## OCR ADVANCED SUBSIDIARY GCE IN BUSINESS STUDIES (3811)

## OCR ADVANCED GCE IN BUSINESS STUDIES (7811)

## Specimen Question Papers and Mark Schemes

These specimen assessment materials are designed to accompany the OCR Advanced Subsidiary GCE and Advanced GCE specifications in Business Studies for teaching from September 2000.

Centres are permitted to copy material from this booklet for their own internal use.
The GCE awarding bodies have prepared new specifications to incorporate the range of features required by new GCE and subject criteria. The specimen assessment material accompanying the new specifications is provided to give centres a reasonable idea of the general shape and character of the planned question papers in advance of the first operational examination.

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## Advanced Subsidiary GCE

# BUSINESS STUDIES <br> BUSINESSES, THEIR OBJECTIVES AND ENVIRONMENT 

## Specimen Paper

Additional materials:
Answer paper

TIME 1 hour 15 minutes

## INSTRUCTIONS TO CANDIDATES

Write your name, Centre number and candidate number in the spaces provided on the answer booklet.
Write all your answers on the separate answer paper provided.
If you use more than one sheet of paper, fasten the sheets together.
Answer all questions.

## INFORMATION FOR CANDIDATES

The number of marks is given in brackets [ ] at the end of each question or part question.
You will be awarded marks for the quality of written communication where an answer requires a piece of extended writing.

## Answer both questions.

The questions relate to the article but your answers should not necessarily be limited to the material in it.

## Question 1

(a) Ford is a company principally involved in motor vehicle manufacture and as such might be regarded as a secondary sector business.
(i) Giving an example of each, identify the other two sectors of economic activity.
(ii) Explain to what extent Ford can be regarded as a secondary sector business.
(b) Discuss the major environmental influences affecting the way in which Ford operates.

## Question 2

(a) The article suggests one reason why Ford has moved its European HQ to Germany is "...to improve sluggish profitability." (lines 26-27).
(i) Outline two other possible objectives Ford may have been pursuing when deciding to move its European HQ to Germany.
(ii) By considering the determinants of demand, outline why the German market is "almost twice the size of" Britain's (line 27).
(b) Discuss the objectives the British government may have in giving Ford financial aid for its Welsh engine plant (line 7).
[Quality of written communication: 2]

Read the following extract and then answer the questions which are based upon it.

## Ford moves European HQ out of Britain

Ford has moved the headquarters of its European operations from Britain to Germany. The shift is intended to increase the American group's competitiveness in the continent's biggest single market, Germany. The move will be seen as a blow to the prestige of British industry. Ford of Europe has been based in Warley Essex, not far from Ford's Dagenham plant, since Henry Ford II, grandson of the
5 company's founder, set up the European organisation in 1967. Ford of Europe are now based at Cologne, Germany.
The shift may arouse fears about Ford's commitment to Britain. Its Welsh engine factory in Bridgend is at present competing with German and Spanish plants to win a project for which Ford are seeking about $£ 60 \mathrm{~m}$ in aid from the British government. There have also been intermittent concerns about 10 whether Ford would maintain its dual site engineering operation in Europe, under which design and engineering is divided between
Cologne and Essex. However, the company has invested heavily in its Essex facility in recent years. As evidence that there is no intention of pulling back further, Ford can point to its decision to expand the production line at Dagenham, the lead plant in Europe for production of its Fiesta car. In addition,
15 Ford's newly created Premier Auto Group, which is made up of Jaguar, Aston Martin, Volvo and Lincoln, is based in Britain.
Ford of Britain has also been the test bed for Ford's efforts to establish itself as the world's leading supplier of automotive services as well as vehicles. In April, Ford surprised the European car industry when it paid $£ 1 \mathrm{~b}$ for Kwik-Fit, the vehicle-repair chain. It is also expanding into car retailing and
20 financial services in Britain. Ford has successfully resisted challenges to its position of market supremacy and it has more than $18 \%$ share of the UK car market. But Ford is struggling in Germany where its market share, excluding Jaguar, has slipped below $9 \%$ this year. As a result, its European share has skidded well below the $12 \%$ at which it stood two years ago.

Ford managers believe that only by rooting itself in Germany can Ford of Europe avoid being 25 handicapped in its attempts to match its American arch rival, General Motors, and the European market leader, Volkswagen. Success in Germany is crucial to Ford's attempts to improve sluggish profitability. Germany is almost twice the size of the next-largest European markets - Italy, Britain and France - and accounts for about one quarter of total west European car sales. General Motors has established a European lead over Ford thanks largely to its presence in Germany where its Opel brand is seen as 30 German whereas Ford is seen as a foreign brand.

Adapted from the Sunday Times, 22nd August 1999

# Oxford Cambridge and RSA Examinations 

## Advanced Subsidiary GCE

BUSINESS STUDIES<br>BUSINESSES, THEIR OBJECTIVES AND ENVIRONMENT

## Mark Scheme

## GENERAL

1. The paper is to be marked to AS standard.
2. Marking should be positive: marks should not be subtracted for errors or inaccuracies.
3. In assessing quantitative answers the "own figure rule" (OFR) must be applied, i.e. a candidate must be given credit for calculations which, though wrong, are consistent with an earlier error.
4. Candidates should be regarded as achieving the highest level of response which accurately describes their answer. They do not necessarily pass through all lower levels of response.
5. Material in italics refers to possible issues / content that candidates might use. These suggestions are neither exhaustive nor necessarily required.
6. Up to 2 marks will be awarded for quality of written communication, which in this context refers to;
(a) the clarity of the candidate's expression
(b) the structure and presentation of ideas,
(c) the grammar, punctuation and spelling.

2 where the demonstration of communication is as good as could be expected under time constrained examination conditions,

1 where the candidate's demonstration of communication is good in terms of clarity of expression
OR structure and presentation of ideas,
OR the grammar, punctuation and spelling, and sound in the other regards,

0 where the clarity of the candidate's expression,
OR structure and presentation of ideas,
OR the grammar, punctuation and spelling, are such as to detract from the quality of the answer.

## Individual Questions

I (a) Ford is a company principally involved in motor vehicle manufacture and as such might be regarded as a secondary sector business.
(i) Giving an example of each, identify the other two sectors of economic activity.

Primary-Extractive industries exploiting natural resources, e.g. farming Tertiary - services, e.g. travel agents

Level 2 Exemplifies sector(s) either through behaviour or by reference to a known firm.
Level 1 Identifies other sector(s)
(ii) Explain to what extent Ford can be regarded as a secondary sector business.

Secondary sector in that they manufacture vehicles. However, within the text there are references to other activities such as the tertiary sector. Kwik-Fit are described as a "....vehicle repair chain..." whilst there is also reference to car retailing and financial services. Both of these would; be seen as other tertiary activities and so reducing the extent to which one might regard Ford as solely a secondary business. So it is not clear that they are only in the secondary sector but the extent to which it is would depend upon the relative importance of each sector to Ford' overall business.

Level 4 Evaluation concerns differing views in reaching a reasoned view
Level 3 Stimulus material is synthesised with subject knowledge to support view
Level 2 Reason(s) are outlined to support view
Level 1 Offers reason(s) as why Ford is/not a secondary sector business.
(b) Discuss the major environmental influences effecting the way in which Ford operates.

A framework for answering this question is provided by PEST, SLEPT etc. Society is becoming increasingly aware of the health/pollution issues associated with vehicles, so Ford will be investing heavily in $R \& D$ to create cleaner cars, also city cars becoming increasingly demanded so change in the type/size of cars made. Legal impositions regarding speed limits, crash worthiness etc. Economic influences clearly effect products offered, e.g. cost of car ownership changing, no longer a luxury. Political changes/restrictions, road pricing, MOTs etc. impact on Ford and others. Technology in manufacture, e.g. robotic welders, and product, e.g. safety features, air bags. Environmental provides a combination of opportunities and threats to a firm such as Ford. Given the dynamics of the environment the way in which any influence effect the firm will reflect the firm's interpretation of the change and its objectives.

Level 4 Offers a supported judgement concerning the effects of environmental influences
Level 3 Discussion of environmental influences demonstrates analysis.
Level 2 Influences explained in the context
Level 1 Offers an undeveloped list of possible influence.

2 (a) The article suggests one reason why Ford has moved its European HQ to Germany is "...to improve sluggish profitability." (lines 26-27)

## (i) Outline TWO other possible objectives Ford may have been pursuing when deciding to move its European HQ to Germany.

Boost German market share from 9\% (Germany being Europe's largest market). Halt decline of European market share (fallen from $12 \%$ two years ago). Be seen in German market as being a national and not a foreign producer (as is the case from GM/Opel). Corporate status, i.e. beat its arch rival GM. A first step towards rationalising design and development which is currently split between Essex and Cologne.

Level 2 Offers commentary on objective(s) from the text.
Level 1 Identifies other objectives(s)
(ii) By considering the determinants of demand, outline why the German market is "almost twice the size of" Britain's (line 27).

Price is clearly one possibility. The other are the non price determinants: population, taste and preferences, income, expectation. So does Germany have a larger car purchasing population than Britain, or are they move inclined to buy new rather than second hand cars which would be an example of tastes and preferences being a determinant of demand. Similarly, do the Germans enjoy a higher standard of living which would enable them to buy more new cars so although the population might be roughly the same or more frequent purchases mean that in total more cars are sold. It is unlikely, but possible that the Germans might live in constant anticipation of increases in new car prices and so buy now whilst they are relatively cheaper. Further possibilities include fiscal incentives for the purchase of new cars rather than keeping older, possibly more polluting cars, on the market.

NB. Candidates cannot be expected to have knowledge of the characteristics of the German market but they can be expected to integrate subject knowledge and context.

Level 4 Response evaluates determinants contextually
Level 3 Determinant(s) of demand are developed in detail within the context
Level 2 Commentary demonstrates understanding of the determinant(s) in the context (5-4)
Level 1 Identifies determinant(s) of demand
(b) Discuss the objectives the British government may have in giving Ford financial aid for its Welsh engine plant (line 7).
[15]
A desire to see Ford remain in the UK, creating jobs in its own right as a large employer but also as a purchaser of components from suppliers. Any loss of employment would increase demands on public spending through benefits and also reduce income to the exchequer through loss of taxation receipts, both direct and indirect owing to reduced purchasing ability of those who have lost their jobs. Impact of jobs may be a regional issue, loss of these jobs may have a significant impact in SE Wales given "recent" loss of other jobs (to some extent off set by other inward investment) than similar losses from, for example, Dagenham.

If Bridgend cease to manufacture engines, then if Ford continue to assemble vehicle in the UK, they will have to import engines, i.e. there is a trade issue. Engines from Wales will make a positive contribution to UK exports and a positive balance of trade. Further, loss of engines from Bridgend may also make other Ford operations in the UK marginal owing to costs and longer supply chains and so may fear that this will herald Ford's departure from the UK.

Loss of technological knowledge and expertise in manufacture, loss of status to UK Plc.

Level 4 Offers balanced discussion of link between objective(s) and sought outcome (15-13)
Level 3 Discussion of objective(s) is analytical within the context
Level 2 Discussion demonstrates understanding of government objective(s)
Level 1 Offers possible objective(s)

## Assessment Grid: Unit 2871

| Question | AO1 | AO2 | AO3 | AO4 | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1a (i) | 2 | 2 |  |  | 4 |
| 1a (ii) | 3 | 2 | 3 | 2 | 10 |
| 1b | 4 | 4 | 4 | 3 | 15 |
| 2 a (i) | 2 | 2 |  |  | 4 |
| 2a (ii) | 3 | 2 | 3 | 2 | 10 |
| 2 b | 4 | 4 | 4 | 3 | 15 |
| Sub Total | 18 | 16 | 14 | 10 | 58 |
| QoWC |  |  |  |  | 2 |
| Total |  |  |  |  | 60 |

## Advanced Subsidiary GCE <br> BUSINESS STUDIES <br> BUSINESS DECISIONS

## Specimen Paper

Additional materials:
Answer paper
TIME 1 hour 15 minutes

## INSTRUCTIONS TO CANDIDATES

Write your name, Centre number and candidate number in the spaces provided on the answer booklet.
Write all your answers on the separate answer paper provided.
If you use more than one sheet of paper, fasten the sheets together.
Answer all questions.

## INFORMATION FOR CANDIDATES

The number of marks is given in brackets [ ] at the end of each question or part question.
You will be awarded marks for the quality of written communication where an answer requires a piece of extended writing.

## Question 1

Study the information below and then attempt all parts of the question.
Smythe plc is based in the U.K. and makes shirts. Production capacity is 400,000 units per annum. Sales volume is currently 145,000 per annum. The shirts are sold by Smythe to retailers at a price of £16 each.

Table 1 Smythe's cost structure

| Cost per Unit |  |
| :--- | :---: |
| Variable costs : |  |
| Labour | $£ 3.00$ |
| Maintenance | $£ 0.60$ |
| Materials | $£ 2.80$ |
|  |  |
| Overhead cost per unit (at maximum capacity) |  |
| Total Overhead per unit | $£ 2.91$ |

Most economic forecasters expect the $£$ to decrease in value over the next three years as measured against the Euro and most major foreign currencies.
Smythe is considering increasing its production level to maximum capacity and attempting to sell in the lower priced market segments, possibly under a different brand name, whilst retaining existing sales.

