Exercise 6

1. An investor holds a time payment purchase contract on some machine tools. The contract calls for the payment of LE140 at the end of each month for a five years period. The first payment is due in one month. He offers to sell you the contract for LE6,800 cash today. If you otherwise can make 1% per month on your money, would you accept or reject the investor’s offer.

2. A company purchased a piece of equipment 3 years ago with an initial value of LE15,000, salvage value of LE3,000, annual operating cost of LE2,000, and estimated life of 10 years. Calculate the book value of the machine now using the straight-line, sum-of-years digits and sinking fund depreciation method. Assume interest rate 10%.

3. Calculate the ownership cost per hour for a dump truck powered by a 120-hp gasoline engine based on the following data:

   - Purchase price = LE175,000
   - Freight charges = LE2,000
   - Estimated salvage value = LE57,500
   - Operation factor = 40%
   - Useful life = 5 years
   - Hours used per year = 1800
   - Maintenance and repair = 130% of annual depreciation
   - Tire cost = LE5,000
   - Tire life = 4,000 hours
   - Maintenance and repairs (tires) = 15% of tire depreciation
   - Gasoline fuel price = LE4.0/gallon
   - Fuel consumption = 0.06 gallon/hp/hr
4. A backhoe will be purchased for a cost of LE109,750. After a useful life of 5 years, it is assumed the equipment will be sold for LE35,000. Assume interest of 8% for borrowing money, 4% for risk and 2% for taxes, insurance and storage. Calculate the annual ownership cost and the cost per hour assuming the equipment will be used 1800 hr/year.