Introduction to Finance

SAMPLE TIME CONSTRAINED ASSESSMENT

Answer any FOUR (4) questions.

Clearly cross out surplus answers.

Failure to do this will result in only the first FOUR (4) answers being marked.

Time: 4 hours

The maximum mark for this paper is 100.

Any reference material brought into the examination room must be handed to the invigilator before the start of the examination.

Candidates are allowed to use a scientific calculator during this examination.

Answer any FOUR (4) questions

Marks

Question 1

a) Example Limited is preparing its Annual Report and Financial Statements for the year ending 31 December 20X7. The accountant has the following information:

- According to the ledger record, sales total £105,000 for the period, however one invoice for goods sold on 30 December 20X7 was not recorded in the ledger. This invoice is £4,000 and has not been paid by the customer.
- Records for the inventory check on 31 December 20X6 show £29,000, and the new inventory check done on 31 December 20X7 shows £20,000.

- The expenses for the year were:
  - Purchases of inventory for resale £47,000, of which £2,000 has not been paid.
  - Depreciation £2,000
  - Administrative staff salaries £15,000
  - Other costs £5,000 including electricity of £1,400
  - Interest paid of £8,000

- The ledger shows £46,000 owing from customers, compared to £20,000 as of 31 December 20X7.
- One customer called Bad Business Limited, owing £6,000, has ceased to trade, and will not be able to pay the amount shown in the ledger for 20X7.
- Cash held in the bank has risen to £8,000.
- The company had to take out a 10-year loan of £10,000 during the year.
- As of 31 December 20X6, the company had two loans outstanding, each of £10,000. One is due for repayment in March 20X8 and the other in July 20X9.
- There were no purchases or sales of non-current assets. Non-current assets had a *Net Book Value* (also called a Written Down Value) of £38,000 as at 31 December 20X6.
- As of 31 December 20X6, reserves of retained profit were £9,000, and the company had no changes to its share capital. (N.B The share capital is the balancing figure in the Statement of Financial Position.)

i) Prepare an *Income Statement* and a *Statement of Financial Position* for Example Limited for the year ended 31 December 20X7. **15**

b) Explain the accounting concepts prudence, accruals and going concern, illustrating your answer with examples from **part (a)** which demonstrate how the concepts have been applied. **10**

Total 25 Marks

Marks

Question 2

a) The following are business concepts:

- The remuneration of business owners
- The remuneration of employees
- Liability of owners
- Privacy of owners

i) Explain for each of the following how each of the above concepts applies: **15**

- A sole trader
- A partnership (not an LLP)
- A limited liability company

b) Explain the accounting equation and describe how it would operate for a new business where an owner invests £10,000 and then: **10**

- Purchases a vehicle for £5,000;
- Purchases inventory for £3,000; and
- Sells all the inventory for £5,000

Total 25 Marks

Question 3

a) The following is a list of cost classifications: **10**

- fixed costs;
- variable costs;
- semi-variable costs;
- stepped costs;
- direct costs;
- indirect costs;
- product costs; and
- period costs

Classify each of the following as two of those cost types. Explain your answer in each case.

i) The salary of the Sales Director responsible for all product sales, who is paid a basic salary plus a bonus proportional to the sales the business secures.

ii) Sheet steel purchased for pressing into a car door, which will then be sold to a car manufacturer.

iii) Rent for a shop.

iv) The legal fees for litigation concerning a discontinued dangerous product made and sold by the business.

Marks

b) Marvellous Motorcycles Limited makes three types of motorcycle, called the Marvel, the Miracle and the Mellow. Listed below are the total costs for the year: **15**

Cost	£
Materials for production:	
Steel	20,000
Plastics	15,000
Hoses and other parts	20,000
Prebuilt engines	1,625,000
Total	1,680,000
Direct labour	2,720,000
Indirect labour	70,000
Power for factory	25,000
Power for offices	5,000
Administration salaries	450,000
Rent for factory	300,000
Rent for offices, for administration only	100,000
Depreciation for factory machines	120,000
Depreciation for office equipment	50,000
Materials for office (stationery etc)	10,000
Materials for maintenance (oil, spare parts etc.)	15,000

The company has the following cost centres, with costs shown as below:

	Production	Maintenance	Administration	Total
Number of employees	60	2	15	77
Material cost	£1,680,000	£15,000	£10,000	£1,705,000
Labour cost	£2,720,000	£70,000	£450,000	£3,240,000
Floor area (m^2)	1000	500	800	2300
Depreciation of machines and equipment	£100,000	£20,000	£50,000	£170,000
Employee hours	100,000	30,000	24,000	154,000
Machine power (kW)	105	20	5	130

Both production and maintenance are in the same factory, however administration is the only occupant of a separate office space.