Table 2 U.K. Shirt Market by Sector

| Sales Volume | Price to Retailer | Market \% Supplied <br> by Importers | Retailers |
| :--- | :---: | :---: | :--- |
| 175 million | $£ 4-£ 6$ | $80 \%$ | Supermarkets, <br> Chain Stores, <br> Mail Order |
| 20 million | $£ 8-£ 13$ | $12 \%$ | Multiple Tailors, <br> Independents |
| 5 million | $£ 14-£ 18$ | $3 \%$ | Prestigious <br> Department <br> Stores, and other <br> quality outlets |

(a) Explain the term "variable costs" as used in Table 1.
(b) Define and then calculate for Smythe's shirts;
(i) the break-even level of output.
(ii) the current margin of safety.
(c) Smythe is considering selling in the lower priced market segments. Discuss whether this is likely to be successful.

## Question 2

Barstow Engineering manufactures electrical motors sold to firms making washing machines and refrigerators. Production is organised into teams of workers each with a production supervisor. Any order is treated as a single batch and is allocated to a team, which is then responsible for its completion.

There has been heavy investment lately in production technology, thus creating flexibility and allowing teams to switch between products quickly. Since these changes, Barstow has become concerned about unreliable delivery of components by its supplier. Barstow's stock control chart for a particular component for the period January - May 1999 is shown in Figure 1. Quality control was not considered important, given the new machinery. Checking is now left to the supervisor. Labour turnover has increased over the past two years as the younger workers have left to join firms which offer training schemes. Recently, there have been a disturbing number of complaints about falling product standards and an increase in the number of rejected products returned by customers. One major customer has threatened to buy from a rival company if Barstow cannot produce "a quality product".

Figure 1
Stock control chart: component $X$

(a) (i) Explain and comment upon the term "buffer stock" as used in Figure 1.
(ii) Calculate the average monthly usage of component X .
(iii) Define "lead time" and calculate it for the April delivery of component X.
(b) One supervisor has suggested that the investment in new production technology might have lead to the recent complaints from customers. Discuss ways in which the situation might be improved.
[Quality of Written Communication: 2]

RECOGNISING ACHIEVEMENT

## Advanced Subsidiary GCE

BUSINESS STUDIES
BUSINESS DECISIONS ..... 2872
Mark Scheme

## GENERAL

1. The paper is to be marked to AS standard.
2. Marking should be positive: marks should not be subtracted for errors or inaccuracies.
3. In assessing quantitative answers the "own figure rule" (OFR) must be applied, i.e. a candidate must be given credit for calculations which, though wrong, are consistent with an earlier error.
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OR structure and presentation of ideas,
OR the grammar, punctuation and spelling, and sound in the other regards,

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OR structure and presentation of ideas,
OR the grammar, punctuation and spelling, are such as to detract from the quality of the answer.

## Individual Questions

## Question 1

(a) Explain the term "variable costs" as used in Table 1.

Possible content :

Costs which vary with output or activity in the short run. Gives examples
Explanation of how the examples given in Table 1 fit this pattern.
Level 2 Explains how one or more of costs listed in first part of Table 1 fit definition
Level 1 Identifies examples of variable costs. Demonstrates knowledge of meaning
(b) Define and then calculate for Smythe's shirts:
(i) the break-even level of output.

Break-even occurs where total costs are covered by revenue (1)
It is calculated by the formula :
Break-even output $=\frac{\text { Total fixed cost }}{\text { contribution p.u. }} \quad(1)=\frac{1,164,000}{£ 9.60}=121,250$ shirts
The last (4) can be made up from :
Contribution p.u. $=$ Selling price $(£ 16)-$ Variable cost p.u. $(£ 6.40)=£ 9.60$
(Process 1 Calculation1)
Fixed Cost $=$ Fixed cost p.u. $(£ 2.91) x$ Capacity output $(400,000$ units $)=£ 1,164,000$ (Process 1 Calculation 1)
(ii) the current margin of safety.

Margin of safety is the difference between current levels of output (and sales) and the break-even level of sales. i.e. the amount by which sales could drop without causing the firm to operate at a loss. (2)
M.o. $S=$ Current output - Break-even output $=145,000-121,250=23,750$ shirts
(c) Smythe is considering selling in the lower priced market segments. Discusswhether this is likely to be successful.

Issues for consideration:

A segment is a defined section of the market for a product which can be determined by characteristics of consumer, by use, by quality or by image. The lower priced segments have by far the largest share of current demand. This presents an opportunity for Smythe if they can produce and sell at the lower price level and still make a positive contribution. Evidence from the analysis in (b) suggests that this may prove difficult. Current sales levels are well below production capacity. This implies that there is very
inefficient use of overheads. The margin of safety is not particularly large. The price is in the middle of the higher segment range. Answers may consider the implications of either increasing price or decreasing it within the $£ 14-£ 18$ range as an alternative approach. The impact on sales would depend on the price elasticity of demand and possible reactions by competitors. There will be implications for marketing. Product style, quality, materials used. Promotion methods, packaging. Distribution channels used. Price will need to be reduced drastically. Clearly the overall strategy will need to take various factors into account, but central to this will be the relationship with cost. Note that competition will be different in these segments and that price sensitivity will most likely change. Exchange rate movements will be influential because of import penetration (possibly favourable movements during the next three years). Production will need to increase. Note the existing capacity. If it needs to increase beyond this, then there may be possibilities of gaining economies of scale. Changes in the method of production (automation?) may impact on employees and cause problems in terms of H.R.M. Overall, given the current variable costs, it is unlikely that the firm would succeed in the very bottom segment. However there may be opportunities in the middle segment if the firm can reduce costs. Note that the firm wishes to retain its existing business and therefore may need to use a different brand name in the new segment to keep its original segment share intact.

Level 4 Answer demonstrates evaluation by balancing pros and cons of change and reaches a justified conclusion.
Level 3 Answer demonstrates analysis by reasoning situation implications.
Level 2 Answer demonstrates understanding of concepts involved in context.
Level 1 Answer identifies appropriate concepts and issues.

## Question 2

(a) (i) Explain and comment upon the term 'bbuffer stock" as used in Figure 1.

Possible content : Definition

A level of stock below which the firm does not wish to go for fear of a stock-out which might either stop the production line or lose sales. The amount of buffer stock for Barstow's component is 200 units. Barstow's buffer stock may not have been adequate as was demonstrated by the stockout occurring at the end of April.

Level 3 Recognises that buffer stock may not be fulfilling its function.
Level 2 Applies understanding to information in Figure 1.
Level 1 Demonstrates knowledge and understanding of meaning.
(ii) Calculate the average monthly usage of component $X$.

Total purchases for period $=700+400+600=1700$ [Process 1 calculation1]

Stock level increase $=450-350=100 \quad[1]$

Total sales $=1600 \quad[1]$
(iii) Define 'lead time" and calculate it for the April delivery of component $X$.

Lead time is the length of time between the re-order point and the time the component is taken into stock. [2] Ordered mid March, delivered mid April. Lead time 1 month \{accept 4 weeks\} [2] $\boldsymbol{\operatorname { m a x }} 4$
(b) One supervisor has suggested that the investment in new production technology might have lead to the recent complaints from customers. Discuss ways in which the situation might be improved.

Issues for consideration:

The new investment in production technology will almost certainly have lead to a change in method. Processes are likely to have become more mechanised and involve the use of CAM. Established workers may have resented this change and have regarded it as "de-skilling". The younger workers may also see the change as removing their opportunity for advancement within the organisation. Another possibility is that the changes have been introduced without proper training (evidence exists for this in the high labour turnover of younger employees). In this case workers are struggling to cope with the change and possibly even the supervisors are not fully familiar with the new technology. Poor quality has perhaps also resulted from the change and the fact that lack of familiarity with the new machinery makes supervisors and operators alike less keen to make adjustments even when small flaws are noticed. Again training and possibly the introduction of TQM would be beneficial. Empowering all workforce to exercise quality control functions by continuous checking of their own work and of others in their team would be some recompense for the de-skilling aspect of the change. The existence of production teams already should make this approach relatively easy to impose. It also aids the accountability aspect of control and affords opportunities for ascribing appropriate reward for good performance. Another aspect of the situation may be poor customer relations. Clearly Barstow cannot afford to let things deteriorate further and this may involve direct consultation with customers to identify particular weaknesses. Some problems may directly arise from their own stock control problem.

Level 4 Answer demonstrates evaluation by balancing arguments relating to various issues and their relative importance or by justifying an appropriate solution.
Level 3 Answer demonstrates analysis by reasoning; for example linking possible cause with appropriate effect.
Level 2 Answer demonstrates understanding of concepts involved in context.
Level 1 Answer identifies appropriate concepts and issues.

## Assessment Grid: Unit 2872

| Question | AO1 | AO2 | AO3 | AO4 | Total |
| :--- | :--- | :--- | :--- | :--- | :--- |
| $1 a$ | 3 | 1 |  |  |  |
| $b i$ | 2 | 2 | 2 |  |  |
| $i i$ | 2 | 2 |  |  |  |
| $c$ | 3 | 3 | 4 | 5 |  |
|  |  |  |  |  |  |
| $2 a i$ | 2 | 1 | 1 |  |  |
| $i i$ | 2 | 2 | 2 |  |  |
| $i i i$ | 2 | 2 |  |  |  |
| $C$ | 2 | 3 | 4 | 6 |  |
| Sub-total | 18 | 16 | 13 | 11 |  |
| QoWC |  |  |  |  | 2 |
| Total |  |  |  |  | 60 |

## Advanced Subsidiary GCE

## BUSINESS STUDIES

BUSINESS BEHAVIOUR

## Specimen Paper

Additional materials:
Answer paper

TIME 1 hour 30 minutes

## INSTRUCTIONS TO CANDIDATES

Write your name, Centre number and candidate number in the spaces provided on the answer booklet.
Write all your answers on the separate answer paper provided.
If you use more than one sheet of paper, fasten the sheets together.
Answer all questions.

## INFORMATION FOR CANDIDATES

The number of marks is given in brackets [ ] at the end of each question or part question.
You will be awarded marks for the quality of written communication where an answer requires a piece of extended writing.

## Answer all questions

Study the information about Peterborough Pans Ltd and then attempt the questions below.

1 (a) Helen has data which suggests reducing the price of the pan to $£ 9.50$ will result in sales of 42,500.
(i) Calculate the Price Elasticity of Demand implied by this data.
(ii) What methods of market research could be used to determine likely demand for the pan?
(b) Giving your reasons, recommend whether PP should lower the price of this pan.

2 Explain the reasons why Helen has set budgets.
3 To what extent is Helen's leadership style appropriate for PP?
4 Helen is concerned about preserving PP's reputation for quality.
Discuss the quality problems which PP are experiencing.

## Peterborough Pans Ltd.

Helen Marsden is Managing Director of Peterborough Pans Ltd. (PP). The firm manufactures saucepans under its own brand name, Albion. For many years it had enjoyed a reputation for the craftsmanship and quality of its products amongst its customer base. Indeed, the firm found itself in the happy position of not having to engage in much marketing activity to gain sales. Rather, its team of four regional sales representatives merely reinforced customer relations and took orders. Helen's appointment was at the insistence of First National Bank Plc, the firm's major lender. First National were concerned about their exposure to PP's worsening trading performance. The bank's options appeared stark: either exercise the covenant on their loan and liquidise the firm, or install a proven business manager to turn the firm around. With considerable reluctance Peter Rowley, grandson of the founder, took early retirement in March 1998 and so made way for Helen.

Prior to her appointment Helen took some time to listen to the views of the firm's customers. In the main they were loyal and wanted to continue to deal with PP. However, it was clear that frustrations were building, particularly making contact with the factory regarding late deliveries and rejects. Another concern was PP's product range. Cooking is becoming a more popular activity, in part owing to cookery programmes on television, and exposure in the print media. Further, life style changes now mean that many customers purchase pans not only as a means of cooking but also essential items of kitchen decoration. Consequently, design and colour are increasingly important purchase considerations. That PP appear unable to quickly respond to market changes is encouraging retailers to look to other manufacturers. Customers remark that lower unit costs, guaranteed lead times and good sales support make a powerful incentive to change suppliers.

At the premium end of the market PP faces increasing competition from a French firm whilst at the lower end sales of imports from the countries of the Pacific rim are rapidly growing. These Asian based manufacturers have invested in the latest technology and seem able to produce smaller batch sizes. In addition, their product's appearance is first rate.

Helen's first impressions of PP were not good. The firm's manufacturing facilities (mainly large presses) and methods (long production runs of any one type of pan) did not appear to have changed in decades. The organisation and layout of the factory was historic rather than logical. There appeared to be no control of stocks and no one could tell Helen how many of any of the firm's products were available for sale at any one time. Neither could Helen get a definitive answer from the accounting department to the simple question "What does it cost us to make this saucepan?". Indeed, there was little evidence of coordination between accounting, sales and the other departments. Members of the sales force would commit the firm to orders without reference to the factory. Tempers were often lost when promised delivery dates came and went without being met. The administrative organisation was poor and few of the company's records were held on computer. The shop floor workers regarded the firm's losses as management's responsibility and appeared to believe that Helen's appointment wouldn't effect their established working practices.

Helen's prognosis for the firm was that radical measures were needed to stave off the very real threat of closure. Her analysis of the situation was that she needed to convince two separate groups of the need to change. Firstly, the owners would need to be convinced to invest further capital into the firm despite its mounting losses. Second, everybody employed by the firm would have to accept significant change.

