MARKSCHEME

November 2006

BUSINESS AND MANAGEMENT

Higher Level

Paper 2

This markscheme is **confidential** and for the exclusive use of examiners in this examination session.

It is the property of the International Baccalaureate and must **not** be reproduced or distributed to any other person without the authorization of IBCA.

1. (a) Based on the information in "E-commerce", identify *one* example from each of the four PEST factors.

[4 marks]

Possible PEST factors:

Political/legal factors:

- limited legal restriction on setting up an E-commerce business in whichever form. This implies "anyone with entrepreneurial spirit..."
- E-commerce interactions bypass national law, other restrictions, codes of practice and so on.

Economic factors:

- intense competition and lower prices.
- costs of setting up businesses is low.
- growth of online sales rose by 26%.

Social factors:

• consumers changing behaviour before, and when, buying a product or a service. Consumers are becoming more knowledgeable, confident and powerful.

Technological factors:

- the spread of internet connection availability of technology a vast number of consumers can be reached worldwide
- the technology is becoming more advanced and cheaper.

Allocate [1 mark] for each relevant PEST factor identified.

Do not transfer marks within the different PEST factors.

For a list of four PEST factors that do not appear in the case study E-commerce, allocate no more than [1 mark].

(b) Explain two possible advantages *and* one possible disadvantage to consumers of using the Internet.

[6 marks]

The possible advantages for consumers:

- more competition and, therefore, more choice
- price transparency and possibly lower prices
- better knowledge and information of products, prices, deals
- more convenient and lower transaction costs.

All of the above give customers considerably more confidence, a greater bargaining position and hence market power.

The possible disadvantages for consumers:

- anonymity, lack of interaction with the sellers. Difficult to ask questions/seek clarification about the products. Lack of trust
- intangibility of the products. Difficult to assess quality of the product or the service
- financial risk due to credit/debit card fraud. Trust and security issues.

[5 to 6 marks]

The explanation of two advantages and one disadvantage is full and well balanced. The explanation is related to the information provided in the case study.

[3 to 4 marks]

There is an explanation of fewer than two advantages and one disadvantage or an explanation of all three that lacks detail or depth. The explanation is generally related to the information provided in the case study, though this may be limited.

[1 to 2 marks]

A limited explanation of less than two advantages and one disadvantage. A list of some advantages and disadvantages may be provided without explanation.

(c) With reference to an example of your choice, discuss the potential of E-commerce for business.

[10 marks]

E-commerce:

- provides an opportunity for a global profile by promoting and advertising the products online. A growth strategy of market development, as well as market penetration, can be more efficiently implemented
- enables a business to create or reinforce a strong, highly differentiated brand image, which can provide customers with reassurance about the reliability and good quality of the product. If the customers perceive the characteristics of the branded product as better than its rivals, they are more loyal and will be likely to look for the specific brand name sites/outlets on the net or for retailers that sell the product. The trust problem is, therefore, reduced
- a strong brand name will create trust and provide security for customers not only concerning the quality but also concerning financial matters, after-sales service, delivery *etc*.
- a strong brand image of a product or a company will enable the consumers to be reassured
 about most of the possible disadvantages of buying online. Higher demand can result in
 various types of economies of scale and hence lower costs of production as well as higher
 revenues and, therefore, higher profit
- provides an efficient channel of distribution directly to the customers. A business can cut its distribution costs considerably by selling directly to customers
- prices may become more competitive. Direct online communication and interaction opportunities with the customers will be created
- potentially reduces fixed costs of operation resulting in competitive advantage.

On the other hand, E-commerce:

- intensifies competition and creates a more confident and demanding customer. An E-commerce business must ensure that its products/services are innovative, varied, customer focused, price-competitive and that the service is better
- more resources may be allocated towards the R&D, market research and product development. The issue of USP and product differentiation may become more important, given a greater level of competition and extra resources may raise costs. Combined with lower, more competitive prices, a business may experience lower profit or even a loss
- creates some new challenges in terms of safety and security of transacting online
- creates some new challenges in terms of product adaptation or standardization in a global market
- may reduce the effectiveness of the three Ps people, process and possibly physical evidence
- accept any other relevant issues introduced for and against.

