim is to reduce the lead time, which facilitates the buyer to fulfill the demand on time. Vendor offers trade credit and early payment options as well as discount in purchase price to the buyer. This study shows joint optimization of both the vendor and the buyer's operations. Author has used minimax distribution free approach. The results are demonstrated with the help of numerical examples. This study examines the sensitivity of the resulting cost savings due to the exchange of cost information. (Received September 22, 2011)