Helen first wanted to change production methods and so head hunted Brian Harbottle to become Operations Director. Brian had considerable experience in lean production techniques. With Helen's agreement the factory was closed for a day so that all employees could attend a staff training day run by a group of external consultants. The consultants deliberately divided the employees into groups with representatives from throughout the factory. The morning was given over to team building exercises whilst the afternoon addressed total quality management issues and just in time methods.

At the same time as reviewing operations Helen instigated an appraisal of the firm's marketing activities. This included not only what to make but also how much to sell it for. The firm's Marketing Manager, Steve Smith, was against the idea of price cutting. To seek to persuade him, Helen estimated some of the costs of manufacturing a pan which the firm sells to retailers for $£ 10.00$. Her figures suggested a labour content of $£ 0.50$, material cost $£ 1.00$, variable overhead of $£ 1.50$ and a fixed cost allocation of $£ 140,000$. Last year the firm sold 36,000 of this style of pan. Another marketing issue centred on the sales representatives. Steve was confused by Helen's statement "...their attitude is too focused upon gaining orders rather than marketing..." as his staff had always reached their sales targets. This success made Steve a firm believer in the motivational aspects of target setting and budgeting. Hence, when Helen announced new targets for the coming quarter he was one of the few managers not to object.

The targets presented by Helen at the December 1998 board meeting were cascaded down through the hierarchy in greater detail. Steve's target was for sales in 1 m units with an operating margin of $5 \%$. Brian was told to reduce manufacturing time by $20 \%$ from the current 14 days whilst simultaneously reducing scrap rates. The finance department were to eliminate the overdraft by the end of the financial year. Finally the personnel target was to ensure all production staff undergo training about quality control methods before the factory's annual maintenance shut down in August. When told of this target, Janet Rowley, the Personnel Manager, was heard to remark, "This is madness! Our staff are craftsmen, they don't need to be told about quality. And where is the money going to come from, certainly not my department. We'd be better off getting rid of this woman and her fancy ideas! I don't see why we need all these targets. Let's get Uncle Peter back, at least he listened to us."

## Figure 1

## Projected Final Account

Profit \& Loss Account
Year ended 30/4/99

Balance Sheet as at 30/4/99
£000s

Sales Turnover $\quad 9,750$
Cost of sales $\quad 6,338$
Gross Profit 3,412
Overheads 3,218

Operating profit 194
Interest 425
Pre tax Profit -231

| Fixed Assets |  |  | £000s |
| :--- | ---: | ---: | ---: |
| Land \& Buildings |  |  | 2,350 |
| Machinery | 1,250 |  | 2,537 |
| Less depreciation | 1,063 |  |  |
|  |  |  |  |
| Current assets |  |  |  |
| Stock |  |  |  |
| Raw Materials | 1,138 |  |  |
| Work in Progress | 250 |  |  |
| Finished goods | 1,125 | 2,513 |  |
| Debtors |  | 1,625 |  |
| Cash |  | 94 | 4,232 |

Current Liabilities

| Creditors | 1,056 |  |
| :--- | ---: | ---: |
| Overdraft | 156 | 1,212 |


| Net assets employed |  | 5,557 |
| :--- | ---: | ---: |
| Financed by | 625 |  |
| Share capital | 1,813 | 2,438 |
| Reserves | 3,119 |  |
| Long term Loan |  | 5,557 |
| Capital employed |  |  |

RECOGNISING ACHIEVEMENT

## Advanced Subsidiary GCE

BUSINESS STUDIES
BUSINESS BEHAVIOUR ..... 2873
Mark Scheme

## GENERAL

1. The paper is to be marked to AS standard.
2. Marking should be positive: marks should not be subtracted for errors or inaccuracies.
3. In assessing quantitative answers the "own figure rule" (OFR) must be applied, i.e. a candidate must be given credit for calculations which, though wrong, are consistent with an earlier error.
4. Candidates should be regarded as achieving the highest level of response which accurately describes their answer. They do not necessarily pass through all lower levels of response.
5. Material in italics refers to possible issues / content that candidates might use. These suggestions are neither exhaustive nor necessarily required.
6. Up to 4 marks will be awarded for quality of written communication, which in this context refers to;
(a) the clarity of the candidate's expression,
(b) the structure and presentation of their ideas,
(c) the grammar, punctuation and spelling.

4 where the demonstration of communication is as good as could be expected under time constrained examination conditions,

3 where the candidate's demonstration of communication is good in terms of clarity of expression,

OR the structure and presentation of ideas
OR the grammar, punctuation and spelling, and sound in the other regards,

2 where the candidate's quality of written communication is sound
1 where the clarity of the candidate's expression,
OR the structure and presentation of ideas,
OR the grammar, punctuation and spelling, are such as to detract from the quality of the answer,

0 where the quality of written communication generally detracts from the quality of the answer.

## Individual Questions

1 (a) Helen has data which suggests reducing the price of the pan to $£ 9.50$ will result in sales of 42,500.
(i) Calculate the Price Elasticity of Demand implied by this data.

$$
\begin{align*}
& \text { PED }=\% \text { change in } D / \% \text { change in } P  \tag{1}\\
& D 1=36,000 ; P 1=£ 10 \mathrm{D} 2=42,500 ; P 2=£ 9.50 \\
& \% \text { change in } D=2,250 / 36,000=6.25 \%  \tag{1}\\
& \% \text { change in } P=£ 0.5 / £ 10=5 \%  \tag{1}\\
& P E D=6.25 / 5=1.25, \text { elastic } \tag{1}
\end{align*}
$$

(ii) What methods of market research could be used to determine likely demand for the pan?

Mixture of primary and secondary. Secondary - what factors determine demand for pans, number of households, so look at demographics, housing starts, marriage statistics etc. Could also use the firm's own internal sales data. Primary, either from consumer or from retailer. Variety of methods, panels, face to face interviews, questionnaires etc. Problem is the available resources, time and expertise. Both will have an influence on choice of method. Might be better to begin with secondary and then use primary to fill in any possible knowledge gaps.

Level 2 Discussion of MR demonstrates an understanding of their use
Level 1 Offers methods of MR
(b) Giving your reasons, recommend whether PP should lower the price of this pan.

If PED estimation is correct, lowering price increases revenues. So if costs don't change then would increase profits. At moment, BE is (£140,000/£7) 20,000 giving a margin of safety of 16,000 . If reduce price $B E$ becomes 21,539 and a projected $M$ of $S$ of 20,961. If no increase in sales then $M$ of $S$ reduces by 1,539. So, depends upon how confident the firm can be in their estimation of PED. Marketing is clearly the other issue. Reducing price might infer a reduction in quality and move the firm down market where competition is more fierce. Would retailers pass on the lower price to consumer? Need to consider other elements of the mix if reduce price, i.e. shouldn't consider elements of the mix in isolation. Could reduction in price be temporary and used as part of a promotional campaign. If pans are bought in sets reduction in price might stimulate purchase of complete sets of which this pan forms a part. Should also consider whether the firm can produce the increase anticipated. Does the firm have current spare capacity. Would additional output increase some costs such as labour if overtime were needed.

Level 4 Discussion arrives at judgement through the use of case material.
Level 3 Discussion of reason(s) is analytical in its use of case material/context
Level 2 Gives reasons why price should/not change in a descriptive manner
Level 1 Offers a view that is unsupported

2 (a) Explain the reasons why Helen has set budgets.
For coordination of overall objectives throughout the firm, control in making sure all departmental behaviour is consistent with objectives, planning of resource allocation, monitoring performance, motivational target setting. Currently firm is making losses. So return to profit either need to boost revenues or to limit expenditure. Helen has set functional departments a series of targets that do both. Further, by having a budget, those within the firm are focused upon what matters and so should encourage behaviour in that direction, e.g. better quality as a means of competing in the market place and also by reducing levels of waste and rework, so reducing costs.

Level 4 Discussion evaluates reasons for budgets in the context
Level 3 Discussion of method(s) is analytical in the context of the problem set
Level 2 Discussion of budget demonstrates an understanding of their use
Level 1 Offers reasons for setting budgets

## 3 To what extent is Helen's leadership style appropriate for PP?

Much of the case evidence suggests she is autocratic. She appears to be telling people what to do, targets and budgets are imposed rather than negotiated. This may demotivate some staff who may want and are able to have some say in how the firm is managed. Links to McGregor's theory X approach to motivation. In which case it might be seen as inappropriate. But need to consider the context in which she is operating. Attitude in the firm seems to be everything is all right or at worst, it is someone else's problem. Hence, without clear direction the firm may continue in its drift toward collapse. Alternatives include paternalistic and democratic. To be appropriate she needs to consider who she is leading and what they are trying to do. So an autocratic style may not be suitable for Brian who has lots of experience in Ops. Management. But the contrast is Janet, who it might be implied is where she is owing to nepotism rather than ability, in which case she might need to be told what to do and to be closely monitored so that she does it.

Level 4 Discussion arrives at a judgement of suitability through the use of case.
Level 3 Discussion of style(s) is analytical in the context of the case.
Level 2 Demonstrates understanding of leadership style(s).
Level 1 Identifies style(s) of leadership.

4 Helen is concerned about preserving PP's reputation for quality. Discuss the quality problems which PP are experiencing.

Quality is concerned not only with the physical product, e.g. pans, but also the ability of the firm to offer its customers what they want, i.e. guaranteed delivery. Further, quality can be an international issue, e.g. lots of rejects within the process which are picked up through quality control and monitoring, so cost of detection and rework or scrap. If control is rigorous then outside parties may not realise the firm has a quality problem.

Case refers to levels of scrap in manufacture. This might mean processes are focused on detection rather than prevention. Again, evidence of this is the introduction of training about QC methods. Retailers complain they get little support from PP so quality is an issue for the marketing department as well in not promising what they may not be able to deliver. Also need to keep the customer informed if delivery is likely to be delayed. Given the improved quality of competitors efforts then PP cannot afford to allow their quality to slip. NB firm prides itself on being a quality UK manufacturer. Hence, quality is both a production, a finance, a HRM and a marketing problem.

Level 4 Discussion is evaluative within the context given.
Level 3 Discussion of problem(s) makes analytical use of the evidence
Level 2 Discussion of problem(s) demonstrates an understanding of the issues
Level 1 Demonstrates knowledge of quality

Assessment Grid: Unit 2873

| Question | AO1 | AO2 | AO3 | AO4 | Total |
| :--- | :---: | :---: | :---: | :---: | :---: |
| 1 (a) (i) | 1 | 1 | 2 |  | 4 |
| 1 (a) (ii) | 3 | 2 |  |  | 5 |
| 1 (b) | 5 | 3 | 3 | 2 | 13 |
|  |  |  |  |  |  |
| 2 | 5 | 5 | 4 | 4 | 18 |
|  | 5 | 5 | 4 | 4 | 18 |
| 3 |  |  |  |  |  |
|  |  | 5 | 4 | 4 | 18 |
| 4 | 24 | 21 | 17 | 14 | 76 |
|  |  |  |  |  |  |
| Sub Total |  |  |  |  | 4 |
|  |  |  |  | 80 |  |
| QoWC |  |  |  |  |  |

## Advanced GCE

## BUSINESS STUDIES <br> FURTHER MARKETING

## Specimen Paper

## Additional materials:

Answer paper
Graph Paper
TIME 1 hour 30 minutes

## INSTRUCTIONS TO CANDIDATES

Write your name, Centre number and candidate number in the spaces provided on the answer booklet.
Write all your answers on the separate answer paper provided.
If you use more than one sheet of paper, fasten the sheets together.
Answer all questions.

## INFORMATION FOR CANDIDATES

The number of marks is given in brackets [ ] at the end of each question or part question.
You will be awarded marks for the quality of written communication where an answer requires a piece of extended writing.

## Answer all questions.

Study the information about The North Devon Railway then answer the questions below.

1. (a) Using time series analysis, and a three point moving average, calculate the trend figures for all possible sections.
(b) Using the graph paper provided, plot the trend line and forecast the demand for June-August in 2001.
(c) Discuss the benefits and drawbacks that Tommy may find by using time series analysis as a forecasting tool.
2. (a) Discuss suitable sampling methods that Tommy might use in researching the different markets for the firm.
(b) With full consideration of the marketing mix, develop a strategy that Tommy might employ to increase the demand for the services of the North Devon Railway.
[Quality of Written Communication: 2]

## The North Devon Railway

The North Devon Railway is a preserved steam railway owned and run by rail enthusiasts. The line, which is 21 miles long, was closed down by the government in 1967. It joined two reasonably sized market towns. In 1984, John Guyatt organised a group of friends and bought the line from British Rail. After a great deal of restoration work the line was re-opened in 1987 as a tourist attraction.

After a slow start, the railway enjoyed a steady growth in demand which continued until the early 1990s. However, a combination of recession and increased competition from other attractions meant that demand very much slowed from then on.

It was felt necessary to ask Tommy Clarkson, a recently retired marketing manager, to assist in the running of the railway and to advise on marketing and development for the future. Tommy was a rail enthusiast who was delighted to get involved.

Tommy decided to gather information over a period of time and to observe day to day operations.
Following his consideration of the pricing policy he noticed the range of different prices on offer:

| Service | High Season <br> June, July, August | Low Season <br> March-May, Sept-Dec |
| :--- | :---: | :---: |
| Adult single | 3.25 | 2.50 |
| Adult return | 5.00 | 4.00 |
| Child single (U16) | 1.75 | 1.25 |
| Child return | 2.75 | 2.00 |
| Family single | 8.50 | 6.50 |
| Family return | 12.50 | 9.75 |

A family ticket can be two adults and up to three children. Infants under three travel free. The railway is closed in January and February, when all essential maintenance work is carried out.