Given the information in the case study it looks as if, despite some current difficulties, the potential of E-commerce is becoming more prominent especially if an E-commerce business takes some action to overcome current and potential difficulties.

A relevant example should be used.

[8 to 10 marks]

A full and balanced discussion of the potential of E-commerce for a business is provided with the use of relevant concepts and terminology. Relevant reference is made to the issues presented in the case study and a relevant example is also given.

[5 to 7 marks]

A reasonable discussion of the potential of E-commerce for a business is provided with the use of some relevant concepts and terminology. Some reference is made to the issues presented in the case study and an example may be given. If an example is not given award up to [6 marks]. If only advantages (or only disadvantages) are introduced, award up to [6 marks].

[3 to 4 marks]

A rather general and brief consideration of the potential of E-commerce for a business is provided with limited or no use of the appropriate concepts and terminology. Limited reference is made to issues presented in the case study. A relevant example may not be used.

[1 to 2 marks]

A limited and perhaps descriptive answer.

2. (a) Explain *two* possible benefits for *BMW* of operating as a multinational company (MNC).

[4 marks]

As a multinational company, *BMW Group* is an organization that owns and controls production or service outside the country in which it is based.

Possible benefits may include:

- BMW Group can have the advantage of a highly skilled workforce or cheap labour
- BMW Group can locate closer to the market to cut transport costs
- BMW Group can locate within a trading group to bypass trade restrictions
- *BMW Group* can take advantage of Government policies lower taxes, subsidies, and lack of competition policies
- any other relevant point.

All of the above points should enable *BMW Group* to increase efficiency, reduce costs of production and become more globally competitive.

Allocate [2 marks] for each benefit that is fully explained. That is broken down as [1 mark] for each benefit that is identified and [1 mark] for appropriate development of the benefit.

(b) (i) Distinguish between strategic objectives and tactical objectives. [2 marks]

Strategic objectives are overall corporate objectives that cover the whole of the business over the long-term. The external business environment influences these objectives.

Strategic objectives form the basis for tactical objectives.

Tactical objectives are short-term objectives and cover specific markets and products.

[2 marks]

A clear and accurate distinction is provided. There should be a recognition that strategic objectives are long-term and tactical objectives are short-term, though this may be implied rather than fully explained.

[1 mark]

A vague distinction is provided.

(ii) Explain how the *BMW Group* could implement in practice the following *two* policies:

- a reduction of its environmental impact
- an increase in its attractiveness as an employer.

[6 marks]

Possible practices towards its employees to become a more attractive employer:

- equal opportunities in recruitment and promotion
- more employee involvement and empowerment in decision making
- more fringe benefits
- training and development programmes
- profit sharing schemes
- improved health and safety conditions
- any other relevant practice.

Possible practices to reduce the environmental impact and to ensure sustainability:

- recycling of materials tyres, steel
- reduction in the usage of materials
- design environmentally friendly cars that use less petrol and/or omit less pollution/design solar cars
- installation of environmentally friendly technology that reduces the level of emission and noise during the production process
- donation of money for some environmental projects
- carrying out of some environmentally friendly project preservation, managed forest plantation
- environmental auditing
- any other relevant practice.

All of the above should enable the *BMW Group* to become a more socially responsible, efficient producer as well as a more attractive employer.

[5 to 6 marks]

A detailed and balanced explanation of possible ways that the two policies can be implemented. The explanation considers both policies and is related to the case.

[3 to 4 marks]

Some consideration of possible ways that the policies can be implemented, though this may not consider both policies in depth. The answer is generally related to the case though may be less specific at the lower end of the range.

[1 to 2 marks]

A limited and vague answer that does not address the case.

A list of possible policies without explanation.

(c) Evaluate the view of the *BMW Group* that social responsibility will lead to commercial success.

[8 marks]

By acting in an ethical and socially responsible manner (see some of the examples suggested in part (b)) *BMW Group* may:

- gain a USP and improve its corporate image. This can enhance its competitive advantage and hence create better marketing opportunities. Total revenue can increase
- attract more socially responsible customers who may be willing to pay a higher price for the cars
- enhance economies of scale and, therefore, lower average costs of production as a result of larger market share
- attract and retain employees through the positive effect on motivation and hence productivity. *BMW Group* may also save on recruitment costs
- pre-empt government legislation against the company due to the environmental lobby or any other pressure group action
- be granted some financial incentives from local or national government
- communicate and cooperate better with various business partners. This may result in improved quality of the products/cars
- any other relevant example.