Below is the data for each product:

Product	Number produced	Direct material cost (£)	Direct Labour cost (£)	Hours in production
Mellow	50	8,000	12,000	500
Marvel	130	5,000	8,000	300
Miracle	180	3,500	6,000	200

i) Produce an *Overhead Analysis Sheet* showing the indirect costs for each of the three cost centres, and how those would be attributed to the production cost centre, and an overhead recovery rate based upon hours of production.

Marks

ii) Calculate the full cost of each type of product.

Total 25 Marks

Question 4

a) ABC Limited makes one product, 'the Basic'. In the last month, it sold 10,000 Basics and made 8,900 of them. This left 1,100 Basics in inventory. Its profit using absorption costing was £55,000. **6**

Last month it had the following fixed costs:

Production Costs	£40,000
Administrative Costs	£15,000
Other fixed costs	£25,000

The standard cost of a Basic meant that ABC Limited had over-absorbed £9,000 of fixed cost.

ABC Limited's management has noticed that there is space in the factory which could be used to make a new product 'the Excellent', which would cost £100,000 for a new machine, and increase fixed production costs by £20,000, being the depreciation on the new machinery.

The factory changes will have no effect on the variable costs of making a Basic. Management will increase the price of a Basic to £35, which it anticipates will reduce demand to 7,000 units.

With a selling price of £50, it is expected that 3,000 units of the Excellent can be sold.

The table below summarises the changes for the next month

	Basic	Excellent
Selling price	£35	£50
Variable materials	£8	£14
Variable Labour	£4	£8
Other variable costs	£4	£5
Number to be produced	8,000	5,000
Number to be sold	7,000	3,000

Marks

b) Calculate the profit for 'the Basic' which would have been made in the past if marginal costing had been used instead of absorption costing.

i) Calculate the original selling price of each Basic (its selling price before the increase). **4**

ii) Calculate the profit that ABC Limited is expecting to make, using a *marginal costing basis.* **5**

c) Explain TWO (2) potential positive and TWO (2) potential negative effects of the changes **and** recommend a potential action that could be taken to reduce the risk of ONE (1) of the negative effects identified. **10**

Total 25 Marks

Question 5

a) Decision Limited is considering purchasing a new machine. It has identified two potential machines, both of which produce the same products to the same quality but have different costs of operation. They would both have to be paid for in cash in the first year of operation. **15**

The costs of the two potential machines for the same level of output are shown in the table below:

		Machine A (£)	Machine B (£)
Purchase Cost		210,000	300,000
Running costs	Y1	10,000	1,000
	Y2	11,000	1,000
	Y3	12,000	1,000
	Y4	15,000	1,000
	Y5	17,000	1,000
Raw material use	Y1	4,000	3,000
	Y2	5,000	3,000
	Y3	6,000	3,000
	Y4	7,000	3,000
	Y5	8,000	3,000

Decision Limited's policy is to depreciate machines to a *zero-residual value* over five years.

The sales from production from either machine are expected to total £60,000 in the first year, increasing by 5% year-on-year.

Marks

i) Prepare a *cash budget* for each machine for the first five years showing the total cash paid or received
AND
Prepare a separate budget for the first five years showing the total profit or loss made
Based on your budgets, you should explain which machine would be the **best** investment for Decision Limited **and** discuss any other considerations for the directors of Decision Limited when purchasing either machine.

b) A company has been depreciating its motor vehicles for two years using the straight-line method and a new accountant suggests that this policy is incorrect and that the reducing balance method would be more appropriate. **10**

Discuss the two methods of accounting for depreciation and give a reasoned explanation whether you agree with the new accountant or not. Explain the information which would be provided to shareholders about the depreciation policy and the implications of this following the suggestion made by the new accountant and your conclusion.

Total 25 Marks

End of paper