In addition to the above fares there are a number of special services:

1. "Twilight Specials" are run in the high season. These are evening trips, where the passengers are served with drinks and given a meal on the journey. The price varies a little depending on the type of group, but an average price would be around $£ 25.00$ per head. These have been very popular and the bar profits have very impressive.
2. "Thomas the Tank Engine Specials" take place on Saturday mornings in high season. The visit includes a train journey, tour of the station, and a baseball cap.
3. School Educational Days are offered to local schools who can undertake project work.

Tommy was able to identify a number of areas of concern:

1. Demand is highly seasonal. When Tommy split the year into three periods, March to May, June to August, and September to December, he discovered that approximately $50 \%$ of the passengers were carried in the High Season. Large queues and disappointed potential customers were often noticed at that time.
2. There has been little promotion undertaken. They relied almost totally on a colour brochure including a timetable and price list.
3. The company has very little understanding of the market and has conducted minimal market research. They are aware that there may be demand from locals who would use the service as a genuine means of transport. The cost-plus, inflexible nature of the pricing policy has meant that local bus companies are cheaper than the standard fares charged by the railway.
4. A new tourist attraction is due to open in early 2001. This may be seen as both opportunity and threat.

Tommy was able to gain data for passenger figures for the most recent three years. He considered the data over the three periods in his year.

|  | $\mathbf{1 9 9 8}$ | $\mathbf{1 9 9 9}$ | $\mathbf{2 0 0 0}$ |
| :--- | :---: | :---: | :---: |
| March-May | 32000 | 36000 | 37000 |
| June-August | 92000 | 90000 | 94000 |
| September- <br> December | 56000 | 56000 | 54000 |

## Advanced GCE

BUSINESS STUDIES
FURTHER MARKETING ..... 2874
Mark Scheme

## GENERAL

1. The paper is to be marked to A2 standard.
2. Marking should be positive: marks should not be subtracted for errors or inaccuracies.
3. In assessing quantitative answers the "own figure rule" (OFR) must be applied, i.e. a candidate must be given credit for calculations which, though wrong, are consistent with an earlier error.
4. Candidates should be regarded as achieving the highest level of response which accurately describes their answer. They do not necessarily pass through all lower levels of response.
5. Materials in italics refer to possible issues / content that candidates might use. These suggestions are neither exhaustive nor necessarily required.
6. Up to 2 marks will be awarded for quality of written communication, which in this context refers to;
(a) the clarity of the candidate's expression
(b) the structure and presentation of their ideas,
(c) their grammar, punctuation and spelling.

2 where the demonstration of communication is as good as could be expected under time constrained conditions,

1 where the candidate's demonstration of communication is good in terms of clarity of expression
OR structure and presentation of ideas,
OR the grammar, punctuation and spelling, and sound in the other regards,

0 where the clarity of the candidate's expression,
OR structure and presentation of ideas,
OR the grammar, punctuation and spelling,
are such as to detract from the quality of the answer.

## Individual Questions

1 (a) Using time series analysis and a three point moving average, calculate the trend figures for all possible sections.

Trend
60.00
32.00
61.33
60.67
60.67 (24.67)
61.00
29.33
62.33
(5.00)
61.67
(25.33)
32.33

Cyclical variation

2000/2 94
185
1998/1 32
1998/2 92
1998/3 56
1999/1 36

36
1999/2 $90 \quad 182$
1999/3 56
$\begin{array}{lll}2000 / 1 & 37 & 187\end{array}$
2000/3 54
Level 3 For demonstrating application of data from case and correctly calculating trend figures.
Level 2 Demonstrating some understanding of time series analysis.
Level 1 Identification of some relevant information.
(b) Using the graph paper provided plot the trend line and forecast the demand for June-August 2001.


Average cyclical variation for June-August $2001=32.00+29.33+32.33 / 3$

$$
\begin{equation*}
=31.22 \tag{2}
\end{equation*}
$$

Forecast $=31.22+$ trend extension to line $\quad=90.00-95.00$
Attempt to draw graph
(c) Discuss the benefits and drawbacks that Tommy will face by using time series analysis as a forecasting tool.

Benefits might include the fact that an accurate forecast will enable Tommy to plan ahead and to budget effectively. It will give him an idea of resource requirements. ARA

Drawbacks might include the idea that the method assumes that the past will repeat itself, and that it is not good for long term forecasting. Only one answer is considered instead of a range. ARA

Level 4 Adopts an evaluative approach, i.e. balance/priority
Level $3 \quad$ Benefit(s) and drawback(s) discussed and related to context
Level $2 \quad$ Understanding of benefit(s) and/or drawback(s) in the context
Level 1 Identification of benefit(s) and/or drawback(s)
2. (a) Discuss suitable sampling methods that Tommy might use in researching different markets for the firm.

Random, quota, stratified and cluster may be among the ideas put forward. Any reasonable method should be rewarded. Cost may be a consideration as the firm is quite small. Questions such as 'who to ask?' and 'where to ask?' might be considered. Some form of stratified or quota may be most appropriate though the discussion should be focused on the context. The cost may make convenience sampling the most appropriate.

Level 4 Evaluation of sampling methods in context
Level 3 Analysis of sampling methods in context
Level 2 Understanding of sampling method(s) in the context
Level 1 Identification of sampling method
(b) With full consideration of the marketing mix, develop a strategy that Tommy might employ to increase the demand for the services of the North Devon Railway.

Most candidates may try to introduce the four P's, promotion, price, place and product. Distribution (place) is not too applicable in this case.
Promotion aspects may be split into advertising, sales promotion, personal selling and publicity. At the moment, promotion could be improved and there is plenty of scope for elements of sales promotion, such as consumer incentives, price cuts and sponsorship.
Advertising does not appear to be very applicable to a firm of this size. Publicity is useful, if good, but uncontrollable.
The product appears too attractive, but there are obviously many alternative choices for people to spend their money on. Product extensions might be considered.
Pricing is another area that might be considered. There is obviously a problem with seasonality of demand and a series of differentiated prices might help to ease this.

The key point is that the candidate should adopt a strategic approach. They should link their suggestions, rather than write four unconnected paragraphs. It is a strategy that is called for and not a list of suggestions.

Level 4 Evaluation of the whole marketing strategy
Level 3 Analysis of more than one area of the mix in context
Level 2 Understanding of one or more areas of the mix, in isolation, but in context
Level 1 Knowledge/understanding of marketing not in context

## Assessment Grid: Unit 2874

|  | AO1 | AO2 | AO3 | AO4 | Total |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Q1 (a) | 2 | 3 | 3 |  | 8 |
| $\mathbf{1}(\mathbf{b})$ | 1 | 2 | 3 |  | 6 |
| $\mathbf{1}(\mathbf{c})$ | 2 | 2 | 3 | 3 | 10 |
| Q2 (a) | 3 | 3 | 3 | 5 | 14 |
| $\mathbf{2}(\mathbf{b})$ | 3 | 4 | 4 | 9 | 20 |
| Sub-total | 11 | 14 | 16 | 17 | 58 |
| QoWC |  |  |  |  | 2 |
| Total |  |  |  | 60 |  |

## Advanced GCE

## BUSINESS STUDIES <br> FURTHER ACCOUNTING AND FINANCE

## Specimen Paper

Additional materials:
Answer paper

TIME 1 hour 30 minutes

## INSTRUCTIONS TO CANDIDATES

Write your name, Centre number and candidate number in the spaces provided on the answer booklet.
Write all your answers on the separate answer paper provided.
If you use more than one sheet of paper, fasten the sheets together.
Answer all questions.

## INFORMATION FOR CANDIDATES

The number of marks is given in brackets [ ] at the end of each question or part question.
You will be awarded marks for the quality of written communication where an answer requires a piece of extended writing.

## Answer all questions.

Read the information on Wood and Green Ltd and then answer the questions below.

## Question 1

(a) Analyse and comment upon Wood and Green's working capital position.
(b) Evaluate ways in which the management of working capital may be improved.
(c) Assume that during the year 2000, the sales target has been reached, stock holding has been reduced to an average of $16.67 \%$ of cost of sales and debtors to 45 days. Construct and comment upon a cashflow forecast for the Year 2000.

## Question 2

(a) Devise and justify a potential strategy for raising the finance required to acquire and use the new machine.
(b) Discuss the appropriateness of DCF as a technique for evaluating the proposed investment in the new machine.
[Quality of Written Communication: 2]

## Wood and Green Ltd

Wood and Green Limited have been in business manufacturing protective clothing for the leisure and sports market for many years. Over the past four years they have been expanding rapidly, successfully targeting new markets in the European Union and Eastern Europe. Share capital has not been increased since they incorporated in 1995. The firm is located in Newcastle and there are only two shareholders. Francis Wood owns $60 \%$ of the share and Anne Green $40 \%$. The growth of the company has meant that good profits have been made over the years and $£ 1,360,00$ has been ploughed back into the business. Even so the firm had to rely on both short and long term borrowing. A bank loan of $£ 700,000$ was negotiated in 1999 and is secured on the premises of the business. The loan is to be repaid in seven equal annual instalments at the beginning of each year from now with interest on the outstanding balance of $12 \%$. The balance sheet as at July 1999 is shown in Fig. 1 and extracts from the profit loss account are shown in Fig. 2.

Further investment is needed if the potential of new markets is to be realised. The objective is to increase turnover by $25 \%$ next year with regular steady growth in subsequent years. This forecast is based on market research by an outside agency. Francis and Anne are assuming that the cost of sale, (as a percentage of sales) will remain unchanged next year.

The most important requirement is a new machine. Purchase, installation and training are estimated to cost $£ 600,000$. Both directors are well aware that success is going to depend on the efficient management of cashflow during the coming year. To this end, Anne Green has agreed to prepare a cashflow forecast for the next twelve months and to consider ways in which working capital management can be improved.

## Fig. 1

| Balance Sheet: | Wood and Green: £'000 | As at 31st July $\begin{aligned} & 1999 \\ & \mathbf{£}^{\prime} 000\end{aligned}$ | $£^{\prime} \mathbf{0 0 0}$ |
| :---: | :---: | :---: | :---: |
| Fixed Assets |  |  |  |
| Land and Buildings |  | 1,560 |  |
| Plant and Machinery | 1060 |  |  |
| Less depreciation | (480) | 580 |  |
| Vehicles | 216 |  |  |
| Less depreciation | (96) | 120 | 2260 |
| Current Assets |  |  |  |
| Stock | 580 |  |  |
| Debtors | 400 | 980 |  |
| Current Liabilities |  |  |  |
| Creditors | 260 |  |  |
| Dividend Payable | 100 |  |  |
| Tax Payable | 200 |  |  |
| Overdraft | $\underline{20}$ | (580) | 400 |
| Net Assets |  |  | 2660 |
| Financed by: |  |  |  |
| Share Capital |  | 600 |  |
| Reserves |  | 1360 |  |
| Bank Loan |  | 700 |  |

Fig. 2

| Extract from: | Wood and Green Ltd Profit Year Ending July 1999 | ccount |
| :---: | :---: | :---: |
|  | $£^{\prime} \mathbf{0 0 0}$ | $£^{\prime} 000$ |
| Sales | 2,400 |  |
| Cost of Sales | $\underline{980}$ |  |
| Gross Profit |  | 1,420 |
| Less Expenses | 592 |  |
| Depreciation | 144 |  |
| Interest on Loan | $\underline{84}$ |  |
|  |  | (820) |
| Net Profit Before Tax |  | 600 |
| Tax |  | (200) |
| Net Profit after Tax |  | 400 |
| Dividend Payable |  | (100) |
| Retained profit |  | 300 |

RECOGNISING ACHIEVEMENT

## Advanced GCE

BUSINESS STUDIESFURTHER ACCOUNTING AND FINANCE2875Mark Scheme

## GENERAL

1. The paper is to be marked to A 2 standard.
2. Marking should be positive: marks should not be subtracted for errors or inaccuracies.
3. In assessing quantitative answers the "own figure rule" (OFR) must be applied, i.e. a candidate must be given credit for an answer which, though wrong, is consistent with an earlier error.
4. Candidates should be regarded as achieving the highest level of response which accurately describes their answer. They do not necessarily pass through all lower levels of response.
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OR the structure and presentation of ideas,
OR the grammar, punctuation and spelling, and sound in the other regards,

0 where the clarity of the candidate's expression, OR structure and presentation of ideas, OR the grammar, punctuation and spelling, are such as to detract from the quality of the answer.

## Individual Questions

## Question 1

(a) Analyse and comment upon Wood and Green's working capital position.

Issues for Consideration
An awareness of what working capital is and how it may be measured.
Simple statement of WC as Current Assets - Current Liabilities $=£ 400.000$
Ratio analysis of any two of Current Test (1.69), Acid Test (1.0)
Other indicators could include debtor days, stock to turnover etc.
No more than two ratios required.
Awareness of standard ratios. CR may be described as good or even commented on as too good.
AT as safe. Amounts are relatively large hence there is greater flexibility. Debtors significantly above creditors (1.54). Cash position crucially weak with no immediate cash. What is the overdraft limit?

For numerate analysis of data focused on the question
For commentary:
Level 2 Comments show understanding of both the theoretical aspects of liquidity and its application to the firm's position.
Level 1 Either contextual or theoretical understanding is shown
(b) Evaluate ways in which the management of working capital may be improved.

