Corporate Finance Practice Questions

1) Which one of the following statements can be made about a company that has no fixed interest payment obligations?

A) Its degree of financial leverage will be 1.0, which means that the company will have no financial risk.
B) Its degree of financial leverage will be less than 1.0 if the company charges interest on its overdue receivable accounts.
C) Its degree of financial leverage will be more than 1.0 if the company charges interest on its overdue receivable accounts.
D) Its degree of financial leverage will be zero, which means that the company bears no financial risk whatsoever.

2) Which of the following statements contradicts the likely outcomes as a result of the "clientèle effect"?

A) Low dividend paying stocks will tend to attract investors in higher tax brackets.
B) Clients prefer dividends because they are more certain than the potential for capital gains in the future; a cut in dividends will result in a negative clientele effect.
C) Stocks with no internal growth will tend to attract investors who prefer high dividends.
D) Different groups of investors have different preferences for dividends; if a firm changes its dividend policy, it will lose one group of investors and simultaneously attract another group, keeping its share prices stable.

3) Which of the following statements with respect to risk analysis techniques is untrue?

A) Sensitivity analysis illustrates the impact on the dependent variable by only changing one independent variable, while holding all other independent factors constant.
B) Monte Carlo simulation will run the greatest number of scenarios, with each scenario having nothing held constant.
C) Scenario analysis requires the calculation of a few possible outcomes, which is followed by the assignment of probabilities of these various outcomes actually occurring.
D) The advantage that a Monte Carlo analysis has over the other techniques is that it does away with the need to assign subjective probabilities to the various random variables.

4) Which of the following statements about cash flow and accounting profit are true?

I. In theory, if the life of a company was finite, the sum of its total undiscounted cash flows should equal the sum of its profit over this period.
II. For a company that has many depreciable assets, its operating cash flows are always higher that its accounting profit.
III. Accounting profit is more reliable than cash flows because cash flows look at all items that involve cash, whereas profits only look at income and expense items.
IV. During a high growth phase of a company, it is very common to see high profits when, in fact, their cash flows are negative.

A) I, II and IV only
B) IV only
C) I, II, III and IV
D) II and IV only

5) Your company is currently analyzing the launch of a new division, which is expected to generate the following cash flows:

Year	Cash Flow
0	($750,000)
1	$300,000
2	$250,000
3	$118,000
4	$375,000
5	$502,000

If the required rate of return on this project is 11%, what is its IRR? Should the company undertake this project?

A) The IRR equals 26.69% and, therefore, the project should be undertaken.
B) The IRR equals 19.3% and, therefore, the project should be undertaken.
C) The IRR equals 19.3% and, because this required return is greater than the original required return of 11%, the project should be rejected.
D) The IRR equals 26.69% and, because this required return is greater than the original required return of 11%, the project should be rejected.

6) Which of the following statements with respect to the use of an appropriate discount rate is true?

I. A company should use its weighted average cost of capital (WACC) for all projects as the discount rate because WACC is roughly how much it costs to finance all of the projects.
II. A company should use WACC as the benchmark discount rate; however, for projects that are risky, WACC should be reduced to reflect the riskiness of the project.
III. The company should use WACC as the discount rate only for projects that exhibit a risk level that is similar to the risk level of the company as a whole.
IV. The rate used to discount a project depends solely on how risky that project is; the discount rate should in no way be influenced by how much it cost for the company to raise capital.

A) I and IV only
B) III and IV only
C) II and III only
D) III only

7) Which of the following statements about the Modigliani and Miller capital structure propositions are true?

I. In the absence of taxes, the value of the firm is in no way impacted by its capital structure.

II. In the absence of taxes, the weighted average cost of capital will be constant for all levels of debt/equity ratios.
III. With taxes, the value of a firm is maximized when its capital structure is entirely made up of equity.
IV. With taxes, the weighted average cost of capital is minimized when the capital structure is made up entirely of debt.