The examples above will enable *BMW Group* to increase its market share and revenues and/or to reduce its costs. Therefore, the profit level – the shareholders return – is likely to increase.

However, the implementation of various socially responsible practices may:

- be very costly, especially in the **short-run** if *BMW Group* has to pay higher wages or install more environmentally friendly technology
- generate higher costs that may create resentment among the shareholders who might see their dividends fall and, therefore, sell their shares leading to a fall in *BMW Group* market value
- stimulate competitors to pursue the objective of being socially responsible. Such action will negatively reduce the *BMW Group* USP/competitive advantage and, therefore, its commercial success
- extra management time
- any other relevant issue.

In the above cases, BMW Group may not be able to enhance its commercial success.

Overall, it looks as if *BMW Group* will be able to achieve its stated belief and objectives especially in the **long-run** given the fact that constant communication and open discussion is implemented.

However, accept any relevant substantial evaluation.

[7 to 8 marks]

The answer provides a detailed evaluation of the *BMW Group's* view and is balanced. Subject concepts and terminology are appropriately used.

For [8 marks] a fully supported judgment is provided.

[5 to 6 marks]

The answer provides a limited evaluation of the *BMW Group's* view and may not be entirely balanced at the lower end of the range. Subject concepts and terminology are generally used appropriately.

[3 to 4 marks]

The answer tends to be descriptive and may lack balance. Subject concepts and terminology are not extensively used.

[1 to 2 marks]

A limited and essentially descriptive answer.

3. (a) Explain *three* practices that can be implemented by J Welsh to ensure "minimum wastage of resources".

[6 marks]

Various possible practices can be suggested from the Kaizen (continuous improvement) and lean production systems:

- TQM
- quality circle
- JIT
- zero defects
- time based competition
- team work / cell production empowerment and delegation
- any other relevant practice.

It is expected that the candidate first identifies the relevant practices and then specifically explains how each of the suggested practices enables the company to maximize employee involvement, leads to a more motivated and more productive staff and creates a lean/efficient production technique. All of the above will result in a minimum wastage of resources and higher productivity.

[1 mark] for each relevant practice identified and an additional mark for an adequate explanation of that practice, up to a maximum of [6 marks].

(b) Explain two advantages *and* one disadvantage for *Softco* of moving from "the existing tall hierarchy to a matrix structure".

[6 marks]

The matrix structure facilitates the organization of tasks along lines that cut across departmental boundaries.

Possible advantages:

- projects are better coordinated given the appointment of designated project manager
- increased flexibility experts can be pooled from various departments
- greater cooperation and quicker inter-functional communication
- enhanced cross-fertilisation of ideas
- more opportunities for employees to use their abilities and to develop management skills.

The matrix structure should enable *Softco* to achieve its aims of delivering results immediately, solve problems quickly and establish a culture of trust and collaboration.

Possible disadvantages:

- overlapping authority between project groups
- costly to implement administration costs will increase
- split loyalty among the members of the two departments
- some control and ownership problems
- the employees from the production department and the design department may not get on with each other frictions may be created
- the difficulty of changing existing and often contrasting cultures.

[5 to 6 marks]

A clear explanation is provided of two possible advantages and one possible disadvantage to the organization resulting from this structure. Specific reference is made to *Softco's* aims for *[6 marks]*.

[3 to 4 marks]

An explanation is provided of less than two advantages and one disadvantage, or two advantages and one disadvantage are identified and the explanation lacks clarity. Some reference may be made to *Softco's* aims. Only advantages are well explained – award up to [3 marks].

[1 to 2 marks]

A list of some advantages and disadvantages is provided without explanation and analysis.

(c) With reference to Maslow's hierarchy of needs and other relevant motivation theory, evaluate J Welsh's view that "giving people self-confidence should be an organization's primary objective because it motivates employees".