## Issues For Consideration

The business is growing rapidly and is set to continue doing so. The ratios are more important in this context. Creditors (including the Bank) would prefer a current ratio closer to 2 on the acid test ratio and should not fall below 1. The real problem is the total lack of cash and the size of the existing bank lending. Cover by property is only 1.73. Methods of improving might include:

Injection of new capital which could find the money for the new machine and relieve the pressure on the WC position. Stock is $24 \%$ of sales implying more than 12 weeks. Debtors $16.67 \%$ of sales i.e. over 8 weeks. How sensitive are customers and what is the pattern of debtors? If creditors are trade creditors this period is 13,8 weeks and points the need for greater liquidity. Tax can be retained until the end of the year so it is not an immediate priority. This suggests some relief from stock and better debt collection (credit management). Issue is more of one generating cash than it is of improving total working capital.

Answers which contain no use of numerate data cannot be better than Level 2.
Level 4 Clear understanding of the extent and nature of the problem and logically argued solution in the light of that.
Level 3 Data has been appropriately analysed

Level 2 Understanding of the issues is demonstrated
Level 1 Relevant observations made
(c) Construct and comment upon a cash flow forecast for Wood and Green in the Year 2000.

## Cashflow Forecast for Year 2000.

|  |  | £'000 |  |
| :---: | :---: | :---: | :---: |
| Operating Income |  |  |  |
| Sales (125\% of 2400) |  | 3000 | (1) |
| Less Cost of Sales (40.83\% of 3000) |  | $\underline{1225}$ | (1) |
|  |  | $\underline{1775}$ |  |
| Working Capital |  |  |  |
| Stock (16.67 \% of 1225) | 204.21 |  | (1) |
| Debtors 45/365 x 3000 | 369.86 |  | (1) |
|  | 574.07 |  |  |
| Less: |  |  |  |
| Creditors (26.53\% of 1225) | 324.99 |  | (1) |
|  |  | $\underline{249.08}$ | (1) |
|  |  | 2024.08 |  |
| Less: |  |  |  |
| Taxation (Last Year's) | 200.00 |  |  |
| Dividend (Last Year) | 100.00 |  |  |
| Loan Repayment | 100.00 |  |  |
| Interest | 84.00 |  |  |
| Repayment of 1999 Creditors | $\underline{260.00}$ |  |  |
|  |  | $\underline{744.00}$ | (1) |
|  |  | $\underline{1208.08}$ |  |
| Less |  |  |  |
| Current Stock held | 580.00 |  |  |
| Current Debtors | $\underline{400.00}$ |  |  |
|  |  | $\underline{980.00}$ | (1) |
|  |  | 300.08 |  |
| Less Overdraft (1999) |  | $\underline{20.08}$ | (1) |
| Forecast Cash Position |  | 280.08 | (1) |

Issues for Consideration
A combination of better working capital management and $25 \%$ growth will, if it is achieved, improve the cash position. But the costs of achieving that growth are likely to be higher, overseas markets normally cost more to service and exchange rate changes may be significant in either direction. The growth is forecast to improve the cash position and therefore the firm will be more stable. But this is a very favourable forecast based on success in achieving the tighter working capital management and on obtaining maximum forecast growth.

Commentary
Level 4 Evaluative of some aspect of the position

Level 3 Analytical comment(s) made
Level 2 Comments show understanding
Level 1 A simple observation

## Question 2

(a) Devise and justify a potential strategy for raising the finance required to acquire and use the new machine.

Issues for Consideration
For internal generation of funds.
The sum is large, being equal to the current share capital. Prospects for internal generation are small, particularly since some attention must be given to improving the working capital position. maybe internal funds can be used to fund installation and training costs. This could only come from debtors or stock (ratios may be used here to support point made).

External Generation Borrowing. Existing borrowing already high although within property values. Must the machine be bought? Are there possibilities for leasing or HP arrangements. Bank lending is already high - debenture as a possibility. Gearing implications of attempts to borrow. Would the growth potential (if the research is good) attract a venture capitalist or State support?

The potential for becoming a plc. The control implications. But doesn't this growing company need a larger and more experienced board? Aren't the opportunities presented by plc status much greater than disadvantages?

Level 4 A strategy is developed based on broad and logical evaluation of the context and the potential methods.
Level 3 The options are analysed in content but no strategy emerges or it is not supported by the analysis and arguments.
Level 2 Understanding of the theoretical possibilities is good but there is little or no contextual consideration or contextual consideration is good with very little theoretical understanding.
Level 1 Some relevant ideas have been drawn from either theory or context.
(b) Discuss the appropriateness of DCF as a technique for evaluating the proposed investment in the new machine.

## Issues For Consideration

The nature of DCF and the importance of the time value of money. It does not take inflation into account and is only as accurate as the estimation of cash flows. In times of high inflation or in markets where the cash flow is difficult to forecast DCF has major weaknesses and it becomes more important to get money back quickly. Here there is no knowledge of the accuracy of the forecast and no forecast beyond the first year, it is not really a basis for any estimation of the availability of the investment. If the firm is expecting growth as considerable as $25 \%$ in the first year DCF is also less crucial, particularly since such growth will generate additional revenue of 600,000 in
year and it is estimated that costs will not rise disproportionately. Other arguments along the same line might include: the cost of capital is likely to be $12 \%$, the question of the expected life of the machine and whether, in the context, there is the likelihood of rapid technological obsolescence. Assumptions, if stated and explained will be accepted.

Level 4 DCF is evaluated in the context of the situation and the information available. (12-8)
Level 3 The situation is analysed but no sustainable argument is offered.
Level 2 Answer shows understanding of either the situation or the technique.
Level 1 Some relevant factors are presented.

## Assessment Grid: Unit 2875

| Question | AO1 | AO2 | AO3 | AO4 |  | Total |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |
| Q1a | 3 | 3 | 2 |  |  | 8 |
| Q1b | 2 | 2 | 3 | 5 |  | 12 |
| Q1c | 2 | 5 | 5 | 2 |  | 14 |
| 2a | 2 | 2 | 3 | 5 |  | 12 |
| 2b | 2 | 2 | 3 | 5 |  | 12 |
|  |  |  |  |  |  |  |
| Sub Total | 11 | 14 | 16 | 17 | 2 | 58 |
| Q o WC |  |  |  |  |  | 2 |
| Total |  |  |  |  |  | 60 |

## Advanced GCE

## BUSINESS STUDIES <br> FURTHER PEOPLE IN ORGANISATIONS

## Specimen Paper

Additional materials:
Answer paper

## TIME 1 hour 30 minutes

## INSTRUCTIONS TO CANDIDATES

Write your name, Centre number and candidate number in the spaces provided on the answer booklet.
Write all your answers on the separate answer paper provided.
If you use more than one sheet of paper, fasten the sheets together.
Answer all questions.

## INFORMATION FOR CANDIDATES

The number of marks is given in brackets [ ] at the end of each question or part question.
You will be awarded marks for the quality of written communication where an answer requires a piece of extended writing.

## Answer all questions

Read the information on Bromsbridge College and then answer the questions below.

## Question 1

(a) Discuss the problems that Wasim might face in his working relationship with Duncan Holt, the College Principal, given Duncan Holt's apparent management style.
(b) Wasim has been informed that one of his key tasks will be introduce teacher appraisal by January 2000. Suggest a strategy which Wasim might recommend in order for the scheme to gain the acceptance of full-time teaching staff.

## Question 2

(a) Calculate the proportionate change in reported illness between 1993/94 and 1997/98 for:
(i) full-time staff;
(ii) full-time equivalent staff.
(b) With reference to Table 1 and Table 2, and any other relevant information suggest how Wasim might evolve a strategy to reduce lost time through illness of full-time teaching staff.
(c) Critically explain the problems that the College might face if the decision is taken to replace the current part-time staff with lecturers supplied by an employment agency specialising in teaching staff.

## Bromsbridge College

Wasim Ahmed had joined Bromsbridge College to take up his post as Human Resource Manager in July 1999. He had previously worked as Assistant Personnel Manager for a well-known chocolate manufacturer. Bromsbridge College, although one of the country's smaller colleges, offered him promotion, and new challenges.

He had been appointed to the Senior Management Team of the College to replace Bob Pickard, who had resigned after a series of disagreements with the Principal, Duncan Holt. The other members of the team are the Finance Manager, the Curriculum Director, two Curriculum Managers, and four Team leaders for four faculties.

During the final week of Bob Pickard's notice period, Wasim had taken the opportunity to acquaint himself with some of the issues that Bob had been dealing with recently, and to try to get a feel for the way that Human Resource issues in a Further Education College might differ from those in a major manufacturing company.

Bob Pickard had been extremely forthcoming about some of the personalities and issues with which Wasim would be faced. Bob had also provided Wasim with some interesting data which he had gathered (see Table 1 and Table 2).
"If you want my honest opinion, you could write down all you know about Human Resource issues and people skills on the back of a postage stamp, and still have room to spare. Duncan Holt came here five years ago with big ideas about cost cutting and efficiency improvements. He pretends to consult with staff, but in truth he is usually only telling them what he wants them to do."

Bob had also explained that many of the longer serving members of the teaching staff had taken early retirement between 1994 and 1998, whilst this had saved considerably on the salary bill for teaching staff, it had removed many of the experienced and highly motivated staff. Where necessary they had been replaced by part-time lecturers, and also younger, more recently qualified lecturers.

Bob also told Wasim that teaching staff were having to teach larger classes, and were also expected to make return journeys of up to 20 miles to teach at any of the College's four sites. As a result staff seemed to complain much more about the expectations that were placed upon them by their teamleaders and the Senior Management Team.

Bob had continued by telling Wasim that relations with the Lecturer's Union were at an all time low, and that a lot of his time had been taken up with negotiations concerning the introduction of teacher appraisal, and negotiations relating to the replacement of all the part-time teaching staff with lecturers supplied by an employment agency specialising in supplying teaching staff. The Union members are getting really angry because they can see that Duncan Holt intends to get his own way, and even the newer members of staff are becoming more angry about the current state of affairs.

Wasim was not at all surprised to be called to the Principal's office the day after Bob Pickard left. Duncan Holt informed him that his two key tasks in the immediate future were to:

1. Have a strategy in place to implement teacher appraisal by January 2000.
2. Make the necessary arrangements for part-time lecturing staff to be replaced by agency staff by January 2000.

He informed Wasim that he was used to having his orders obeyed, and told Wasim that these deadlines were not hopeful guidelines - they must be achieved or else.

He began to study the information given to him by Bob Pickard to see if there were any particular clues which might help them with the tasks set for him by Duncan Holt. Perhaps life at the chocolate factory hadn't been all that bad really!

Table 1: $\quad$ Staffing Levels:

|  | Management: |  | Teaching staff: |  |  |
| :--- | :---: | ---: | :--- | :---: | :---: |
| Year: |  | Full Time: | Part-time: | Full Time Equivalent | Admin \& Support |
|  |  |  |  |  |  |
| $1993 / 94$ | 16 | 94 | 29 | $(5)$ | 26 |
| $1997 / 98$ | 10 | 52 | 44 | $(8)$ | 38 |
| $1998 / 99$ | 10 | 50 | 48 | $(9)$ | 52 |

## Table 2: $\quad$ Teaching staff - Days lost through illness:

| Year: | Full Time: | Part- time: | Most reported illness: (days lost) |
| :--- | ---: | :---: | :--- |
|  |  |  |  |
| $1993 / 94$ | 277 | 32 | Colds \& Flu |
| $1997 / 98$ | 792 | 49 | Stress |

## Advanced Subsidiary GCE

BUSINESS STUDIES
FURTHER PEOPLE IN ORGANISATION ..... 2876
Mark Scheme

## GENERAL

1. The paper is to be marked to A 2 standard.
2. Marking should be positive: marks should not be subtracted for errors or inaccuracies.
3. In assessing quantitative answers the "own figure rule" (OFR) must be applied, i.e. a candidate must be given credit for calculations which, though wrong, are consistent with an earlier error.
4. Candidates should be regarded as achieving the highest level of response which accurately describes their answer. They do not necessarily pass through all lower levels of response.
5. Material in italics refers to possible issues / content that candidates might use. These suggestions are neither exhaustive nor necessarily required.
6. Up to 2 marks will be awarded for quality of written communication, which in this context refers to;
(a) the clarity of the candidate's expression
(b) the structure and presentation of ideas,
(c) the grammar, punctuation and spelling.

2 where the demonstration of communication is as good as could be expected under time constrained examination conditions.

1 where the candidate's demonstration of communication is good in terms of clarity of expression
OR the structure and presentation of ideas,
OR the grammar, punctuation and spelling, and sound in the other regards,

0 where the clarity of the candidate's expression, OR structure and presentation of ideas, OR the grammar, punctuation and spelling, are such as to detract from the quality of the answer.

## Individual Questions

## Question 1

(a) Discuss the problems that Wasim might face in his working relationship with Duncan Holt, the College Principal, given Duncan Holt's apparent management style.

Duncan Holt seems very autocratic - will Wasim be able to evolve ideas based on sound HRM ideas and principles or will his work be "undermined" by the Principal, who has the power and authority to do so. Duncan Holt seems to have very clear views about the staff, his own role, and what he expects Wasim to do - whose priorities will come first? Is Wasim expected to be anything more than a "mouthpiece" for the Principal's views and plans. How might Wasim react to his suggestions possibly being rejected by Duncan Holt? Why did Bob Pickard leave? Was he fed up of the way he was treated? If so will Wasim encounter similar problems? How will the Principal's plans, ideas, and demands affect Wasim's own personal levels of motvation? Will Wasim be allowed any autonomy to make his own plans. Will the staff at the college co-operate with him? Will he be seen as anything more than being brought in to carry out the Principal's desires, irrespective of the needs of the workforce? Candidates have many potential routes into this question - examiners should credit any reasonable approach at the appropriate level.

