



UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS  
General Certificate of Education  
Advanced Subsidiary Level and Advanced Level

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**BUSINESS STUDIES**

**9707/22**

Paper 2 Data Response

**May/June 2011**

**1 hour 30 minutes**

Additional Materials: Answer Booklet/Paper



**READ THESE INSTRUCTIONS FIRST**

If you have been given an Answer Booklet, follow the instructions on the front cover of the Booklet.  
Write your Centre number, candidate number and name on all the work you hand in.  
Write in dark blue or black pen.  
You may use a soft pencil for any diagrams, graphs or rough working.  
Do not use staples, paper clips, highlighters, glue or correction fluid.

Answer **all** questions.  
The businesses described in this question paper are entirely fictitious.

At the end of the examination, fasten all your work securely together.  
The number of marks is given in brackets [ ] at the end of each question or part question.

This document consists of **5** printed pages and **3** blank pages.



## 1 Turbo Tractors (TT)

TT is a private limited company which manufactures farm tractors. TT finds it difficult to compete with larger international businesses that benefit from economies of scale.

TT's Income Statement (Profit and Loss) shows that profits are falling:

**Table 1: Extract from Income Statement (\$000)**

|                                    | 2009 | 2010 | 2011 | 5 |
|------------------------------------|------|------|------|---|
| Revenue (sales turnover)           | 50   | 60   | 70   |   |
| Cost of sales (cost of goods sold) | 20   | 30   | 40   |   |
| Overhead costs                     | 10   | 15   | 20   |   |

A survey of customers has identified the following key problems:

- Lost sales due to late deliveries 10
- Increased complaints about poor quality tractors.

Tariq, the Finance Director, has identified the need to reduce costs. He believes that this could be achieved through improvements in:

- Inventory (stock) control
- Productivity of workers. 15

### Inventory Control Issues

Asmir, the Production Manager, has produced the following information relating to inventories:

**Table 2: Inventory Data**

| Component   | Source of Supply | Reliability of Supply | Delivery Time (weeks) | Inventory Level                | 20 |
|-------------|------------------|-----------------------|-----------------------|--------------------------------|----|
| Engine      | Imported         | Reliable              | 6                     | Enough for 2 weeks' production |    |
| Gearbox     | Imported         | Unpredictable         | 2                     | Enough for 2 weeks' production | 25 |
| Wheels      | Local            | Reliable              | 6                     | Enough for 1 week's production |    |
| Instruments | Local            | Reliable              | 1                     | Enough for 6 weeks' production | 30 |

## Productivity Issues

Balzac, the Human Resources Director, is planning to introduce a new payment system for production workers to try to overcome the problem of late deliveries and poor quality. This new payment system includes:

- Replacing the existing basic wage rate with a piece rate system
- A bonus for completing a tractor on time
- No extra payment for long service
- Ending the profit-sharing scheme.

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**(a)** Explain the following terms:

- (i)** Economies of scale (line 2) [3]
- (ii)** Revenue (sales turnover) (line 6). [3]

**(b) (i)** Using the information in Table 1, calculate the net profit margin for TT in 2011. [3]

**(ii)** The net profit margin in 2009 was 40% and in 2010 it was 25%. Briefly comment on the trend in the net profit margin. [3]

**(c)** Discuss whether Balzac's proposed new payment system is likely to solve the problems of lost sales and increased customer complaints. [10]

**(d)** Using Table 2 and other information, analyse the usefulness of just-in-time inventory (stock control) to TT. [8]

## 2 McQuarry (MQ)

MQ is a family run partnership. MQ owns and operates a quarry that produces high quality stone used in modern buildings. The quarrying process produces a lot of waste material including pieces of stone that are not up to standard. At present this waste is sold at a low price and used for road building.

With decreased Government spending, road building has fallen so that there is now little demand for this waste material. MQ has developed a process that crushes this waste material and changes it into lightweight building blocks called Crushblocks. MQ is considering investing in a factory to make Crushblocks. MQ would then be operating in the secondary sector. 5

Sam, the Finance Director, has produced the following cash flow forecast for the Crushblocks project. 10

**Table 3: Cash Flow Forecast (\$m)**

| Year                 | 2012 | 2013 | 2014 | 2015 | 2016 |    |
|----------------------|------|------|------|------|------|----|
| Opening balance      | 5    | -62  | -64  | -70  | -40  | 15 |
| Sales of waste       | 17   | 5    | 2    | 0    | 0    |    |
| Sales of Crushblocks | 0    | 0    | 2    | 40   | 150  |    |
| Development costs    | 80   | 5    | 0    | 0    | 0    | 20 |
| Operating costs      | 4    | 2    | 10   | 10   | 10   |    |
| Closing balance      | -62  | -64  | -70  | -40  | ?    | 25 |

### Press statement from MQ:

MQ are pleased to announce the new Crushblock project. The planned factory will add value to our waste material. There will be an increase in the demand for skilled employees and a boost to the local economy. Crushblock will decrease building costs and help with the construction of more energy efficient houses. We will need to import some extra raw materials, but we believe the impact on the local community will be less than with lorries carrying waste material away as happens now. 30

**Summary of article in a local newspaper:**

MQ's Crushblock project looks good on paper but where is the material going to come from for the new roads that we need? What about the houses near to the noisy and polluting crushing machine? And the promised new jobs? Lorry drivers and unskilled workers will actually lose their jobs. There's huge unemployment already. This country is in big enough trouble without having more pollution and more imports.

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- (a) Explain the following terms:
- (i) Secondary sector (line 9) [3]
  - (ii) Add value (line 28). [3]
- (b) (i) With reference to Table 3, calculate the closing balance for 2016. [2]
- (ii) Comment on the usefulness of this cash flow forecast to MQ. [6]
- (c) Briefly analyse the problems that MQ's management might have if workers are made redundant. [6]
- (d) Evaluate the impact of the Crushblock project on **two** of MQ's stakeholders. [10]