[8 marks]

J Welsh's belief that giving people self-confidence will enable the employees to reach the highest level on Maslow's hierarchy of needs (self esteem and self actualisation). Motivated employees will clearly generate lots of benefits to the organization in terms of low staff turnover, efficiency, flexibility, creativity and so on.

However, J Welsh does not address the point that according to Maslow's theory some other lower level needs should be fulfilled before achieving higher level needs. Obvious examples are the lack of job security created by short-term contracts, high pressure on employees to perform and constant assessment.

Also, some employees might only be interested in financial benefits and might even dislike work and challenges. Therefore, paying attention only to the issue of self-confidence might not be effective. According to Maslow, if the lower level needs like "safety/security", and "love and belonging" are not satisfied, the employees will not be able to fulfil the higher level needs created by self-confidence (as suggested by J Welsh).

For some employees the need for job security or affiliation/love and belonging might be greater than the need for achievement/self-actualisation or self-esteem. They may see the constant performance evaluation as intimidating and an indication of a lack of trust, respect and maybe even care.

More attention should be paid to enable those employees to first achieve the lower level of needs on Maslow's hierarchy. The point might be more applicable for the employees who work on the production-line rather than the designers of the software.

For other employees, especially the more creative ones in the software design department, the interest, creativity and self-confidence provided by the nature of the job and management attitudes, may outweigh the need to fulfil some lower level needs like job security.

Candidates should be aware that J Welsh's assumptions might not be valid given some of the above theories and the different type of employees mentioned in the case study. A lack of job security and increased fear might mitigate her efforts to give people self-confidence. J Welsh might only be successful in implementing her policies to a limited extent.

Candidates should also refer to other motivation theory and apply concepts like Herzberg and McGregor to the assertion by J Welsh.

Accept any judgment provided it is well substantiated.

[7 to 8 marks]

Maslow and/or other motivation theory is used effectively to give clear discussion of the assertion about self-confidence and motivation. The evaluation is well balanced and applicable to *Softco*. The answer makes use of the relevant terminology and concepts. If Maslow theory is not used, award no more than [5 marks].

[5 to 6 marks]

There is some use of Maslow and/or other motivation theory to discuss the assertion though this may tend to be descriptive at the lower end of the range. The discussion is generally relevant to *Softco* though may be unbalanced or more general at the lower end of the range. The answer makes some use of relevant terminology and concepts.

[3 to 4 marks]

Maslow and/or other motivation theory is considered though this may be general and not specifically related to the assertion and *Softco*.

[1 to 2 marks]

A limited and essentially descriptive answer.

4. (a) Suggest *one* reason why *Landofnod's* unit costs vary from month to month. [2 marks]

The table indicates that costs per unit change each month. *Landofnod* imports (purchases) foam (raw materials) from a company in Taiwan. Due to fluctuations in the exchange rate/s between the two counties, costs can change. For example in December unit costs have fallen, probably because the Canadian dollar has appreciated in value and/or the Taiwanese dollar has depreciated and/or the Taiwanese dollar has appreciated in value causing costs to rise.

Other appropriate reasons should also be credited.

[2 marks]

The explanation is clear.

[1 mark]

A valid reason is given but is not explained clearly.

(b) Using the information in the table, calculate:

(i) the value of the closing stock at the end of April 2006 (using the LIFO method of valuation).

[6 marks]

LIFO

Date	Purchases (\$)	Sales (units)	Balance (\$)
Opening Stock			30 @ 197 = 5910
November 2005	100 @ 200 = 20 000	90	30 @ 197 = 5910
			10 @ 200 = 2000
December 2005	90 @ 198 = 17 820	94	30 @ 197 = 5910
			6 @ 200 = 1200
January 2006	120 @ 202 = 24 240	85	30 @ 197 = 5910
			6 @ 200 = 1200
			35 @ 202 = 7070
February 2006	75 @ 199 = 14 925	82	30 @ 197 = 5910
			6 @ 200 = 1200
			28 @ 202 = 5656
March 2006	80 @ 196 = 15 680	75	30 @ 197 = 5910
			6 @ 200 = 1200
			28 @ 202 = 5656
			5 @ 196 = 980
April 2006	70 @ 197 = 13 790	70	30 @ 197 = 5910
			6 @ 200 = 1200
			28 @ 202 = 5656
			5 @ 196 = 980
			Total = 13746

[5 to 6 marks]

The layout and working is clear and the calculations are essentially accurate.

