



6) The equity accounts of DotCom Inc. are as follows:

Common shares (\$1 par value)	10,000,000
Additional paid-in-capital	50,000,000
Retained earnings	125,000,000
Treasury shares at cost	<u>1,000,000</u>
Net common equity	186,000,000

Suppose the firm sells 1,000,000 new shares at \$20 per share.

- (a) What is the new value of the “Common shares” account?
- (b) What is the new value of “Net common equity”?

7) Debt that can be paid off before maturity, at the company’s discretion, is called \_\_\_\_\_ debt.

8) Preference in position among creditors is called (security/seniority/absolute priority).

9) A security that gives the owner the right to purchase stock directly from the firm at a fixed price during a specified period is known as a \_\_\_\_\_.

10) Moose Stores has one million shares of common stock outstanding, with a total market value of \$40 million. It now announces an issue of one million warrants at \$5 each. Each warrant entitles the owner to buy one Moose share for \$30 any time within the next 5 years. Moose is not going to pay any dividends within this period. The annual standard deviation of Moose stock returns is 20%, and the annually-compounded interest rate is 8%.

- (a) What is the market value of each warrant? (Hint: the Black-Scholes value of a European call option on a share selling for \$45 each, with exercise price of \$30, with 5 years to expiry, 8% interest rate, and 20% standard deviation = \$24.57.)
- (b) What is the market value of each share after the warrant issue? (Hint: The value of the shares is equal to the total value of the equity minus the value of the warrants.)

11) Rational Demiconductor has \$1,000 cash, and had earmarked \$1,000 for investment, but learns project is a loser ( $NPV < 0$ ), so plans to distribute the cash by a dividend. Given the following information (left side), fill in (a) through (f). What does this illustrate about dividend policy?

	Original	Post-dividend
Cash	1,000	(a)
Asset Value	9,000	(b)
<u>New Project</u>	<u>0</u>	<u>(c)</u>
Total Value	10,000	(d)
# of Shares	1,000	(e)
price/share	\$10	(f)

12) In a Modigliani-Miller world, does increasing leverage increase:

- (a) The cost of debt? (explain – one sentence)
- (b) The cost of equity? (explain – one sentence)
- (c) The overall opportunity cost of capital? (explain – two sentences)

13) In a Modigliani-Miller world, suppose there is an unlevered firm U and a levered firm L. They have the same cash flows. Which firm has the higher total market value of its securities?

14) In a world with corporate taxes but otherwise Modigliani-Miller, which firm (U or L) has the higher total market value?

15) The theory of capital structure in which the optimal debt ratio is determined by tax benefits and distress costs of debt is called the \_\_\_\_\_ theory.

16) The Salad Oil Storage (SOS) Company has financed a large part of its facilities with long-term debt. There is a significant risk of default (in fact, there would be default if the debt matured today). Explain intuitively (one or two sentences each):

- (a) Why SOS stockholders could lose by investing in an  $NPV > 0$  project financed by a new equity issue
- (b) Why SOS stockholders could gain by investing in an  $NPV < 0$  project financed by cash
- (c) Why SOS stockholders could gain from paying out a large cash dividend.
- (d) The value losses from these “games” can be counted among the “costs of \_\_\_\_\_.”

17) Solve BM6 Practice Question #1, page 574. (Hint: First, “net out” accounts payable by moving it to the left-hand side and constructing a “net working capital” asset entry. Then compute WACC on the remaining three sources of finance.)

18) Solve BM6 Practice Question #3, page 574. (This is a one-sentence answer.)

19) Solve BM6 Practice Question #8, page 576.