Please show work preferably all on excel

A1. (Calculating the WACC) The required return on debt is 8%, the required return on equity

is 14%, and the marginal tax rate is 40%. If the firm is financed 70% equity and 30% debt,

what is the weighted average cost of capital?

A2. (Calculating theWACC) The following values apply to the Drop Corporation: *rd* = 7.5%,

*re* = 13%, *T* = 38%, *D* = $100, and *E* = $200. What is the weighted average cost of capital?

A4. (Estimating the WACC with three sources of capital) Eschevarria Research has the capital

structure given here. If Eschevarria’s tax rate is 30%, what is its WACC?

**BOOK VALUE MARKET VALUE BEFORE-TAX COST**

Bonds $1,000 $1,000 8%

Preferred stock 400 300 9%

Common stock 600 1,700 14%

B13. (Leveraged returns) You have a chance to make a $25,000 one-year investment. The investment

is expected to earn 18%, and there are no taxes. If you borrow $10,000 at 10% and

put up the other $15,000 with your own money, what will be your expected return on the

$15,000?

A2. (Mutually exclusive projects) Consider the cash flows given below for the mutually exclusive

projects, S and L.

a. If the cost of capital is 10%, what is the NPV of each investment?

b. What is the IRR of each investment?

c. Which investment should you accept?

**YEAR 0 1 2**

Project S − 100 160 0

Project L − 100 0 200

A7. (NPV and IRR) A project is expected to generate cash flows of $14,000 annually for five

years plus an additional $27,000 in year 6. The cost of capital is 10%.

a. What is the most that you can invest in this project at time 0 and still have a positive

NPV?

b. What is the most that you can invest in this project at time 0 if you want to have a 15%

IRR?

B9. (NPV) Bill Scott estimates that a project will involve an outlay of $125,000 and will return

$40,000 per year for six years. The required return is 12%.

a. What is the NPV using Bill’s estimates?

b. David Scott is less optimistic about the project. David thinks the outlay will be 10%

higher, the annual cash flows will be 5% lower, and the project will have a five-year

life. David does agree with Bill’s required return. What is the NPV using David’s

estimates?

B17. (Excel: Finding NPV and IRR) Kennesaw Instrument Company is looking at six projects

with the following cash flows (investment outlays are negative cash flows):

**TIME 0 1 2 3 4 5 6 7 8**

Project A − -10 2 3 4 5 4 3 2 1

Project B − -8 -3 5 5 5 2 0 0 0

Project C − -45 25 20 15 5 0 0 0 0

Project D − -1 2 2 2 0 0 0 0 0

Project E − -30 6 6 6 6 6 0 0 0

Project F − -10 -20 5 5 8 8 8 8 8

The cost of capital for all of the projects is 10%.

a. Calculate the NPV for the six projects.

b. Calculate the IRR for the six projects.

c. Calculate the MIRR for the six projects.

A1. (Net income and net cash flows) Julie Stansfield has a bicycle rental shop with annual revenues

of $200,000. Cash operating expenses for rent, labor, and utilities are $70,000.

Depreciation is $40,000. Julie’s tax rate is 40%.

a. What should be Julie’s net income?

b. What is her net cash flow?

B1. (Capitalizing versus expensing) BeyTravel Agency is a small firm owned byDavid Bey that has

just purchased $20,000 worth of computer upgrades. Under current tax laws, Bey has a choice

of expensing or depreciating a small investment such as this. Bey’s marginal tax rate is 40%.

a. What is the present value of the depreciation tax shield if the computers are depreciated

straight line over the next five years? The cost of capital is 10%.