[3 to 4 marks]

The calculations contain minor errors. At the top end the layout and workings are clear.

[1 to 2 marks]

There are many inaccuracies and the layout and working are poor. For [1 mark] there must be some understanding shown. Many inaccuracies but the right layout is clear for [2 marks].

248 000

(ii) the value of gross profit for the six-month period November 2005 to April 2006 using the LIFO method of stock valuation.

[3 marks]

Saics 470 @ 300			240 000
Less cost of goods sold			
Opening stock	30 @ 197	5910	
Purchases		106 455	
		112 365	
less closing stock		13 746	98 619
Gross profit			149 381

[3 marks]

Sales 496 @ 500

The layout and working is clear and the calculations are accurate.

[2 marks]

The layout and the working is largely clear and the calculations are largely accurate. Allow for some minor mistakes.

[1 mark]

There are errors, but the answer contains some accuracy and appropriate structure.

(c) Examine *one* advantage of moving to a FIFO method of stock valuation. [3 marks]

FIFO (first in, first out) is a method whereby the oldest stock is issued or sold first, using the earliest unit value, until that particular batch of stock is exhausted. The next latest price is then used for pricing the issues/sales and so on. Closing stock is valued in terms of the most recent purchases – lower profit.

FIFO, as opposed to LIFO, gives a more realistic value to closing stock and, therefore, its balance sheet value because existing stock is close to the present market value of stocks. It does, therefore, give a lower cost of goods sold in the profit and loss account, raising gross profit.

[3 marks]

One advantage of adopting FIFO is fully examined.

[2 marks]

One advantage of adopting FIFO is examined but lacks some detail.

[1 mark]

One advantage of adopting FIFO is identified.

(d) Evaluate whether *Landofnod* should introduce a JIT (just-in-time) method of production and stock control.

[6 marks]

JIT is a stock control system associated with Japanese management practices. Under this system materials are scheduled to arrive exactly when they are needed on the production line. In this case, the foam is ordered and delivered when production of the mattresses takes place.

The possible advantages are:

- reduced costs of storage, stockpiling, opportunity cost and spoilage
- Landofnod will not have to commit itself to purchasing an agreed amount of material at a given interval
- the requirement for working capital is reduced and so the firm's cash flow position can improve as money is not tied up in stocks
- warehouse/factory space can be freed up as less stock is sitting in the warehouse
- increased flexibility and responsiveness to the needs of the customers
- more motivation for employees who are given the responsibility of ordering. Team work is likely to improve.

The possible disadvantages are:

- Landofnod might find it difficult to cope with a sudden and sharp increase in demand
- bad publicity and loss of reputation if Landofnod cannot meet demand
- the relationship between *Landofnod* and its Taiwanese supplier could be placed in jeopardy as new, reliable suppliers may be needed
- loss of discounts for bulk purchases
- increased ordering and administration costs.

Given falling sales and high levels of stock, JIT may be appropriate, particularly if cash flow is a problem, but *Landofnod* would probably have to find a new local supplier and there is no guarantee that the new supplier would be as reliable as one in Taiwan. As well, *Landofnod* would be faced with increased costs. It may be more prudent, in the short term, for *Landofnod* to review its system of stock ordering and link it more closely to sales forecasts.

[5 to 6 marks]

A clear understanding of JIT and evaluation of its introduction with particular reference to the information given about *Landofnod*. For *[6 marks]* a judgment is made.

[3 to 4 marks]

Some examination of the advantages and disadvantages of JIT with some reference to the information given about *Landofnod* at the top of the band. The answer may be descriptive.

[1 to 2 marks]

Few advantages and/or disadvantages are outlined. Little or no reference may be made to Landofnod.

5. (a) With reference to Arica Sportswear plc

(i) distinguish between fixed and variable costs.

[2 marks]

Fixed costs: costs that do not change when the level of output changes e.g. rent,

rates, interest. They only remain constant in the short-run.

