1. The optimal capital structure:

|  |  |
| --- | --- |
| A.  | will be the same for all firms in the same industry. |

|  |  |
| --- | --- |
| B.  | will remain constant over time unless the firm makes an acquisition. |

|  |  |
| --- | --- |
| C.  | of a firm will vary over time as taxes and market conditions change. |

|  |  |
| --- | --- |
| D.  | places more emphasis on the operations of a firm rather than the financing of a firm. |

|  |  |
| --- | --- |
| E.  | is unaffected by changes in the financial markets. |
|  |  |
|  | The basic lesson of MM theory is that the value of a firm is dependent upon the:

|  |  |
| --- | --- |
| A.  | capital structure of the firm. |

|  |  |
| --- | --- |
| B.  | total cash flows of the firm. |

|  |  |
| --- | --- |
| C.  | percentage of a firm to which the bondholders have a claim. |

|  |  |
| --- | --- |
| D.  | tax claim placed on the firm by the government. |

|  |  |
| --- | --- |
| E.  | size of the stockholders claims on the firm. |
|  |  |

 |

1. In Miller's model, when the quantity [(1 - Tc)(1 - Ts) = (1 - Tb)], then:

|  |  |
| --- | --- |
| A.  | the firm should hold no debt. |

|  |  |
| --- | --- |
| B.  | the value of the levered firm is greater than the value of the unlevered firm. |

|  |  |
| --- | --- |
| C.  | the tax shield on debt is exactly offset by higher personal taxes paid on interest income. |

|  |  |
| --- | --- |
| D.  | the tax shield on debt is exactly offset by higher levels of dividends. |

|  |  |
| --- | --- |
| E.  | the tax shield on debt is exactly offset by higher capital gains. |
|  |  |

1. An investment is available that pays a tax-free 6%. The corporate tax rate is 30%. Ignoring risk, what is the pre-tax return on taxable bonds?

|  |  |
| --- | --- |
| A.  | 4.20% |

|  |  |
| --- | --- |
| B.  | 6.00% |

|  |  |
| --- | --- |
| C.  | 7.67% |

|  |  |
| --- | --- |
| D.  | 8.57% |

|  |  |
| --- | --- |
| E.  | None of these. |
|  |  |
|  |  |

1. Your firm has a debt-equity ratio of .60. Your cost of equity is 11% and your after-tax cost of debt is 7%. What will your cost of equity be if the target capital structure becomes a 50/50 mix of debt and equity?

|  |  |
| --- | --- |
| A.  | 9.50% |

|  |  |
| --- | --- |
| B.  | 10.50% |

|  |  |
| --- | --- |
| C.  | 11.00% |

|  |  |
| --- | --- |
| D.  | 11.25% |

|  |  |
| --- | --- |
| E.  | 12.00% |

1. Given the following information, leverage will add how much value to the unlevered firm per dollar of debt?
Corporate tax rate: 34%
Personal tax rate on income from bonds: 30%
Personal tax rate on income from stocks: 30%

|  |  |
| --- | --- |
| A.  | $-0.050 |

|  |  |
| --- | --- |
| B.  | $0.006 |

|  |  |
| --- | --- |
| C.  | $0.246 |

|  |  |
| --- | --- |
| D.  | $0.340 |

|  |  |
| --- | --- |
| E.  | $0.660 |

1. The Aggie Company has EBIT of $70,000 and market value debt of $100,000 outstanding with a 9% coupon rate. The cost of equity for an all equity firm would be 14%. Aggie has a 35% corporate tax rate. Investors face a 20% tax rate on debt receipts and a 15% rate on equity. Determine the value of Aggie.

|  |  |
| --- | --- |
| A.  | $120,000 |

|  |  |
| --- | --- |
| B.  | $162,948 |

|  |  |
| --- | --- |
| C.  | $258,537 |

|  |  |
| --- | --- |
| D.  | $263,080 |

|  |  |
| --- | --- |
| E.  | $355,938 |
|  |  |

1. Suppose a Miller equilibrium exists with a corporate tax rate of 30% and a personal tax rate on income from bonds of 35%. What is the personal tax rate on income from stocks?

|  |  |
| --- | --- |
| A.  | 0.0% |

|  |  |
| --- | --- |
| B.  | 7.1% |

|  |  |
| --- | --- |
| C.  | 10.05% |

|  |  |
| --- | --- |
| D.  | 45.5% |

|  |  |
| --- | --- |
| E.  | None of these |
|  |  |

1. The Do-All-Right Marketing Research firm has promised payments to its bondholders that total $100. The company believes that there is a 85% chance that the cash flow will be sufficient to meet these claims. However, there is a 15% chance that cash flows will fall short, in which case total earnings are expected to be $65. If the bonds sell in the market for $84, what is an estimate of the bankruptcy costs for Do-All-Right? Assume a cost of debt of 10%.
2. The All-Mine Corporation is deciding whether to invest in a new project. The project would have to be financed by equity, the cost is $2,000 and will return $2,500 or 25% in one year. The discount rate for both bonds and stock is 15% and the tax rate is zero. The predicted cash flows are $4,500 in a good economy, $3,000 in an average economy and $1,000 in a poor economy. Each economic outcome is equally likely and the promised debt repayment is $3,000. Should the company take the project? What is the value of firm and its components before and after the project addition?