Level 4 Candidates demonstrate evaluative skills, concerning the problems that Wasim might face and how he might overcome them.
Level 3 Candidate demonstrates analytical skills, concerning the problems which Wasim might face and how he might overcome them.
Level 2 Candidate demonstrates relevant knowledge and understanding of issues which might affect Wasim.
Level 1 Candidate demonstrates theoretical knowledge of potentially relevant issues.
(b) Wasim has been informed that one of his key tasks will be to introduce teacher appraisal by January 2000. Suggest a strategy which Wasim might recommend in order for the scheme to gain the acceptance of full-time teaching staff.

Wasim has a definitive time-scale to work towards - he will need to plan and coordinate his activities to meet his deadline (hopefully). He will need to prioritise the elements of his strategy carefully (with no guarantee of success). Candidates may wish to include issues such as consultation with the teaching staff, and their Union(s), the need to involve outside help (ACAS etc.) They may also consider how resistant to change the teaching staff may be, their objections to appraisal in principle, the different ways that it could be carried out, and how it is possible to appraise performance when there is no tangible product being produced (unlike chocolate in the chocolate factory). Candidates may introduce issues relating the Principal's aims and agendas
(actual and or hidden). Better Candidates may identify elements of a strategy which Wasim might prefer, but might be totally unacceptable to Duncan Holt. There is a designated timescale, which may necessitate a key set of prioritised actions to be achieved by certain timescales. Will this mean that the process is rushed and ill
conceived. Is the timescale realistic given the nature of industrial relations at the College? Will the teaching staff feel coerced into accepting, bearing mind the number of full-time staff currently employed? What might be the arrangements for
part-time and / or agency staff? Will there be several different systems in operation how feasible is that? How might Wasim try to overcome these issues?

Level 4: Candidate demonstrates evaluative skills, which clearly identify a cohesive strategy which Wasim could recommend.

Level 3: Candidate demonstrates analytical skills which identify elements of a strategy which Wasim could recommend.
(10-7)
Level 2: Candidate demonstrates some knowledge and understanding of relevant issues within the context of Wasim's role.

Level 1: Candidate demonstrates relevant theoretical knowledge.

## Question 2

(a) Calculate the proportionate change in reported illness between 1993/94 and 1997/98 for:
(i) full-time staff; [2]
(ii) full-time equivalent staff.
(i) $\frac{515}{277} \times 100(1)=185.92 \%$
(ii) $\frac{17}{32} \times 100(1)=53.12 \%(1)$
N.B. Apply own figure rule - if selected elements for the first stage of the calculation are inappropriate do not award the first mark.
However, if Candidate uses these figures to arrive at a "correct" answer then award the other mark.

## E.G. $315 \times 100(0)=113.71$ (1) 277

(b) With reference to Table 1 and Table 2, and any other relevant information, suggest how Wasim might evolve a strategy to attempt to reduce lost time through illness of full-time teaching staff.

The question asks for a strategy - will Wasim have the authority to formulate a workable strategy or is the Principal likely to over-ride some or all of the ideas Wasim might put forward. Is the strategylikely to incur extra costs - if so will the Principal agree, particularly in an environment of cost cutting? What elements could / should Wasim include in the strategy? How might he begin to prioritise the elements? How
might Wasim attempt to establish the underlying reasons for the increased levels of illness, and the changing nature of the illness reflecting most of the lost time reported? Is there a need to consider class sizes, working practices, travel to outreach centres? What might need to be done to reduce the impact of any / all of these issues? Have full time teaching posts been cut too drastically? What other factors might be contributing to teacher illness, other than teaching responsibilities? Do Table 1 and 2 give a suitable breakdown of illness reported by full-time as opposed to part-time staff? Is there sufficient information in the tables to give Wasim a true picture? What other information could Wasim use? Where might he get it from? Does the College subscribe to an external counselling service? Should Wasim recommend that staff absences through illness are more closely monitored? Should he consider introducing "back to work interviews / counselling sessions", if the college do not already do so?

Level 4 Candidate demonstrates evaluative skills in the generation of a cohesive strategy which Wasim could realistically reccommend.
Level 3 Candidate demonstrates analytical skills in the indentification of elements of a strategy which Wasim could recommend.
Level 2 Candidate demonstrates some knowledge and understanding of relevant issues within the context of Wasim's role.
Level 1 Candidate offers relevant theoretical knowledge.
N.B. Candidates offering relevant calculations and / or observations based on the information given in Tables 1 and 2 should be awarded at the appropriate level.
(c) Critically explain the problems that the College might face if the decision is taken to replace the current part-time staff with lecturers supplied by an employment agency specialising in teaching staff.

Will the change necessarily be as cost-effective as the Principal thinks? What medium and longer term costs might negate any short-term savings? What impact might these issues have on Wasim / the full-time staff / students etc? Could the current part-time staff take legal action for redundancy / unfair dismissal? What might the repercussions be if they were to take such action? How might the Union react - how might any Industrial action affect the students - how might the full time staff react? Who will "employ" the agency staff? How might Wasim deal with any disciplinary and grievance issues relating to the agency staff? What will he do if the expected agency staff do not turn up for their appointed classes. Better Candidates may well focus on the legal issues and the impact on Wasim in his role as H.R manager, but also recognise that agency workers may be less motivated / find it difficult to become integrated into the "culture" of the college. It may also be difficult to set up effective communication channels with the agency, and their staff - particularly if there are any unexpected absences to be covered.

Level 4: Candidate demonstrates evaluative skills in answer which identifies issues that may pose problems to Wasim, the staff and students.
Level 3: Candidate demonstrates analytical skills in answer which identifies issues that may pose problems to Wasim, the staff and students.
Level 2: Candidate demonstrates knowledge and understanding of issues of a relevant nature.
Level 1: Candidate shows relevant theoretical knowledge.

## Assessment Grid: Unit 2876

| Question | AO1 | AO2 | AO3 | AO4 | Total |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Q1(a) | 2 | 2 | 4 | 4 | 12 |
| Q1(b) | 3 | 3 | 4 | 5 | 15 |
| Q2(a) (i) | 0 | 2 | 0 | 0 | 2 |
| (ii) | 0 | 2 | 0 | 0 | 2 |
| Q2(b) | 3 | 3 | 4 | 5 | 15 |
| Q2(c) | 3 | 2 | 4 | 3 | 12 |
| Sub Total | 11 | 14 | 16 | 17 | 58 |
| QoWC |  |  |  |  | 2 |
| Total |  |  |  |  | 60 |

## Advanced GCE

## BUSINESS STUDIES <br> FURTHER OPERATIONS MANAGEMENT

## Specimen Paper

Additional materials:
Answer paper

TIME 1 hour 30 minutes

## INSTRUCTIONS TO CANDIDATES

Write your name, Centre number and candidate number in the spaces provided on the answer booklet.
Write all your answers on the separate answer paper provided.
If you use more than one sheet of paper, fasten the sheets together.
Answer all questions.

## INFORMATION FOR CANDIDATES

The number of marks is given in brackets [ ] at the end of each question or part question.
You will be awarded marks for the quality of written communication where an answer requires a piece of extended writing.

## Answer all questions

Read the information about the Wilson Trucking Company (WTC) and then answer the questions below.

## Question 1

(a) Using the data provided in Table 2 calculate the percentage value of stock that the chassis represents at both maximum and minimum stock levels.
(b) Evaluate the firm's current stock holding policy for all its components.
(c) Discuss a strategy that the WTC may use to improve its quality control.

## Question 2

The production method used by the WTC is under review. The firm is considering moving from cell to flow production. Discuss this proposal highlighting the advantages and disadvantages for:
(a) the firm;
(b) its employees.

## Wilson Trucking Company (WTC)

The Wilson Trucking Company (WTC) has been in business for almost a century, producing a wide variety of long and short haulage trucks. The firm is one of the largest in the industry employing some 500 workers on a site just off the A1 south of Newcastle.

The WTC produces between 10 and 14 trucks per week. The average time it takes to build a truck being about 1100 labour-hours. Trucks are generally in the firm's workshop for seven weeks, which represents a large amount of tied-up capital.

The firm currently uses a mixture of cell and job production methods. The bought-in chassis are worked upon in cells, each cell having a team of four workers who build the truck's outer framework. Once this stage is complete the chassis is rolled into the spraying area where it is given a basic coat of rust proofing. From there it returns to its cell where the basic structure of the driver cabin and storage facilities are worked upon. Once this is complete it passes through a number of departments where seating, lighting and the more specialised features are added. These range from freezing facilities for the transportation of food, to canisters required to convey toxic and caustic substances. New customer demands never cease to amaze the firm, and increasingly it has had to adapt to the changing market needs. Once the storage facilities are installed the truck is then painted to the customers' specifications. From there it is sent to the inspection department where it is examined thoroughly for any defects. Frequently a fault sheet is issued and the truck has to be reworked in some way or another.

The issue of quality control has been a problem for some time at the WTC, especially as it has recently delayed some customer delivery dates. The inspection department has been alienated by the rest of the plant as it is perceived that the department is looking to fail every truck it inspects. The number of faults recorded over the last month are shown in Table 1.

The firm uses a variety of stock control methods depending upon the particular component. The WTC has developed a strong partnership with its chassis supplier and have now come to rely on just one firm for their chassis. For the high volume, low value products, such as nuts and bolts, a visual Kan Ban system is used - this is operated by the supplier who visits the factory to ensure that supplies do not run too low. The more specialised components such as toxic canister tanks are ordered to a Just-in-Time system, this is used because frequently customers ask for very specific features. The suppliers for these components are located near London. Other components such as headlights and paint are ordered through a computer generated CAM system - the firm being able to predict demand for these products using a standard formula based upon usage and lead times (refer to Table 2 for further details).

Table 1 Summary of Faults Recorded

| Weeks | Number of <br> vehicles <br> inspected | Number of minor <br> faults recorded | Number of major <br> faults recorded | Number of <br> labour-hours required to <br> rectify faults |
| :---: | :---: | :---: | :---: | :---: |
| Week 1 | 12 | 5 | 3 | 20 |
| Week 2 | 14 | 23 | 2 | 18 |
| Week 3 | 13 | 17 | 1 | 16 |
| Week 4 | 11 | 7 | 4 | 34 |

Table 2 Summary of The WTC Stock Ordering Situation

|  | chassis | High volume/low value <br> components | Specialised <br> components | General items i.e. paint, <br> headlights |
| :---: | :---: | :---: | :---: | :---: |
| Lead time | 4 weeks | 1 day | 6 weeks | 3 days |
| Minimum stock <br> kept | 0 | 2500 components <br> (1 day's average usage) | 0 | 75 items <br> (5 days average usage) |
| Maximum stock | 0 | 2500 components <br> (1 day's average usage) | 0 | 105 items <br> (7 days average usage) |
| Average price <br> of each <br> component | $£ 20,000$ | $£ 0.20$ | $£ 38,000$ | $£ 15.00$ |

RECOGNISING ACHIEVEMENT

## Advanced Subsidiary GCE

BUSINESS STUDIES
FURTHER OPERATIONS MANAGEMENT ..... 2877
Mark Scheme

## GENERAL

1. The paper is to be marked to A2 standard.
2. Marking should be positive: marks should not be subtracted for errors or inaccuracies.
3. In assessing quantitative answers the "own figure rule" (OFR) must be applied, i.e. a candidate must be given credit for calculations which, though wrong, are consistent with an earlier error.
4. Candidates should be regarded as achieving the highest level of response which accurately describes their answer. They do not necessarily pass through all lower levels of response.
5. Material in italics refers to possible issues / content that candidates might use. These suggestions are neither exhaustive nor necessarily required.
6. Up to 2 marks will be awarded for quality of written communication, which in this context refers to;
(a) the clarity of the candidate's expression
(b) the structure and presentation of ideas,
(c) the grammar, punctuation and spelling.

2 where the demonstration of communication is as good as could be expected under time constrained examination conditions.

1 where the candidate's demonstration of communication is good in terms of clarity of expression
OR structure and presentation of ideas, OR grammar, punctuation and spelling, and sound in the other regards,

0 where the clarity of the candidate's expression,
OR the structure and presentation of ideas,
OR the grammar, punctuation and spelling,
are such as to detract from the quality of the answer.

## Individual Questions

1 (a) Using the data provided in Table 2 calculate the percentage value of stock that the chassis represents at both maximum and minimum stock levels.

Maximum levels;
General items: £1575 (105 x £15)
Minimum levels: $£ 500$ ( $2500 \times \mathfrak{£} 0.20$ )
Chassis: £20 000
Total maximum stock value $=£ 22075$
Chassis represents $90.6 \%$
Minimum levels:
General items: £1125 (75 x £15)
Minimum levels: $£ 500(2500 \times £ 0.20$
Chassis: $£ 20000$
Total maximum stock value $=£ 21625$
Chassis represents 92.5\%
(b) Evaluate the firm's current stock holding policy for all its components.

Issues for consideration:
The high volume, low value product such as nuts and bolts: a visual Kan ban system is currently used, suppliers operate it. The system may be costly for the firm, however, it should ensure that they do not run out. The fact that the supplier operates it means that the WTC does not have to waste too much space storing the components and that they do not waste labour-hours ordering them. Candidates could argue for a computerised system similar to that used for headlights - cost might be a factor here.