Variable costs: costs that change in direct proportion to the output of a firm

e.g. raw materials, sales commission.

[2 marks]

The distinction between fixed and variable costs is clear and accurately explained. Examples are used from the case.

[1 mark]

There is some understanding of the distinction between fixed and variable costs, but there may be some lack of clarity.

(ii) calculate the contribution earned per kit after relocation. (Show your working)

king)	[2 marks]		
=	transport costs manufacturing cost printing commission	\$ 2 \$43 \$12 <u>\$ 3</u>	
	0,	transport costsmanufacturing costprinting	= transport costs \$ 2 manufacturing cost \$43 printing \$12

Contribution to fixed costs

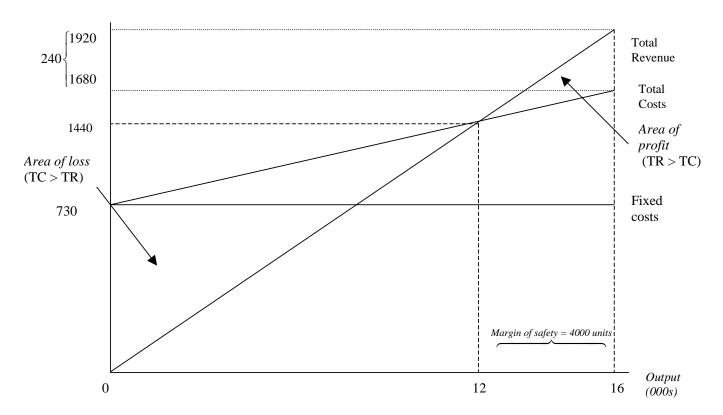
Award [1 mark] for the correct answer and [1 mark] for working up to a maximum of [2 marks].

(b) Construct a break-even chart and identify

(i) the monthly output of kits required by Arica Sportswear plc to break-even.

\$000s						
Output	FC	VC	TC	TR	+/-	
0	720	0	720	0	(720)	
4 000	720	240	960	480	(480)	
8 000	720	480	1200	960	(240)	
12 000	720	720	1440	1440	0	Break-even point
16 000	720	960	1680	1920	240	Factory capacity

Sales/Rev (\$000)



Break-even= 12 000 kits

(ii) the margin of safety if the factory is producing at full capacity.

Margin of safety = actual production less break-even output

= 16 000 less 12 000

= 4 000 units

(iii) the monthly level of profit assuming 16 000 kits are manufactured and sold.

[8 marks]

or [4 000 units \$60 000 contribution = \$240 000]

[6 to 8 marks]

The break-even chart is accurately presented with the break-even output, margin of safety and level of profit correctly identified. If the margin of safety or level of profit are correctly calculated but not shown on the chart, a maximum of [7 marks] can be awarded. The lower end of the band is awarded where there are some minor omissions in presentation or calculation.

[3 to 5 marks]

There is a valid attempt at presenting a break-even chart, but there are some inaccuracies and/or omissions in presentation or calculations, which may mean that one or more of the answers are incorrect. When a candidate has just calculated the values correctly but there is no break-even chart a maximum [3 marks] should be awarded.

[1 to 2 marks]

The break-even chart and/or calculations are highly inaccurate or missing. The principles are understood only in a very general sense.

(c) Evaluate the marketing manager's proposal to increase the price of *Arica* sports kits to retailers by 15 %.

[8 marks]

The present pricing strategy employed by *Arica Sportswear plc* is a premium pricing strategy. It could be argued that the firm is price skimming as its "offer" is temporarily unique. The relatively high price of \$120 is justified by the quality of the product and by the customization that takes place. It is clear that the brand is presently fashionable and adds value, justifying the higher price and that creaming the market will allow revenue maximization in the short run. Indeed, the present pricing strategy seems appropriate given the significant monthly profit level and the relatively high margin of safety.

Clearly the product is very popular and the new factory is producing at full capacity. This will prove to be a problem as there is no flexibility if demand increases further, possibly leading to disappointed customers. A price increase should decrease demand in theory dependent on the products' price elasticity. The 12 to 24 year old target market may be fashionable, but disposable incomes are often limited and the impact of a 15 % increase in price may be significant.

