**Week 5 – Practice Set Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Please type a numerical solution to the problems below:**

1. Michela Corporation expects the following revenues, cash expenses, and depreciation charges in the future:

|  |  |  |  |
| --- | --- | --- | --- |
| **Year** | **1** | **2** | **3** |
| Revenues | $89,000 | $106,000 | $145,000 |
| Cost of goods sold | $38,000 | $49,000 | $53,000 |
| Selling expenses | $11,000 | $13,000 | $14,000 |
| Other cash operating expenses | $10,000 | $11,000 | $12,000 |
| Depreciation | $9,500 | $13,500 | $15,000 |

Michela is in the 22 percent tax bracket. Please compute the after-tax cash flows from operations for this investment for each of the years.

1. Albert Corporation estimates above the business needs 4 percent of revenues as a cash balance, 11 percent of revenues as an inventory balance, 6 percent of revenues an accounts payable balance, and 5 percent of revenues as accrued expenses balance. All these balances would be needed at the beginning of each year and are estimated from the year-end annual estimates of revenues and cash expenses given below:

|  |  |  |  |
| --- | --- | --- | --- |
| **Year** | **1** | **2** | **3** |
| Revenues | $100,000 | $150,000 | $200,000 |

Please calculate the account balances for cash, inventory, accounts payable, and accrued expenses for years 0,1,2.

1. Mable Corporation in forecast the cash flows for a project estimates that it will need $50,000 in increased assets in year 1 and will receive $20,000 from increased liabilities in the same year. What is Mable’s net inflow or outflow for year 1.
2. Myles Corporation is considering a new computer system (equipment) that can be purchased for $140,000. Delivery will cost $8,200 and setup will cost $12,000. What is the initial cost of this new computer?
3. You are opening your own business and estimate the following expenses and revenues. Revenues will be $351,000 in year 1 and will grow at 7% for the next two years. Cost of goods sold will be $125,000 in year one and will go at 8% for the next two years. Operating expense will be $35,000 in year one and will grow at 4% for the next two years. Taxes will be 26% per year for all years. Depreciation will be $32,000 in year 1, $44,000 in year 2, $35,000 in year 3. Please estimate the cash flows from operations for years 1,2,3.
4. Dorothy Corporation has a project with the following cash flows: (remember the year zero number is negative)

Year 0 Year 1 Year 2 Year 3

Cash flows -$1,000,000 $400,000 $600,000 $300,000

Using a 12% cost of capital, what is the net present value of this project? Should this project be accepted by Dorothy?

1. Please rework the prior problem with a 6% cost of money. What is the new net present value, and should Dorothy accept the project?
2. (this last one is worth 3 points) You are thinking of opening an internet coffee shop and estimate the following cash flows. The cost of the establishment is $1.200,000 for the building and $250,000 for equipment. The business will earn $842,000 per year in revenue and have cash expenses of $538,000 per year during its five years of operation. Depreciation on the building and equipment will be $80,000 per year. At the end of five years you expect to sell the coffee shop for an **after-tax** cash disposition value of $600,000. No other cash flows will occur during the 5 years of operation. Using a 25 percent tax rate, and a 9 percent cost of money, what is the net present value of this business?