A) I and IV only
B) III and IV
C) I, II, III and IV
D) I, II and IV only

8) Which of the following statements about capital budgeting is true?
I. Capital budgeting is the process of deciding which projects to undertake.
II. Capital budgeting dictates that all projects with positive NPVs should be undertaken, since these projects all yield a return that is higher than what is required.
III. Capital budgeting requires that the present value of a project's profits be in excess of its up-front costs.
IV. Proper capital budgeting will result in the maximization of shareholder value.

A) I, II, III and IV
B) II and IV only
C) I, III and IV only
D) I and IV only

9) The market value of XYZ Corp.'s common equity is currently $600 million and the market value of its debt is $400 million. The cost of equity is estimated at 12% and the before-tax cost of debt is estimated at 8%. Suppose that the company wishes to raise an additional $150 million to finance its expansion; it estimates the debt will now cost them 9% (before tax) and the equity will cost 14%. The company's tax rate is 40%. If the company wishes to maintain its existing capital structure, what will the company's new WACC and marginal cost of capital be?

A) New WACC: 10.56% Marginal cost of capital: 1.44%
B) New WACC: 9.12% Marginal cost of capital: 15.3%
C) New WACC: 10.56% Marginal cost of capital: 15.8%
D) New WACC: 12.0% Marginal cost of capital: 14.7%

10) Which of the following statements is least accurate with respect to the impact operating leverage will have on the financial profile of a company?

A) A high operating leverage is evident if a greater proportion of a firm's cost structure is fixed.
B) As operating leverage increases, a small percentage change in sales will have a bigger impact on EBIT.
C) As operating leverage increases, a small percentage change in EBIT will have a bigger impact on net income.
D) The higher the operating leverage of a company, the higher will be the sales break-even point.

11) Your company is currently analyzing the launch of a new division, which is expected to generate the following cash flows:

Year	Cash Flow
0	($750,000)
1	$300,000
2	$250,000
3	$118,000
4	$375,000
5	$502,000

If the required rate of return on this project is 11%, what is its MIRR? Should the company undertake this project?

A) The MIRR equals 19.93%; because this is greater than the required rate of return, the project should be undertaken.
B) The MIRR equals 19.93%; because this is less than the IRR of the project, it should not be undertaken.
C) The MIRR equals 18.72%; because this is greater than the required rate of return, the project should be undertaken.
D) The MIRR equals 26.69%; because this is greater than the required rate of return, the project should be undertaken.

12) Which of the following is the least likely means of aligning managers' best interests with those of a firm's shareholders?

A) The possibility that a rival firm will take over if the firm's value drops dramatically
B) Directing a greater proportion of managers' compensation towards stock options
C) The increasing prominence of institutional shareholders, who are more sophisticated and have the necessary voting power to influence managers' decisions
D) Shortening the terms in which managers may serve

13) ABC Corp. is considering the following mutually exclusive projects:

Project	Cost	Annual CF (for 5 years)	Required Return
A	$150,000	$45,900	10%
B	$570,000	$162,912	13%

Which of the following would represent the most optimal choice?

(a) Because project A has a NPV of $23,997 and project B has a NPV of $47,565, only project B should be chosen.

(b) Because project A has a NPV of $23,997 and project B has a NPV of $2,999, both projects should be chosen.

(c) Because project A has a NPV of $23,997 and project B has a NPV of $2,999, only project A should be chosen.

(d) Because project A has a NPV of $23,997 and project B has a NPV of $47,565, both should be chosen.

14) Which of the following statements with respect to the various theories that exist about a firm's optimum dividend policy is incorrect?

A) If a company were to retain all of its profits, its growth rate would equal its return on equity.
B) The bird-in-the-hand theory suggests that a company should never retain any of its profits.
C) The all-or-nothing theory suggests that a company should retain all of its profits if its return on equity exceeds its cost of capital.
D) The bird-in-the-hand theory and the all-or-nothing theory would lead to the same conclusion for companies whose return on equity exceeds its cost of equity.

15) Which of the following statements are true with respect to effects arising as a result of a firm's capital structure?

