

**Name:**

**Id#**

**ISE 307, Term 153  
ENGINEERING ECONOMIC ANALYSIS**

**Quiz# 4**

Date: Wednesday, August 24, 2016

- Q1.** The double-declining-balance method is to be used for an asset with a cost of \$90,000, estimated salvage value of \$4,000 and estimated useful life of five years.
- a) What is the depreciation for the five years, assuming that the asset was placed in service at the beginning of the year?
  - b) If switching to the straight-line method is allowed, when is the optimal time to switch?

**Q2.** Nelson Company purchased equipment and incurred the following costs:

- Cash price = \$55,000
- Sales taxes = \$4,400
- Insurance during transit = \$400
- Site preparation, installation, and testing= \$2,300

- a) Determine the cost basis (the amount to be capitalized) for these cells.
- b) Suppose that the equipment was sold after 3 years for \$30,000 and it was depreciated using the given below 5-year MACRS Table. Determine the book value and tax gains or losses assuming 35% tax rate.

20%	32%	19.20%	11.52%	11.52%	5.76%
1	2	3	4	5	6