BUS312: Introduction to Corporate Finance

Assignment #4

Question #1

You are an experienced investor. At the beginning of the year, you purchased $500,000 of financial assets. Commissions are 1% of the purchase price. Your "portfolio" of financial assets is your only source of income. From your investments, you receive $5,000 in dividends from non-Canadian corporations and $3,750 in dividends from Canadian corporations. You received $1,125 in interest income. At the end of the year, you sell your portfolio of financial assets for $625,000. Commissions are 1% of the sale price. Your only *non-investment related* tax-credit is the basic personal tax-credit. Assume the following tax information applies:

From	To	Federal Tax Rate
$0	$40,000	15.5%
$40,000	$80,000	22%
$80,000	$125,000	26%
$125,000		29%

From	To	Provincial Tax Rate
$0	$35,000	6.05%
$35,000	$70,000	9.15%
$70,000	$80,000	11.7%
$80,000	$100,000	13.7%
$100,000		14.7%

Federal Canadian dividend gross up rate = 45%
Federal Canadian dividend tax credit = 27.5% of the dividend
Provincial Canadian dividend tax credit = 17.4% of the dividend
Federal Basic Personal tax credit = $1,600
Provincial Basic Personal tax credit = $650

Being as accurate as possible with respect to the tax rules, determine the after-tax and after transaction cost rate of returns on your investment. (Hint: your investment is the total amount you take "out of your pocket" to undertake the investment, i.e. it includes commissions. The same applies when you sell your investments at the end.)

Question #2

A resident of British Columbia is given the opportunity to invest in *one* of the following three investments, each of which requires the same initial investment:

a. Proposal 1 offers interest income of $14,500 in one year (i.e., 14.5% on $100,000).
b. Proposal 2 offers $9,500 in dividends on an investment of $100,000 in a 10% preferred stock issue of a Canadian corporation.
c. Proposal 3 offers an expected capital gain of $12,000 on an investment of $100,000. The expected capital gain is anticipated to be realized on December 31, 2004.

The investor has taxable income from other sources in the amount of $50,000. The investor makes his/her investment choice on the basis of the highest after tax expected income. Using the above information and information from question #1, and presuming that the investments are of approximately the same risk, determine the best investment alternative.

Question #3

ABC Corp has an EBITDA of $1.2 million. They paid $120,000 interest during the year. ABC has three asset classes on their books, Classes X, Y and Z, with UCC's of $32,000, $67,000 and $150,000 respectively. The CCA rates applicable to these classes are 20%, 30% and 40%. An asset, one of seven, in Class X, originally purchased for $80,000, is sold for $45,000. The last asset of Class Y, originally purchased for $20,000, is sold for $50,000. An asset of Class Z is purchased for $80,000 and an old asset, originally purchased for $60,000 is sold for $35,000.

Determine the taxable income of ABC Corp.