I. Companies with a generally stable growth in sales should have a higher degree of operating leverage.
II. The firm's cost of equity will rise as its leverage ratios increase.
III. Since a firm's financing choices should have no bearing on its operating income, firms that have similar operating incomes and shares outstanding but different debt levels should have the same respective earnings per share.
IV. In a world without any taxes, it may be argued that the value of the firm will not be impacted by the amount of debt that it has in its capital structure.

A) III and IV only
B) I, II, III and IV
C) I, II and IV only
D) II and III only

16) Which of the following statements is incorrect with respect to the accuracy of rankings among the NPV, IRR and MIRR methods of project evaluation?

A) If the projects are independent of each other, all the methods will result in the same rankings.
B) The MIRR method is more accurate than the IRR method, but the NPV is the most accurate among the three methods.
C) If the projects are mutually exclusive, they will have the same capital requirements but different time horizons; the MIRR and the NPV methods should result in the same rankings.
D) If the projects are mutually exclusive, they will have different capital requirements but the same time horizons; the MIRR and the NPV methods should result in the same rankings.

17) Which of the following events is not associated with an increase in the level of business risk for an enterprise?

A) The entry and exit of large firms in the industry adds to the volatility of sales.
B) Taking on more debt to finance high-growth projects
C) New duties on imported raw materials add to the volatility of resource costs.
D) A firm invests heavily in new capital equipment, reducing its variable cost component.

18) Which of the following statements is incorrect with respect to why the NPV method and the IRR method can sometimes provide conflicting rankings for projects?

A) The divergence in rankings is usually observed when the two projects differ in investment size.
B) Divergences in ranking only occur because the required rate of return is held constant for a project.
C) Divergences in ranking only occur when the projects are mutually exclusive, not when they are independent of each other.
D) The divergence in rankings is usually observed when one project has most of its cash flows occurring in the earlier years, while the other project has most of its cash flows occurring in the later years.

19) ABC Corp. is currently examining a project that's expected to generate an annual cash flow of $37,000 for eight years. The project will cost $150,000. If the required rate of return on this project is 12%, which of the following would represent the most optimal choice?

A) Because the IRR of 15.7% exceeds the required return, the project should be rejected.
B) Because the IRR of 15.7% exceeds the required return, the project should be accepted.
C) Because the IRR of 18.2% exceeds the required return, the project should be rejected.
D) Because the IRR of 18.2% exceeds the required return, the project should be accepted.

20) Your company is evaluating three projects that require a rate of return of 11%. The cash flows for these projects are as follows:

	Year			
	0	1	2	3
Project X	(500,000)	300,000	150,000	275,000
Project Y	(750,000)	400,000	100,000	285,000
Project Z	(1,000,000)	500,000	375,000	475,000

Which projects would you undertake if the projects were independent, and which would you undertake if they were mutually exclusive?

A) If projects are independent, choose projects X, Y and Z; if they are mutually exclusive, choose only project Z.
B) If projects are independent, choose projects X and Z; if they are mutually exclusive, choose project Z only.
C) If projects are independent, choose project X; if they are mutually exclusive, choose project Z.
D) Whether the projects are independent or mutually exclusive, project Z should be chosen because it has the highest NPV.

Corporate Finance

1)	**A**	**B**	**C**	**D**
2)	**A**	**B**	**C**	**D**
3)	**A**	**B**	**C**	**D**
4)	**A**	**B**	**C**	**D**
5)	**A**	**B**	**C**	**D**
6)	**A**	**B**	**C**	**D**
7)	**A**	**B**	**C**	**D**
8)	**A**	**B**	**C**	**D**
9)	**A**	**B**	**C**	**D**
10)	**A**	**B**	**C**	**D**
11)	**A**	**B**	**C**	**D**
12)	**A**	**B**	**C**	**D**
13)	**A**	**B**	**C**	**D**
14)	**A**	**B**	**C**	**D**
15)	**A**	**B**	**C**	**D**
16)	**A**	**B**	**C**	**D**
17)	**A**	**B**	**C**	**D**
18)	**A**	**B**	**C**	**D**
19)	**A**	**B**	**C**	**D**
20)	**A**	**B**	**C**	**D**

