

Carleton University

Department of Civil and Environmental Engineering

ECOR 3800 A

Assignment 3

Release Date: June 05th

Due Date: June 12th 4:00 PM

Submission: in designated filing cabin.

Question 1

A machine, purchased for \$75,000, has a depreciate life of 5 years. It will have an expected salvage value of \$5,000 at the end of the depreciable life.

- a] Using the straight-line method, what is the book value at the end of year 3?
- b] Consider problem 5(A). If the double declining balance (200 % DB) method is used, what is the depreciation amount for year 2?
- c] If the DB method was used and the book value at the end of year 3 was \$25,725, what is the declining balance rate?

Question 2

A truck for hauling coal has an estimated net cost of \$90,000 and is expected to give service for 300,000 kilometres. Its salvage value will be \$6,000 and depreciation will be charged at a rate of 28 cents per kilometre. Compute the allowed depreciation amount for the truck usage amounting to 50,000 kilometres per year.

Question 3

A company purchased new casting equipment in 2000 at a cost of \$200,000. The company also paid \$40,000 to have the equipment delivered and installed. The casting machine has an estimated useful life of 10 years, and it will be depreciated at a CCA rate = 30%.

- a] What is the cost basis of the casting equipment?
- b] What will be the CCA each year for the life of the casting equipment?

Question 4

An asset was purchased for \$100,000. The CCA rate for this asset was 30%. The effective tax rate was 40%. Assume books are closed and any tax credit for capital loss can be claimed immediately. Find the disposal tax for the asset if sold after 5 years for the following values.

- a] \$110,000
- b] \$100,000
- c] \$30,000
- d] \$10,000