MAKING YOU COUNT

THE INSTITUTE OF CERTIFIED FINANCIAL MANAGERS

EXAM ASSIGNMENT

in discipline of FINANCIAL MANAGEMENT AND FINANCIAL ANALYSIS

March 2011

Section A – 40 points

TEST (20 questions with 2 points credited for every correct answer)

1. Which of the following is a part of the financial manger's functions?

    a. Managing operating costs
    b. Managing by exception
    c. Submitting financial statements to the tax and statistics authorities
    d. Carrying out risk management

2. Gross margin ratio of the company amounts to 25%. Average annual inventory is evaluated at £30,000. Stock turnover ratio is 8. Specify value of sales for the accounting period.

    a. £225,000
    b. £320,000
    c. £240,000
    d. £300,000

3. If the operating leverage degree is 3 with given sales rate, it means that when the sales rate is increased by 10%, total amount of profit will increase by:

    a. 3%
    b. 15%
    c. 30%
    d. 10%

4. When will operating income be the same while applying absorption costing and direct costing?

    a. if there is no opening inventory of final goods если
    b. if amount of products manufactured is equal to amount of products sold
    c. if there is no work in progress at the end of period
    d. if there is no work in progress at the beginning of period

5. Define the value of net working capital of company X by means of information from the financial statement drafted as of December 31, 2010 (£ thousand):

Long-term assets	1,200
Current assets	500
Statutory fund	200
Share of minority	40
Long-term creditors	800
Current liabilities	650
Preference stock	10

    a. £ 900,000
    b. £ (160,000)
    c. £ (150,000)
    d. £ (200,000)

6. Define duration of the financial cycle under the given conditions: stock is purchased every 10 days, buyers pay the invoices on the 50th day, suppliers demand invoices payment on the 45th day:

   a. 15 days
   b. 10 days
   c. 50 days
   d. 5 days

7. If market rate (rate of return) is higher than the coupon rate this means that:

   a. current value of the bond is higher than the nominal value
   b. current value of the bond is lower than the nominal value
   c. current value of the bond is equal to the nominal value
   d. current value of the bond is lower than the coupon rate

8. You have the following details of the company's operation as of December 31, 2010:

Current liabilities	£10,000
Liquidity adequacy ratio	2:1
Stock	£12,000
Cash assets	£3,000

   Define the value of debtors as of December 31, 2010

   a. £ 5,000
   b. £15,000
   c. £12,000
   d. £10,000

9. Operating income of the joint-stock company for 2010 is £89,000. It is known that for the accounting year loan interest was accrued at £15,000, profit tax was £12,000, amount of dividends accrued was £13,000. Issued capital of the joint-stock company is £100,000, and is composed of 100,000 shares with nominal value of £1 a share.
   The share profit for 2010 is:

   a. £0.49
   b. £0.89
   c. £0.74
   d. £0.62

10. The "Stock" account has increased from £90,000 to £100,000 during the accounting year. Cost of goods sold is £160,000. What was the total amount of goods purchased for the accounting period?

    a. £170,000
    b. £250,000
    c. £260,000
    d. £150,000

11. Which of the following coefficients is applied to evaluate the capital leverage?

    a. Asset turnover
    b. Acid test ratio
    c. Debt-to-equity ratio
    d. Return on assets

12. Internal rate of return of the investment project is:

   a. Discounting rate when net present value of the project equals to initial investments
   b. Discounting rate when net present value of the project equals to zero
   c. Rate of return that discounts the present value of the project to zero
   d. Rate of return at which the project is profitable

13. Gross margin ratio of the company is 40%. Average annual stock is evaluated at £10,000. Stock turnover is 9. Define the value of sales for the accounting period.

   a. £150,000
   b. £144,000
   c. £126,000
   d. £225,000

14. For 2009 and 2010 the company keeps equal values of the sales and total amount of expenses. However, in 2010 value of the operating leverage increased. Define the reason of increase of the operating leverage for the company.

   a. Increase of the marginal profit
   b. Increase of net profit
   c. Increase of variable overhead
   d. Increase of fixed expenses

15. Market value of one of 1 mln ordinary shares of the company is £2 per a share; nominal value of one share is £1. Attracted borrowed capital is £3 mln at the rate of 12% per annum. The rate of return demanded by investors is 15%. Rate of the profit tax is prescribed at 25%. What is the weighted average cost of the capital employment of the company?