Answers

1) **A**
2) **B**
3) **D**
4) **A**
5) **A**
6) **B**
7) **D**
8) **D**
9) **C**
10) **C**
11) **A**
12) **D**
13) **C**
14) **D**
15) **C**
16) **D**
17) **B**
18) **B**
19) **D**
20) **B**

Answers

1) The Right Answer is **a**. **Explanation:**
Degree of financial leverage = EBIT/(EBIT - interest expense). In the absence of interest expense, the numerator and the denominator will be the same, resulting in a ratio that equals 1.0. Without interest expense, it can also be implied that the firm does not carry any debt and, therefore, it does not have any financial risk. Receivable accounts are counted as part of working capital; any interest they may generate says nothing about a firm's degree of financial leverage.

2) The Right Answer is **b** **Explanation:**
The **clientele effect** simply states that different groups of investors prefer varying levels of dividends. For instance, because dividends are taxed at a higher rate than capital gains, investor with high tax brackets would rather see a low dividend payout ratio and instead have their returns made up entirely of capital gains. Therefore, if a firm changes its dividend policy, it will lose one group of investors and simultaneously attract another group, keeping its share prices stable. Furthermore, stocks with no internal growth are an indication that the firm is paying its entire earnings out as dividends; this stock would attract the attention of investors seeking high dividends.

3) The Right Answer is **d**. **Explanation:**
A **Monte Carlo simulation** actually requires the assignment of probabilities to the various random variables involved in calculating NPV. Assigning probabilities sets parameters, which influence how the simulation can draw random numbers for that variable.

4) The Right Answer is **a** **Explanation:**
Choice III is incorrect because even though accounting profit only looks at income

and expense items, many of those amounts are dependent on which accounting methods were chosen, whereas with cash flow, there is no room for discretion.

5) The Right Answer is **a**. Your answer was correct!
Explanation:
Candidates must have a thorough understanding of their calculators.

On your TI-BAII Plus calculator: **(IRR Calculation)**

1) Press CF (then press "2nd", and "CLR Work" to ensure worksheet is empty)
2) Key in -750,000 for CFo, then press "ENTER"
3) Press the down arrow to display C01, then key in 300,000 and press "ENTER"
4) Press the down arrow to display F01. As cash flows are uneven, each cash flow will have a frequency of "1". For each, you need only to press "ENTER".
5) Repeat steps 3 and 4 for the four remaining cashflows.
6) Press IRR, then CPT. The number displayed is the Internal Rate of Return.

6) The Right Answer is **b**. **Explanation:**
Choice I is incorrect because the discount rate must only take a project's risk into account. Therefore, the source and the cost of financing are irrelevant. WACC must only be used as the discount rate for projects that exhibit a risk that is similar to that of the company as a whole. Therefore, for projects that are riskier than average, the discount rate can use WACC as the base and add a premium to reflect the higher risk nature of the project.

7) The Right Answer is **d**. **Explanation:**
With taxes, the value of a firm is maximized when its capital structure is entirely made up of debt. The logic is that with the tax deductibility of debt, the cost of debt is reduced much further than the cost of equity and, therefore, only debt should be used to raise capital.

8) The Right Answer is **d**. **Explanation:**
Choice II is incorrect because in the case of mutually exclusive projects, only the project with the highest NPV should be accepted; the rest should be rejected even if their NPVs are positive. III is incorrect because the proper method is to discount a project's free cash flow, not its profits; profits are heavily influenced by the accounting methods that are chosen and, therefore, are not deemed to be as reliable.

9) The Right Answer is **c** **Explanation:**

Step 1: $\text{Old WAAC} = 12\%(.60) + (1 - .4)(8\%)(.40) = 9.12\%$

Step 2: $\text{New WAAC} = 14\%(.60) + (1 - .4)(9\%)(.40) = 10.56\%$

$$\text{Marginal Cost of Capital} = \frac{10.6}{9.12} - 1 = 15.8\%$$

10) The Right Answer is **c**. **Explanation:**
Operating leverage has an impact on EBIT. However, the link between EBIT and net income is independent of the degree of operating leverage.

