

Finance F21

Multiple Choice

Identify the choice that best completes the statement or answers the question.

1. With respect to the statement of cash flows:

a	increasing assets is always the predominant use of cash while borrowing is the predominant source of cash
b	increases in assets are sources of cash and increases in liabilities are uses
c	its most important function is to identify the principal sources and uses of cash
d	all of the above

2. A source of cash would be generated by which of the following?

a	An increase in accounts receivable
b	An increase in inventory
c	A decrease in accrued expenses
d	An increase in accounts payable

3. A firm is planning for next year and has developed the following information.

This year's sales	\$7.90M	
Next year's sales	\$9.48M	
This year's inventory	\$2.37M	
This year's cost ratio*	60.0%	*Cost of goods sold (COGS)
Next year's cost ratio*	55.0%	as a % of sales

What inventory balance should be included in next year's plan if management intends to increase inventory turnover by *two turns* in the coming year. Calculate using ending balances and the COGS formulation of inventory turnover.

a	\$1.74M
b	\$1.90M
c	\$1.30M
d	\$1.24M

4. What is the debt/interest planning problem?

a	Planned debt is required to forecast interest, but interest is required to forecast debt.
b	Debt is constant, but interest varies through time.
c	The difficulty of knowing how much debt to issue because EAT is constant.
d	The difficulty of knowing how much dividends to pay because debt is constant.

5. If the yield curve is **normal**, what is the interest rate on a 20-year Treasury bond, compared to the interest rate on a 5-year Treasury bond?

a	The interest rate on the 20-year bond will be more than the interest rate on the 5-year bond.
b	The interest rate on the 5-year bond will be more than the interest rate on the 20-year bond.
c	The interest rates of the two bonds will be equal.
d	It is impossible to tell without knowing the relative risks of the bonds.

6. Holding all other variables constant, an increase in the interest rate will cause ____ to decrease.

a	Future values
b	Present values

c	Annuity payments
d	Growth rates

7. What is the amount of the equal annual installments for a 10-year, \$10,000 loan with a 20% rate of interest?

a	\$2,225
b	\$3,863
c	\$2,385
d	\$1,917
e	\$2,000

8. You have borrowed \$130,000 to buy a new motor home. Your loan is to be repaid over 15 years at 8% compounded monthly. Calculate the total amount of interest you will pay over the life of the loan.

a	\$ 47,451
b	\$ 93,677
c	\$126,226
d	\$299,090

9. You have borrowed \$130,000 to buy a new motor home. Your loan is to be repaid over 15 years at 8% compounded monthly. How much total interest will you save over the life of the loan by paying an extra \$200 per month loan?

a	\$24,247
b	\$41,872
c	\$69,418
d	\$81,763

10. You are considering an investment that will pay you \$100 in Year 1, \$500 in Year 2, \$0 in Year 3 and \$600 in Year 4. If you require a 12% return, what is the most you should pay for this investment today? (Round to nearest \$)

a	\$915
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b	\$869
c	\$734
d	\$698

11.A security's value is equal to:

a	the book value of the firm
b	the book value of the firm divided by number of shares
c	the future value of its expected cash flows
d	the present value of its expected cash flows

12.Which of the following is TRUE?

a	A bond's price moves to par value as it approaches maturity
b	The shorter a bond has to maturity, the less sensitive the bond's price is to changes in market interest rates
c	The longer a bond has to maturity, the more sensitive the bond's price is to changes in market interest rates
d	Both b &c
e	All of the above

13.The term maturity risk emphasizes the fact that

a	repayment is less assured as maturity lengthens
b	shorter term bonds are worth more than longer term bonds
c	bond prices change when interest rates change

d	the prices of longer term bonds change more than the prices of shorter term bonds when interest rates change
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14. An unsecured bond is referred to as a(n):

a	Indenture
b	Debenture
c	Mortgage Bond
d	Subordinated Mortgage Bond

15. J&J Manufacturing issued a bond with a \$1,000 par value. The bond has a coupon rate of 7% and makes payments semiannually. If the bond has 30 years remaining and the annual market interest rate is 9.4%, what will the bond sell for today?

a	\$760.91
b	\$861.29
c	\$937.42
d	\$1,000.00
e	\$1,025.32

True/False

Indicate whether the statement is true or false.