   a. 12.00%
   b. 12.75%
   c. 15.00%
   d. 13.20%

16. Anticipated sales volume for the products in 2011 was set at 275,000 units. Total expenses per unit of the products are set at the level of £16 which includes £3 of fixed expenses. The sale price was stipulated at £25 per unit. Define the financial margin safety for the company in kind

   a. 68,750
   b. 275,000
   c. 206,250
   d. 183,333

17. As of January 01, 2010 balance cost of long-term assets of the company is £2,758,940. For year 2010 fixed assets previously purchased for £273,790 were sold with loss of £15,850. Same year new fixed assets were purchased at the amount of £568,900. All the operations of purchase and sale of fixed assets were paid in the accounting year. Define the amount of capital expenses that the company needs to represent in the Cash Flow Statement for 2010

a. £310,960
b. £568,900
c. £295,110
d. £273,790

18. Shares of the joint-stock company are assigned with the beta-coefficient equal to 1.2. Anticipated return for the market in general for the following period is 12%. Return of state internal bonds is 5%.
What is the value of the company's statutory capital?

a. 13.0%
b. 12.0%
c. 13.4%
d. 18.0%

19. For February 2011 the company gained sales volume of 1,500 pieces of products at the sale price of £25. Variable overhead per a piece of products is set at £10. Define the increase of profits in terms of money given that increase of sales volume by £10,000 is anticipated in March 2011.

a. £4,000
b. £6,000
c. £12,500
d. £5,263

20. The difference between the financial leverage and the operating leverage is that the former refers to:

a. Usage of fixed expenses
b. Usage of variable overhead
c. Risk indexes on sale
d. Usage of borrowed assets

SECTION B

Task 1. 20 points

Board of Directors of *Ann Beauty Products* has the following condensed statements submitted for current and preceding years:

Ann Beauty Products
Loss and Profit Statement
for the year that ends September 30

	2009		2010	
	£000	**£000**	**£000**	**£000**
Sale		5 400		5 760
Minus				
Cost of goods sold:				
Opening stock balance	480		600	
Purchase	3 360		3 525	
Minus final stock balance	600	3 240	750	3 375
Gross profit		2 160		2 385
Minus operational expenses		2 040		2 250
Net profit		120		135

Balance sheet as of September 30

	2009		2010	
	£000	**£000**	**£000**	**£000**
Fixed assets		2 850		2 790
Current assets				
Stock	600		750	
Debtors	1 125		1 440	
Cash assets in bank	12		6	
	1 737		2 196	
Minus creditors: amount due for a year	585	1 152	675	1 521
		4 002		4 311
Financing at the expense of:				
Ordinary £1 shares		2 475		2 649
Reserves		1 527		1 662
		4 002		4 311

You are required to:

Apply 6 coefficients (asset turnover, profitability of sales and invested capital), and comment dynamic of profitability and efficiency of the company's work represented in statements above.

Task 2. 15 points

Allied Carpets produces and sales carpeting.
Sale price on a unit of products «A1» is 20 £.

You have the following details of the accounting period:

Indexes	
Sale of «A1», pieces	168 000
Cost of producing one unit of «A1», £	
- direct material expenses	5.20
- direct payroll expenses	6.00
- variable overhead (VOH)	4.80
- fixed expenses, £	652 000

Production capacity of the company is 200,000 pieces of A1 products per accounting period. The market capacity is not limited.

You are required to:
1. Draft Loss and Profit Statement for variable overhead (VOH).
2. Define quantity of pieces of products and earnings in break-even point.
3. Define extent of the operating leverage for this company.
4. Give your definition of the “operating leverage”. How is risk bound up to the leverage?

Task 3. 25 points

Aschcroft Ltd considers financial borrowing for the upgrading their plant. It is assumed that this scheme will cost £ 3,500 thousand and will enable increase of annual earnings before taxes and interest, from January 01, 2011 by £ 900 thousand.

Please find condensed Balance-sheet and Loss and Profit Statement of the company below. Per now share price is £ 3.

Two financing schemes are considered. At first, 1.4 mln shares may be issued at £ 2,50 each (net price of placement). Then, financial corporation *City* offered to purchase debentures from the company at total amount of £ 3,500 thousand. Interest will be 12% per annum; debt repayment is stipulated by equal annual instalments of £ 350 thous. from January 01, 2012.

Balance as of December 31, 2010

	£ 000	**£ 000**
Long-term assets (net)		**2 100**
Current assets		
Inventory	3 600	
Accounts receivable	3 300	
	6 900	
Accounts payable (payment for one year)		
Accounts payable	4 050	
Corporate profit tax	900	
Dividends	300	
	5 250	
Net working capital		**1 650**
		3 750
Net equity and reserves		
Statutory fund		
that is composed of ordinary shares at 25 pence each		1 000
Retained earnings		2 750
		3 750

Profit and loss statement per year that ends December 31, 2010

	£ 000
Profit	16 800
Operating income before taxes	1 800
Operating income tax	900
Operating income tax after taxes	900
Dividends	450
Retained earnings for the fiscal year	450

It is assumed that the corporate profit tax rate is 50%.

You are required to:

1. Calculate income per one share for year 2011 for two alternatives of financing – debentures and ordinary shares;
2. Calculate profit before paying interest in debentures, and taxes at the level of which earning per share under both approaches will be equal;
3. Explain what factors should be taken into consideration, before selecting a way of financing.