

Friday 24 April 2015 9 to 12

Paper 5

Module 3P8: FINANCIAL AND MANAGEMENT ACCOUNTING

Module 3P9: INDUSTRIAL ECONOMICS, STRATEGY AND GOVERNANCE

*Answer **four** questions, one from each of sections **A, B, C and D**.*

*Answers to sections **A, B, C and D** must appear in four separate booklets.*

All questions carry the same number of marks.

*The **approximate** percentage of marks allocated to each part of a question is indicated in the right margin.*

*Write your candidate number **not** your name on the cover sheet.*

STATIONERY REQUIREMENTS

8 page answer booklet x 4
Rough work pad

SPECIAL REQUIREMENTS TO BE SUPPLIED FOR THIS EXAM

CUED approved calculator allowed
Engineering Data Book

10 minutes reading time is allowed for this paper.

You may not start to read the questions printed on the subsequent pages of this question paper until instructed to do so.

SECTION A

Answer *one* question from this section.

1 The following draft balance sheet as at 31 March 2014 has been prepared from the books of Cedar and Company Limited:

	£000		£000	£000
Ordinary share capital	130	Fixed assets at cost	240	
Retained earnings	80	Less accumulated depreciation	70	
Sundry creditors	20			170
		Stock		30
		Sundry creditors		20
		Bank balance		10
	<hr/>			<hr/>
	230			230

Since the completion of the above draft balance sheet the following discoveries have been made.

(i) An item of plant which was purchased for £25,000 in April 2009 had been sold during the year ended 31 March 2014. The only entries made so far in the accounts concerning this sale relate to the proceeds of £6,000 which have been credited to sales. It is the company's policy to depreciate all fixed assets (except buildings) held at the end of each financial year using the straight-line method at an annual rate of 10% of historical cost.

(ii) Provision had not been made in the accounts for £15,000 compensation for loss of office payable to a former director.

(iii) During the year an extension had been made to an existing warehouse. Cedar and Company Limited employed their own workers and the cost of their labour of £4,000 has been included in the Wages Account. Materials used consisted of £10,000 included in the Purchases Account during the year and £2,000 taken from existing stock.

- (a) Calculate the corrected figure of retained earnings as at 31 March 2014. [50%]
- (b) Show the corrected balance sheet as at 31 March 2014. [30%]
- (c) Discuss the reasons for charging depreciation in financial statements. Outline the reasons for choosing the straight-line method compared to the reducing balance method for depreciation. [20%]

2 The chief executive officer of Ruby's Fashions has included the following financial statements in a loan application submitted to ABC Bank. The company intends to acquire additional equipment and wishes to finance the purchase with a long-term note.

Balance Sheet	2012	2011
	£000	£000
Current assets	21	14
Long-term assets	52	50
Current liabilities	9	7
Long-term liabilities	24	26
Contributed capital	25	25
Retained earnings	15	6
 Income Statement		
Revenues	74	70
Expenses	56	53
 Statement of Cash Flows		
Net cash from operating activities	9	15
Net cash from investing activities	(12)	(14)
Net cash from financing activities	<u>5</u>	<u>7</u>
Change in cash balance	2	8
Beginning cash balance	<u>9</u>	<u>1</u>
Ending cash balance	<u>11</u>	<u>9</u>

Interest expense was £2,000 in 2012 and £2,000 in 2011.

- (a) Calculate the following ratios from the financial statements:
- (i) return on equity;
 - (ii) operating profit margin;
 - (iii) current ratio;
 - (iv) debt to equity ratio. [50%]
- (b) In the light of the financial ratios calculated in (a), discuss whether the bank should make a long-term loan of £10,000 to Ruby's Fashions. [30%]
- (c) Discuss what further information the bank might need to make a more informed decision about the loan. [20%]

SECTION B

Answer *one* question from this section.

3 Your company, Platts, is evaluating a four-year project. The project will yield revenues of £4.8m per annum in the first two years and then £5m per annum in the final two years. To undertake the project, Platts needs to upgrade its factory.

To assess the viability of the project, Platts has carried out a feasibility study costing £0.5m on the best location for the factory. Payment has yet to be settled but Platts intends to pay within this week. The study concluded that the preferred option would be to build a new factory on land already owned but not used by the company. The land is recorded at an historical value of £10m in the accounts but a recent survey valued it at £20m. If the project does not go ahead, Platts would dispose of the land at £18m.

The construction cost of the new factory is £10.5m payable immediately. Construction takes one year. There would be no pre-tax cash flows or efficiency savings in the year following the initial £10.5m payment whilst the factory is constructed. However, the old factory would be sold for £2m when the new factory is ready for occupation. When Platts moves into the new factory, efficiency gains are expected to amount to £600,000 per annum. Platts is also confident that it can cross-sell further services, hence generating additional revenue of £300,000 per annum over the remaining three years of the expected four year operating life of the new factory.

Mr Cornish currently manages the existing factory at a salary of £50,000 p.a. He has expressed willingness to manage the new factory, provided his salary is increased to £200,000 p.a. Platts estimates that the annual incremental cost during the operating life of the factory is 20% of sales revenue. The accountant intends to allocate existing head office overhead costs of £1m per annum to the project. It is estimated that the company's working capital requirement is 10% of the revenue. At the end of the four years of operations, Platts estimates that the new factory can be sold for £16.5m. The company depreciates all fixed assets on a straight line basis. Ignore taxation and inflation. The company's cost of capital is 10%.