16. A decrease in accounts receivables is categorized as a use of funds.
17. The primary market is the resale market for securities.
18. The Securities and Exchange Commission is the governmental body responsible for enforcing the rules and regulations governing the trading in securities.
19. The "base" interest rate is made up of the pure rate, an inflation adjustment, and a liquidity risk premium.
20. The time value of money means that a dollar today is worth less than a dollar at any time in the future.
21. Compound interest occurs when interest is earned on interest.

- ___ 22. Because stocks rely on dividends as the principal source of cash flow, ascertaining stock prices is an easier and more precise process than the valuation of bonds, which relies on variable coupon payments.
- ___ 23. Bond ratings are primarily based on the issuing firm's financial projections.

Problem

24. Petersen, Inc. had the following balances on their balance sheet as of 12/31/20X4 (this is the complete balance sheet):

Cash	\$ 50,000
Accounts Receivable	100,000
Inventory	250,000
Fixed Assets (net)	500,000
Accounts Payable	220,000
Long Term Debt	180,000
Common Stock	100,000
Retained Earnings	400,000

a	How much is Petersen's Net Working Capital as of the balance sheet date?
b	What is Petersen's Current Ratio?
c	If Net Income for Petersen for 20X4 was \$50,000, what was its Return on Assets?
d	If Petersen has Earnings Before Taxes of \$30,000 and a TIE Ratio of 7.0. What is its interest expense?

25. One year ago a \$1,000 face value, 6% coupon bond was selling for \$1,100. Since then, the market yield has decreased by two percentage points. The bond pays interest semiannually and now has four years to maturity. What is the bond's price today?

26. Key Graphics expects to finish the current year with the financial results indicated on the worksheet given below. Develop next year's income statement and ending balance sheet using that information and the following planning assumptions and facts. Note that due to an economic slowdown, Key Graphics is expecting a ten percent reduction in revenue. It is attempting to cut expenditures by an even greater percentage, resulting in a larger net profit. Work to the nearest thousand dollars.

PLANNING ASSUMPTIONS AND FACTS

Income Statement Items

1	Revenue declines by 10%.
2	The cost ratio will improve by 3%.
3	Spending in the Marketing Department will be held to 22% of revenue.
4	Engineering and Overhead expenses will be cut by 15%.
5	The combined state and federal income tax rate will be 40%
6	Interest on all borrowing will be 9 percent.
7	Interest expenses are based on $\frac{1}{2}$ of the prior year's long-term debt and $\frac{1}{2}$ of the current year's long-term debt.)

Balance Sheet Items

1	Cash balances will remain constant.
2	The ACP will be 30 days. (Use ending balances.)
3	The inventory turnover ratio will be 4 times. (Use ending balances.)
4	Capital spending is expected to be \$6.0M. The average depreciation life of the assets to be acquired is 5 years and straight-line depreciation is used. Old assets will depreciation by \$1,700,000.
5	Accounts payable is expected to be 40% of inventory.
6	Accruals will rise by \$10,000
7	\$1,500,000 of dividends will be paid.
8	There are no stock splits.

Key Graphics
Income Statement
(\$000)

	THIS	YEAR	NEXT	YEAR
	\$	%	\$	%
Revenues	\$18,000	100.0	\$16,200	100.0
Less: Cost of Goods Sold	<u>7,500</u>	<u>42.0</u>		
Gross Margin	\$10,440	58.0		
Expenses				
Marketing	\$4,100	22.8		
Engineering	1,400	7.8		
Overhead	<u>1,500</u>	<u>8.3</u>		
Total Expenses	7,000	38.9		
EBIT	\$3,440	19.1		
Less: Interest Expense	<u>500</u>	<u>2.8</u>		
EBT	\$2,940	16.3		
Less: Income Tax	<u>1,176</u>	<u>6.5</u>		
EAT	\$1,764	9.8		

Key Graphics
Balance Sheet
(\$000)

ASSETS	LIABILITIES AND EQUITY				
	This Year	Next Year		This Year	Next Year
Cash	\$1,200		Accounts Payable	\$400	

Accts, Receivable	2,000		Accruals	<u>180</u>	
Inventory	<u>2,400</u>		Current Liabilities	\$580	
Current Assets	\$5,600				
Gross Fixed Assets	\$13,000		Long-Term Debt	\$4,575	
Less: Acc. Deprec.	<u>4,800</u>		Equity	<u>8,645</u>	
Net Fixed Assets	\$8,200		Total Capital	\$13,220	
Total Assets	<u>\$13,800</u>		Total Liab.& Equity	<u>\$13,800</u>	