11) The Right Answer is **a** **Explanation:**

Step 1: Periods Until Maturity	CF_t	FV @ 11%	FV @ t = 5
4	300,000	$(1.11)^4$	455,421
3	250,000	$(1.11)^3$	341,908
2	118,000	$(1.11)^2$	145,388
1	375,000	$(1.11)^1$	416,250
0	502,000	$(1.11)^0$	502,000
			$1,860,967

Step 2:

$750,000 = 1,860,967 \div (1 + MIRR)^5$
$(1 + MIRR)^5 = 1,860,967 \div 750,000$

$MIRR = (2.4813)^{1/5} - 1$ **MIRR = 19.93%**

12) The Right Answer is **d**. **Explanation:**
It is rare for managers to be voted out at the end of their terms. Instead, when corporate performance has really deteriorated, the manager either resigns or is forced to resign. In either case, the length of the term in which these managers serve has no bearing on the decision to retain or fire them.

13) The Right Answer is **c**. **Explanation:**
Step 1. Find NPV of each project

Note: NPV = (PV of CF) – (Cost)

Project A: Given: PMT = 45,000; N = 5; I = 10%

Find: PV = 173,997

∴ NPV = 173,997 – 150,000 = 23,997

Project B: Given: PMT = 162,912; N = 5; I = 13%

Find: PV = 572,999

∴ NPV = 572,999 – 570,000 = 2,999

14) The Right Answer is **d**. **Explanation:**
The bird-in-the-hand theory and the all-or-nothing theory would lead to the same conclusion for companies whose cost of equity exceeds their return on equity. While a bird-in-the-hand theory suggests that the full earnings be paid out as dividends all the time, an all-or-nothing theory would only come to that conclusion if a company's cost of equity exceeded its return on equity. Therefore, if the return on equity actually exceeds the cost of equity, an all-or-nothing policy would suggest that absolutely no dividends be paid out.

15) The Right Answer is **c**. **Explanation:**
Choice I is true because if sales are expected to grow at a stable rate, why not make operating earnings more sensitive to changes in sales? Remember that volatility is not always a bad thing, especially if things are happening in your favor. Choice II is true because equity is the "residual" owner of a company. Therefore, as leverage ratios rise, the risk of default increases and will begin to require a higher return. Choice III is untrue because earnings per share is calculated after deducting for interest charges. Therefore, the firm with the higher debt will have the lower earnings

per share. Choice IV is true - in fact, this is Proposition I of the Modigliani-Miller Theorem.

16) The Right Answer is **d**. **Explanation:**
Even if mutually exclusive projects have the same time horizon, if their capital size is different, then the MIRR method might produce a ranking that is different than that produced under the NPV method.

17) The Right Answer is **b**. **Explanation:**
Taking on additional debt increases a company's financial risk, but not necessarily its operating or business risk. Business risk is best quantified by the variability of cash flows generated from operations. In this matter, financing charges have no relevance.

18) The Right Answer is **b**. **Explanation:**
Actually, it is the level of required rate of return that will influence the ranking for a project. For instance, at a low level of required rate of return, both the NPV method and the IRR method might produce the same result. However, as the required rate of return increases, a divergence in rankings may arise because the NPV method assumes that cash flows will be reinvested at the required rate of return, while the IRR method assumes that the cash flows will be reinvested at the IRR rate.

19) The Right Answer is **d**. **Explanation:**

Step 1. Calculate the IRR (which is really the expected return)

Given: PMT = $37,000; N = 8; PV = -150,000

Find: I (or IRR) = 18.2%

Step 2. Decision: Since IRR exceeds required return, this project should be accepted.

20) The Right Answer is **b**. **Explanation:**

	Present Value of CF @ 11%			
	0	1	2	3
Project X	(500,000)	272,727	201,077	95,547
Project Y	(750,000)	360,360	208,390	(100,088)
Project Z	(1,000,000)	450,450	347,316	102,124

If the projects are independent, choose all the projects that have a positive NPV. If the projects are mutually exclusive, choose only the project with the highest NPV.