The more specialised components: currently ordered to a Just-in-Time system as customers ask for very specific features. The fact that the need for these components is unpredictable is significant - the firm will not want to tie up funds because the components are expensive. Although supplies may take time to arrive, the WTC will know well in advance what is required and order accordingly, therefore the distance does not matter, as it is unlikely to hold up production.

Other components - such as headlights and paint: These are ordered via a CAM system. These components could be monitored by suppliers - however, this maybe impracticable as demand is more predictable i.e. number of headlights used is fairly standard. Candidates may question how much stock is kept; they could discuss the merits of just-in-case to guard against faulty components and the need to keep production going. These components are relatively cheap and do not represent a great deal of funds.

Candidates should be rewarded appropriately for the use of relevant calculations and analysis of the figures in Table 2.

Level 4 For an evaluation of stock control methods currently used by the firm based upon the firm's needs and the information available in the case study. Candidates should be able to discuss the limitations of the methods and possible improvements. (14-10)

Level 3 For an analysis of the stock control methods used by the firm considering the firm's needs and the case study data.

Level 2 For an awareness of the stock control methods used by the firm with no suggestion as to improvements or limitations of the current system.

Level 1 For an outline of stock control methods unrelated to the case study.
(c) Discuss a strategy that the WTC may use to improve its quality control.

## Issues for consideration:

The current system appears to be an end of line inspection process, this can be costly in terms of waste and given the number of faults recorded in Table 1 is expensive in terms of labour-hours.
Possible strategies may include checks on inputs, random checking at different points of the production process, employing methods so that existing workers take part in the control, use of TQM. Use of motivational methods to encourage workers to work to the highest standard possible bonuses for zero defects.

Level 4 For an evaluation of possible quality control strategies that are appropriate to the case study.
Level 3 For an analysis of appropriate quality control method(s) that may be used in the case study context.
Level 2 For an awareness of possible quality control methods that may be used in the case study context.
Level 1 For an outline of quality control methods unrelated to the case study.

2 The production method used by the WTC is under review. The firm is considering moving from cell to flow production. Discuss this proposal highlighting the advantages and disadvantages for:
(a) the firm;

Issues for consideration
Candidates may focus upon the fact that the trucks are in the factory for about seven weeks, at any one time there are at least 70 trucks being worked upon at different stages in the factory. This is costly to the firm - any way of speeding up the process would be advantageous. It is difficult to know whether the process can be speeded up without compromising quality - it may be that time is needed between the various stages for good reason. Moving to flow would mean that the process should become smoother, the process is sequential to a certain degree and this would therefore suit the flow. The deskilling of employees would reduce costs and perhaps allow the use of more machinery. There will be a problem during the change-over period, which could result in poor industrial relations, which may result in unwelcome publicity. There may well be a saving in terms of space, which would reduce costs and allow
expansion/diversification - although land is unlikely to be expensive in this area. Training costs may fall.

The main problem with a flow system is that there are unlikely to be that many trucks the same. There may be batches of trucks but these are most likely to be in small number - as a result the flow will be broken as different specifications are added. Really flow would be unsuitable owing to the individual nature of trucks, and the fact that customers are ordering expensive products that they want tailored to meet their needs.

Level 4 For an evaluation of possible advantages and disadvantages of the change of production based upon the implications for the firm.

Level 3 For an analysis of possible advantages and disadvantages of the change in production methods to the firm.

Level 2 For understanding of either advantages or disadvantages of the proposal to the firm, with either little contextual and good theoretical understanding, or little theoretical understanding and contextual information.

Level 1 For an outline of the relevant production methods unrelated to the case study context.
(b) its employees.

Issues for consideration
The main factor here is motivation - workers could end up on a production line which would be demotivating. The fact that they would be deskilled is a disadvantage as it may result in loss of earnings. The cells would have a team spirit which would add to motivation and job enjoyment. Moving to flow may result in less variety and less worker interaction - workers may feel that they are devalued. Workers may take less interest and pride in their job which may result in a loss of quality.

Level 4 For an evaluation of possible advantages and disadvantages of the change in production to the workforce.

Level 3 For an analysis of possible advantages and disadvantages of the change in productionmethods to the workforce.

Level 2 For an analysis of possible advantages or disadvantages of the proposal to the workforce, with either little contextual knowledge and good theoretical understanding, or little theoretical understanding and contextual knowledge.

Level 1 For an outline of the relevant production methods and the implication to the workforce unrelated to the case study context.

## Assessment Grid: Unit 2877

| Question | AO1 | AO2 | AO3 | AO4 | Total |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |
| Q1(a) | 2 | 2 | - | - | 4 |
| Q1(b) | 2 | 3 | 4 | 5 | 14 |
| Q1(c) | 2 | 3 | 4 | 5 | 14 |
| Q2(a) | 3 | 4 | 4 | 5 | 16 |
| Q2(b) | 2 | 2 | 4 | 2 | 10 |
|  |  |  |  |  |  |
| Sub Total | 11 | 14 | 16 | 17 | 58 |
| QoWC |  |  |  |  | 2 |
| Total |  |  |  |  | 60 |

## Oxford Cambridge and RSA Examinations

## Advanced GCE

## BUSINESS STUDIES <br> BUSINESS STRATEGY

## Specimen Paper

Additional materials:
Answer paper

TIME 2 hours

## INSTRUCTIONS TO CANDIDATES

Write your name, Centre number and candidate number in the spaces provided on the answer booklet.
Write all your answers on the separate answer paper provided.
If you use more than one sheet of paper, fasten the sheets together.
Answer all questions.

## INFORMATION FOR CANDIDATES

The number of marks is given in brackets [ ] at the end of each question or part question.
You will be awarded marks for the quality of written communication where an answer requires a piece of extended writing.

## Answer all questions

Read the information on Lerner and Levy Ltd (3Ls) and then answer the questions below.

1. In an attempt to increase sales to retailers, Renate Cole has suggested increasing the debtor collection period offered.

Using ratios, and other information, critically discuss the implications of this strategy for 3Ls' stakeholders.
2. How might an increase in interest rates effect 3Ls' ability to "....meet the strategic targets set out in the corporate plan". (lines 98-99)?
3. George has been reviewing the firm's production plans in attempt to identify aspects of the process where costs could be reduced. One such possibility is reducing process waste.

Discuss the implications for the firm in reducing the amount of process waste generated.
4. Renate Cole is anxious that 3Ls has an attractive portfolio of products available for sale in the light of a newspaper article which has criticised 3Ls' behaviour as being unethical because it "....continues to sell beef pies about which there are significant and worrying health concerns."

Evaluate the responsibilities the firm has in deciding which products to include in its portfolio
[Quality of Written Communication: 4]

## Lerner and Levy Ltd. (3Ls)

If anyone were to write a history for Lerner \& Levy Ltd. (3Ls) in years to come, then the events of March 1996 would doubtless warrant a chapter. It was on 20th March 1996 that the Secretary of State for Health announced to the House of Commons that the most likely cause of Creutzfeldt-Jacob Disease (CJD) in humans was exposure to Bovine Spongiform Encephalopathy (BSE). BSE was first 5 identified in 1986 and became notifiable in 1988.

Although cases of BSE peaked in 1993 the announcement by the Secretary of State served to reinforce many consumers' worst fears. Consequently the immediate repercussion throughout the market for beef-based products was considerable. For 3Ls, who manufacture meat pies, the impact was devastating. Almost overnight a significant portion of their sales revenue disappeared as customer
10 after customer cancelled orders. Things got worse on the 25th March when the EU announced an emergency ban on UK exports of beef, beef products and live cattle. The ban meant that 3Ls' hastily drawn up plans to export their way out of trouble became redundant.

To George Bee, 3Ls' Managing Director, the whole BSE saga represents a classic case of government mis-management. Rather than taking the rapid and decisive action George thinks was needed, he
15 believes the government's response was characterised by dithering and confusion. Much media, and government, attention was focused upon the beef-rearing industry. However, the BSE crisis has caused casualties on a much wider scale.

Many other businesses, such as hauliers, auctioneers and meat processors, have all felt the effects of a drop in consumer confidence. What really irks George is that 3Ls hadn't done anything wrong. Rather, 20 they are the innocent victims of a change completely beyond their control. By March 1997 there is still little sign of government intervention. Indeed, to George, the government's objectives of trying to reduce unemployment and create economic growth seem at odds with their apparent inaction. George's only ray of hope comes from the fact that demand for 3Ls' other product lines remains buoyant.

Lerner \& Levy Ltd. (3Ls) produce ready-prepared foods, mainly meat pies. These are either sold 25 under their own brand name, "Crusty", or via the own-brand market. The plant is on the outskirts of a town, close to a motorway junction. All output is distributed by road. The plant operates a single 8.00 to 16.00 shift, five days each week.

Following a suggestion made by the works council, production employees have been arranged into teams. Each team of eight employees is supervised by a line manager who has overall responsibility for rotated through the various activities on the line. Production employees are highly skilled in operating the complex automated manufacturing machinery. In addition, each team has responsibility for its own quality control.

The firm has two production lines and, if both produce at full capacity, output is about 125,000 units per 35 week.

Output is produced in batches using flow production techniques. Once the required batch size has been produced, the line is washed and reset to allow the manufacture of a different product. In this way each line can be used to produce several different types and recipes of pies. The dirty water used in cleaning the production lines can be discharged into the sewage system as effluent.

40 Beef pies used to form the business' core activity, but current demand is considerably lower than its former level (Table 1). By a combination of an overtime ban, natural wastage and not hiring casual staff during the summer holiday period, 3Ls has been able to avoid compulsory redundancies amongst
its 40 strong work force. Despite this, morale on the shop floor is low and there are continual rumours about long term employment prospects. Every visitor to the plant is viewed with suspicion. For 45 example, after a photocopier maintenance engineer called in last week a story spread about an Administrative Receiver having been seen in the offices. As much as George would like to, he knows that he cannot tell the employees that their jobs are safe. The key to work is demand for pies, which in turn depends on consumer confidence. Unless demand picks up, and does so soon, George is resigned to having to rationalise the work force. The problem is how to achieve the necessary cutbacks without
50 losing his most valued employees. Whilst the union's shop steward, John Evans, has been supportive so far, George is very aware that the union' s primary responsibility is to their members and not to the firm. What he really needs to know is what demand the firm is likely to be facing in the coming few months. Even a rough idea of sales would enable him to conduct an employment audit as the first stage toward a full manpower plan.

55 About $75 \%$ of the firm's expenditure is on fixed costs. Hence, although output has fallen there has not been a corresponding reduction in cash outflow. In an attempt to boost demand, 3Ls lowered their gross margins for beef pies from $100 \%$ to $75 \%$ in July 1996. Rather than generate much needed positive cash flow, this marketing exercise proved unsuccessful and in August it was abandoned. Instead of alleviating the strain on the firm's working capital, the drop in revenues compounded the problem. Fortunately the firm's bankers have extended the agreed overdraft limit. Increasing the firm's liabilities pushes the interest cover ratio perilously close to the stipulated minimum. With the approach of the end of the accounting year, George is aware that as the financial performance of the firm deteriorates further, it has the affect of weakening the balance sheet (Figure 1). The latest profit projections suggest a loss of $£ 17,000$ from revenues of $£ 629,000$. With stories in the papers about the
65 Chancellor of the Exchequer being under pressure to raise interest rates, George is starting to think that the firm's reliance on an overdraft is increasingly inappropriate. Alternatively, he could suggest to the shareholders that they inject more equity capital into the business. Perhaps this could be achieved through a rights issue. Whatever route is taken it is clear that something is going to have to be done.

In June 1996 it became clear that demand for beef pies was not going to recover. Hence, the only 70 agenda item for the June management meeting was the formulation of alternative responses to the firm's predicament. George took all of the senior staff through his analysis of the major influences affecting 3Ls and used this as his basis for the corporate plan that he tabled. Following discussion George instructed Ahmed Khan, Research and Development (R\&D) Director, to accelerate the firm's on-going product development programme. By September several ideas were put to senior
75 management, from which five were selected for further consideration. In November, following a series of voluntary tasting tests amongst the work force, the list had been narrowed down to two. One is a pie with a finely minced lamb filling. The other product replaces beef with a soya derived meat substitute. At this stage George gave Renate Cole, Marketing Manger, an additional budget of $£ 50,000$ specifically for new product development. Rather than conduct consumer field trials "in house", Renate contracted
80 the work out to a firm of marketing consultants. Extracts of their report are reproduced in Appendix 1. Armed with statistical evidence showing consumer demand, the marketing department have been out visiting trade customers. At the same time, Renate gave a brief to an advertising agency to develop an integrated campaign. Renate is aware that the correct marketing strategy is vital if she is to convince retailers to give either new product shelf space.

85 Ever the optimist, George believes that every cloud has a silver lining. One good thing about the BSE crisis is that it is enabling Ahmed's department to conduct experimental production runs for the new pies on an actual production line. The trials for the soya pies revealed few difficulties. In contrast, the trial runs for lamb pies are less encouraging. Helen is finding that the machinery which injects the minced lamb filling into the pastry case is clogging. This causes the production line to stop because the weights of individual pies are too often outside agreed tolerances. Producing over-weight pies lowers profits, whilst under-weight pies render the firm liable to prosecution. After several unsuccessful
adjustments to nozzle design and size, Helen feels the only solution is to increase the size of the pieces of lamb. This would make the filling more chunky and less creamy. However, Renate adamantly opposes any change to the specification of the lamb pies.