- (a) Calculate the Net Present Value of the project and advise whether or not Platts should undertake the new project. (Note: Work to the nearest £000) [60%]
- (b) Write a memo to the senior management of Platts comparing the advantages and disadvantages of the Net Present Value approach to appraise investment projects with the Internal Rate of Return (IRR) and Payback methods. [40%]

Interest Rate Table

Interest rate p.a., r	Number of years, T	Present value of £1 receivable at the end of T years, $PV = \frac{1}{(1+r)^T}$
5%	1	0.9254
	2	0.9070
	3	0.8638
	4	0.8227
	5	0.7853
	6	0.7462
	7	0.7107
	8	0.6768
	9	0.6446
	10	0.6139
10%	1	0.9091
	2	0.8264
	3	0.7513
	4	0.6830
	5	0.6209
	6	0.5645
	7	0.5132
	8	0.4665
	9	0.4241
	10	0.3855
15%	1	0.8696
	2	0.7561
	3	0.6575
	4	0.5718
	5	0.4972
	6	0.4323
	7	0.3759
	8	0.3269
	9	0.2843
	10	0.2472
20%	1	0.8333
	2	0.6944
	3	0.5787
	4	0.4823
	5	0.4019
	6	0.3349
	7	0.2791
	8	0.2326
	9	0.1938
	10	0.1615

4 31 March 2012 marked the end of the first year of business for Gregory Limited, manufacturers of cement garden gnomes. During the year a total of 93,200 gnomes was produced and sales revenue amounted to £457,200. The only stocks remaining on their premises at the end of the year were:

- direct materials (5 kg of which are used to make one gnome): 5,600 kg;
- finished gnomes (valued at the average unit cost of production which excludes selling and administration costs): £29,750.

Costs for the 93,200 gnomes produced during the year have been analysed and classified as variable or fixed as follows:

	£000	£000
Variable costs		
Direct materials	140.0	
Direct labour	97.5	
Power	8.0	
Variable indirect labour	14.5	
Variable factory overheads	10.2	
Selling (including commission on sales)	<u>38.3</u>	
		308.5
Fixed costs		
Staff labour costs	27.7	
Fixed factory overheads	28.3	
Selling (including salaries)	33.7	
Administration (including salaries)	<u>68.0</u>	
		<u>157.7</u>
Total costs		<u>466.2</u>

- (a) (i) Calculate, to the nearest penny, the cost of materials used in the manufacture of each gnome, and use this information to calculate the value of the closing stock of materials. [10%]
- (ii) Calculate the number of gnomes in stock at 31 March 2012. [20%]
- (iii) Assuming constant selling prices throughout the year, calculate the selling price of each gnome. [20%]
- (iv) Prepare an income statement for the year ended 31 March 2012 showing the gross and net profit figures. [20%]
- (b) Calculate the net profit to sales percentage. State what other information would be necessary before managerial performance can be assessed more comprehensively. [30%]

SECTION C

Answer *one* question from this section.

5 (a) In November 2005, six of Paris's most luxurious hotels were fined for colluding on room rates. Regular guests showed little concern, noting that, whatever the listed rack rate, it was always possible to negotiate substantial discounts. Using the prisoner's dilemma model, explain why the hotels were able to collude over their listed rack rates but not over discounts? [50%]

(b) A supplier of sports footwear and apparel is interested in the idea that it could increase its stock market value by creating real options for itself. Explain what is meant by *real options*. What actions might the company take to generate value from real options? [50%]

6 (a) Discuss why patents might be more effective in protecting *product innovations* than *process innovations*. [50%]

(b) Discuss why a more turbulent business environment might encourage outsourcing and increased focus on core business among large firms. [50%]

SECTION D

Answer **one** question from this section.

7 TransAgri sells information on commodity prices across neighbouring markets to farmers in Bangladesh via mobile phones. The service enables farmers to bring their crops daily to the market with the best price. TransAgri is now planning to scale up its operations after a successful first two years and is considering how to innovate its business model.

- (a) Explain what is meant by a *business model*? [20%]
- (b) Discuss the possible business models that TransAgri could consider as it plans to scale up its operations. Explain which business model might be most appropriate. [40%]
- (c) What are the challenges that TransAgri would face in trying to implement the business model you have recommended? [40%]

8 SolarLights is a new company that intends to sell solar torch lights to low income communities in Tanzania where the electricity from the grid is either not available or not reliable.

- (a) Explain the different possible forms of market segmentation. [20%]
- (b) Choose one of the segmentation forms identified in (a) above and explain how to perform the segmentation of the market for the solar torch light product [40%]
- (c) Discuss the challenges of using the method chosen in (b) for the solar torch light product in Tanzania. [40%]

END OF PAPER

Answers:

1 (a) £66,000

(b)

Balance Sheet of Cedar & Co Ltd. As on 31st March 2014

	£'000		£'000	£'000
Ordinary share capital	130	Fixed asset at cost	231	
Retained earnings	66	Less accumulated	<u>60</u>	
Sundry creditors	20			171
		Stock		30
Provisions	15	Sundry creditors		20
		Bank		<u>10</u>
	<u>231</u>			<u>231</u>

2 (a)

(i) 2011: .548
2012: .507

(ii) 2011: .271
2012: .270

(iii) 2011: 2.0
2012: 2.33

(iv) 2011: 1.065
2012: .825

3 (a) £75,000

4 (a)

(i) £1.50 and £1,680

(ii) 8,500

(iii) £5.40

(b) 4.9%

CV