95 Squabbling between two of his departments is the last thing George needs. He feels there is quite enough pressure on him from 3Ls', various stakeholders without needless and silly internal disputes. Unless he can resolve this dispute there is a real danger that the firm will not meet the strategic targets set out in the corporate plan. Everything would be so much easier, thought George, if the government also had a strategy for solving the BSE crisis.

## Table 1

## Monthly Beef Pie sales, volume '000s

|  | Month | Sales |
| :---: | :---: | :---: |
| 1995 | October | 424 |
|  | November | 448 |
|  | December | 384 |
| 1996 | January | 400 |
|  | February | 432 |
|  | March | 384 |
|  | April | 80 |
|  | May | 88 |
|  | June | 92 |
|  | July | 100 |
|  | August | 88 |
|  | September | 92 |
|  | October | 100 |
|  | November | 108 |
|  | December | 100 |
| 1997 | January | 108 |
|  | February | 112 |

## Figure 1

## Lerner \& Levy Ltd. <br> Projected Balance Sheet for 1/4/97

|  |  |  | $£^{\prime} 000$ s |
| :---: | :---: | :---: | :---: |
| Premises |  |  | 950 |
| Plant and equipment |  |  | 875 |
|  |  |  | 1825 |
| Stock 18 |  |  |  |
| Debtors |  | 148 |  |
| Cash |  | 5 | 171 |
| Creditors |  | 52 |  |
| Overdraft |  | 37 | (89) |
| Net current assets |  |  | 82 |
| Net Assets Employed |  |  | 1907 |
| Share capital* |  |  | 1000 |
| Reserves |  |  | 407 |
| Long Term Loan |  |  | 500 |
| Capital Employed |  |  | 1907 |
| * Share capital, 10m fully paid up shares at 10p par value |  |  |  |
| Share register | Owner |  | Shares |
|  | N Lerner |  | 2,146,221 |
|  | J Lerner |  | 2,186,056 |
|  | D Lerner |  | 1,125,970 |
|  | D Levy |  | 2,098,750 |
|  | R Levy |  | 1,352,787 |
|  | E Levy |  | 100,000 |
|  | G Lucas |  | 449,211 |
|  | N Tait |  | 225,300 |
|  | C Woodhead |  | 55,841 |
|  | G Bee |  | 259,864 |

## Appendix 1

Summary of consumer market research investigation conducted January and February 1997.
(Based on a total of 947 face to face interviews).

1. $63 \%$ of respondents believe that British beef is safe to eat.

Consumer confidence is greatest amongst the elderly.
Mothers in the age range 20-35 are the least confident.
There is no statistically significant correlation between confidence and social status.
Consumer confidence is greatest in the South West.
2. $47 \%$ of respondents haven't altered their purchasing behaviour.

Of those that have changed their behaviour:
$71 \%$ have stopped buying processed products, e.g. sausages, burgers etc;
$58 \%$ have substituted other meats for beef.
3. $36 \%$ of respondents expect to purchase beef, or beef products, within the next week.
4. Branded lines, including own label, offer reassurance.
$87 \%$ of respondents are confident that supermarkets wouldn't sell meat if it posed any significant danger to human health.

New product development.
Mean scores for product attributes from blind tasting amongst representative focus groups. Each attribute assessed on a scale of 0 (unfavourable) to 10 (favourable).

| Attribute | Product A <br> Lamb | Prod <br> Soya |
| :--- | :--- | :--- |
| Appearance |  |  |
| - size | 6.6 | 6.8 |
| - shape | 4.5 | 5.1 |
| - filling | 7.3 | 5.2 |
| - pastry | 7.2 | 6.3 |
| Taste - pastry | 5.1 | 4.4 |
| - texture | 5.1 |  |
| - flavour |  |  |
| Taste - filling |  | 4.2 |
| - texture |  | 3.5 |
| - flavour | 8.2 |  |
| Value for money @ $£ 0.99$ |  | 4.6 |
| retail price | 5.8 |  |

RECOGNISING ACHIEVEMENT

## Advanced Subsidiary GCE

## BUSINESS STUDIES

BUSINESS STRATEGY

## Mark Scheme

## GENERAL

1. The paper is to be marked to A2 standard.
2. Marking should be positive: marks should not be subtracted for errors or inaccuracies.
3. Candidates should be regarded as achieving the highest level of response which accurately describes their answer. They do not necessarily pass through all lower levels of response.
4. In assessing quantitative answers the "own figure rule" (OFR) must be applied, i.e. a candidate must be given credit for calculations which, though wrong, are consistent with an earlier error.
5. Material in italics below refers to possible issues / content that candidates might use. These suggestions are neither exhaustive nor necessarily required.
6. The emphasis throughout this paper should be upon the integration of the material learnt and the context described within the stimulus material. Candidates are expected to treat both in a synoptic manner, considering situations from a variety of perspectives rather than a series of discrete issues by adopting a holistic / multi-disciplinary approach.
7. Up to 4 marks will be awarded for Quality of Written Communication, which in this context refers to:
(a) the clarity of the candidate's expression,
(b) the structure and presentation of ideas,
(c) the grammar, punctuation and spelling.

Marks will be awarded as follows:
4 where the demonstration of communication is as good as could be expected under time constrained examination conditions,

3 where the candidate's demonstration of communication is good in terms of clarity of expression,
OR structure and presentation of ideas,
OR grammar, punctuation and spelling,
and sound in the other regards,
2 where the candidate's demonstration of communication is sound,
1 where the clarity of the candidate's expression,
OR structure and presentation of their ideas,
OR their grammar, punctuation and spelling, are such as to detract from the quality of the answer,

0 where the demonstration of communication general detracts from the quality of the answer.

## Individual Questions

1. In an attempt to increase sales to retaile rs, Renate Cole has suggested increasing the debtor collection period.

Using ratios, and other information, critically discuss the implications of this strategy for
3Ls's stakeholders.
Assume all sales are on credit, debtor figure from balance sheet is representative for the year, 365 trading days in the year etc. Current debtor collection period $=$ Days sales in debtors, which in turn is Debtor t/o $=$ Sales $/$ Debtors, ie $=629,000 / 148,000=4.25 \mathrm{per}$ year. So Days debtors $=365 / 4.25=85.88$ or about $=86$ days.

Assume debtor collection is relaxed to 100 days, the debtor value in balance sheet would increase to $£ 172 k$, ie an increase of $£ 24 k$. How could this additional working capital requirement be funded? If through borrowing then additional interest expense will depress profits. Policy may help firm survive, but at the same time harm profits which are already projected to be a loss of $£ 17,000$. Additional credit will require funding from some source. If from bank then additional interest payment will erode profits, the alternative is owners advance the firm further capital, but firm is already in a perilous state and consumer confidence in product continues to look bleak.

In contrast, their customers are likely to see the move as favourable, gives them more time to turn pies into cash or to keep the cash in their bank account generating interest before paying 3L's as short term source of finance. Relaxed credit policy may make 3L's a more attractive supplier than other firms. But if the pies don't sell in their shops then additional credit may make little or no difference, there's no point stocking unwanted goods.

For employees the focus is on job retention and so if the move helps to endure the survival and prosperity of the firm then likely to be positive. There are already rumours in the plant about job losses so anything which could reduce this threat would boost employee morale. May also lead to additional jobs if the change results in securing more customers.

The firm's bankers might be concerned if increase in wc is financed through long term debt which would increase the firm's gearing $26 \%$ and overdraft $£ 37,000$, i.e. $5.9 \%$ of turnover. Would be concerned about how 3Ls expect to be able to finance this increase in their cash cycle. If bankers refuse to advance additional funding, would that place 3Ls' survival in jeopardy and if so might the bank stand to lose some of the capital currently advanced?

Level 4 Integrates different stakeholder positions through evaluative discussion.
Level 3 Discussion of stakeholder(s) position is supported through analytical use of the case evidence.
Level 2 Describes how different stakeholder(s) might view change in policy.
Level 1 Demonstrate knowledge of stakeholder(s).

## Question 2.

$$
\begin{aligned}
& \text { How might an increase in interest rates affect 3Ls' ability to "meet the strategic targets } \\
& \text { set out in the corporate plan. }{ }^{\prime \prime} \text { (lines 98-99) }
\end{aligned}
$$

Interest rates represent the cost of borrowing and the reward for saving. Two effects Internally increases the cost of any variable rate borrowing the firm has, eg. overdraft, hence increasing the firm's interest bill to creditors. Trade creditors may press for faster payment of outstanding invoices. Pressure to reduce debtor collection period so money is in the bank earning interest, ie. debtors now have greater opportunity cost. Firm is 26\% geared, if this borrowing is variable rate then again greater interest burden.
Externally - if consumers are net borrowers then their disposable incomes will fall. May therefore reduce expenditure on non essentials - which may lead to an increase in spending on cheaper foods. Do 3Ls' pies fall into this category? Similarly, price of pies will represent a small percentage of customers overall income so again likely to be little / no changes in revenues.

Unless impact of increase can be mitigated then less internal funds will be available to meet objectives, ie. fewer financial resources for new product development, growth, diversification etc. Plans may have to be delayed / cancelled unless funding can be found from another source.

Level 4 Evaluative treatment of linkages, considering both internal and external.
Level 3 Discussion of linkage(s) between impact and objectives is analytical.
Level 2 Suggest linkage between interest rates and achievement of targets.
Level 1 Demonstrate knowledge / defines interest rate.

## Question 3

George has been reviewing the firm's production plans in an attempt to identify aspects of the process where costs could be reduced. One such possibility is reducing process waste.
Discuss the implications for the firm in reducing the amount of process waste generated.

Waste represents costs which are not recovered so $3 L s$ ' should try to minimise its creation therefore have less to get rid of. Reducing the amount of waste would have important costs and social benefits. The implications for the firm depend upon how this is achieved. One way would be to reduce production but this would have the impact of reducing saleable output and hence revenues. Another method is to closely examine the process to seek to identify where the waste is produced, hence there are Ops Management issues which in turn lead to a training requirement if a new, less wasteful, process is adopted. Might require the purchase of higher quality inputs so there is a supplier implication.

Different stakeholders may want waste material disposed of in different ways. Government, at EU, national and local level will specify minimum standards through legislation, regulations and restrictions. Whatever the other stakeholder groups want $3 L s$ will have to operate within this framework or run the risk prosecution. Immediate community may pressure the firm to dispose of waste with minimum impact on the locality, ie place pressure
on the firm to do more than the mere minimum. Hence, reducing waste may well be seen in a positive manner. Employees will be concerned with security of their jobs and so may well be willing to accept less than perfection provided disposal method does not place an undue risk to their health and safety. Shareholders may be more concerned with cost and so encourage managers to conform to the law and little else unless they adopt an ethical stance and argue that it is better not to produce the waste in the first place rather than concentrating on getting rid of it an efficient manner.

How the waste is disposed of will reflect its nature. Case discusses liquid effluent being washed into the sewage system, ie aim is to dilute. Firm may produce other waste, ie solids, rejected batches of pies may be saleable as animal feedstuffs. Waste heat / water might be recyclable / recoverable.

Level 4 Discussion is evaluative and balances different need / pressures.
Level 3 Discussion of stakeholder(s) needs is analytical.
Level 2 Discusses waste disposal within the context of stakeholder(s).
Level 1 Offered unreasoned comments regarding waste disposal / stakeholder(s)

## Question 4

Renate Cole is anxious that 3Ls has an attractive portfolio of products available for sale in the light of a newspaper article which has criticised 3Ls' behaviour as unethical because it "...continues to sell beef pies about which there are significant and worrying health concerns."

> Evaluate the responsibilities the firm has in deciding which products to include in its portfolio.

Different stakeholders want different things but will all have a vested interest in the long term prosperity of the firm. However, this long term prosperity may be at odds with the short term needs of different stakeholder groups.

Dropping an allegedly harmful product will have a negative impact on profits (shareholder) owing to lost income. Product needs to be replaced in the portfolio and so this will require costly product development, again harming profits. Further, new products may not be successful and so increasing risk of failure of the business.

Firm has an ethical responsibility to its customers to provide the best possible product at a price which is affordable yet sufficient to allow for an adequate ROI for shareholders. Continuing to offer "harmful" product may satisfy short term shareholder needs yet be against long term customer needs. Further, is product really harmful, would the law allow the firm to continue to offer dangerous products? Firm has a responsibility to its suppliers as well as it does to its work force and community. Each group will have its own set of needs which will at times be in conflict.

Level 4 Discussion of how responsibilities require balance is evaluative.
Level 3 Linkage between corporate responsibility and stakeholders is analytical.
Level 2 Demonstrates understanding of responsibilities to stakeholders.
Level 1 Offers possible responsibilities / groups without supporting commentary.

## Assessment Grid: Unit 2880

| Question | AO1 | AO2 | AO3 | AO4 | Total |
| :--- | :---: | :---: | :---: | :---: | :---: |
| 1 | 3 | 4 | 5 | 6 | 18 |
| 2 | 4 | 4 | 5 | 6 | 19 |
| 3 | 4 | 4 | 5 | 6 | 19 |
| 4 | 3 | 5 | 6 | 6 | 20 |
|  |  |  |  |  |  |
| Sub Total | 14 | 17 | 21 | 24 | 76 |
| QoWC |  |  |  |  | 4 |
| TOTAL |  |  |  |  | 80 |