The marketing manager is suggesting that the market will accept such an increase and indeed this may enhance the status of the product. It would be advisable for the board of directors to commission some market research first to test these assumptions and ensure that a price increase will not damage the brand and lead to a decline in popularity; fashion is after all a fickle phenomenon. It is also important that customers do not notice a corresponding decline in quality from the new factory, which may undermine its premium position in the market place.

The price increase and cost decrease should allow *Arica Sportswear plc* to pay a higher rate of commission to its sales representatives.

An alternative would be for the price to be reduced to reflect the lower manufacturing costs of *Arica Sportswear plc*. This cost plus approach could be justified if the revenues increase overall. However, the problem of overcapacity would have to be dealt with first, possibly through outsourcing or by opening new productive capacity.

In a fashion market, price is often part of an image, but competition is likely to become fiercer if firms like *Arica Sportswear plc* appear to be achieving large profit margins. There is also the issue of market saturation, which may force *Arica Sportswear plc* to employ a more competitive pricing strategy in the medium to long term.

The board of directors are likely to approve such an increase subject to reassurance that this will not damage the brand and lower the market share significantly. Research should be carried out before a discussion is made.

[6 to 8 marks]

The evaluation of the proposed pricing strategy reflects a good understanding of *Arica Sportswear plc's* present market position and its operational difficulties. The discussion is balanced and makes relevant reference to *Arica Sportswear plc*. Business terminology and concepts are used appropriately. A judgement is made for [8 marks].

[3 to 5 marks]

There is some understanding of pricing theory and the appropriateness of the proposed strategy though the discussion may not always be balanced. There is some attempt to use relevant marketing theory and/or terminology, but this may be limited.

[1 to 2 marks]

A limited and essentially descriptive answer.

6. (a) Describe two potential limitations of ratio analysis.

[4 marks]

- ratios are retrospective as they refer to the past not the future. Changes in the external environment may mean ratios are not a good guide
- different companies may use different accounting policies making comparisons difficult *e.g.* different depreciation approaches may be taken
- there is no reference to non-accounting or non-financial factors *e.g.* motivation, the economy and market position
- ratios may ignore the effects of inflation, for example on sales
- comparison between firms may be misleading due to varying objectives, financial structures and history.

Award [1 mark] for each limitation identified and [1 mark] for each description up to a maximum of [4 marks].

(b) Analyse the types of market research that *Show-off Ltd* can undertake to support their expansion decision.

[7 marks]

Market research can be classified as:

- primary first hand data gathered by *Show-off Ltd* for its own needs
- secondary second hand data previously collected by other organisations
- quantitative data consisting of numbers which can be easily manipulated and presented diagrammatically
- qualitative opinions expressed which may explain behaviour but may be difficult to categorise or classify.

Possible sources of *primary data* could include:

- customer questionnaires
- observation of buying behaviour
- focus groups
- expert interviews.

Primary data will be more accurate and up-to-date and may provide significant information about the market and customers for *Show-off Ltd's* existing products and for the proposed accessories for digital cameras and portable music players. Primary data tends to be expensive, as it is time-consuming and labour intensive to collect. This may mean a delay to the proposed expansion of the business. Primary data is relatively easy to gather in the retail trade as customers are quite accessible for interviews and observation is quite possible, but *Show-off Ltd* are producers rather than retailers and this may complicate the collection of data.

Possible sources of *secondary data* could include:

- company records/database of previous purchasers of Show-off Ltd's products
- government statistics on social trends and family expenditure
- retail and market audits
- analysis of competitors particularly those in the digital camera and portable music player business
- trade information trade press, trade associations, specialist publications on accessories
- economic and business forecasts.

Secondary data is quicker and cheaper to collect. It will provide details of macro factors such as market and economic trends, essential to justify expansion.

Clearly combinations of primary and secondary research would be advisable. It will be important to identify whether market growth is likely to occur in the existing and proposed markets. Research on customer loyalty may be important to assess the ease with which *Show-off Ltd* can expand its product range. Retail audits and market reports are likely to be useful as is data on social attitudes and trends linked to economic data. This would allow *Show-off Ltd* to judge whether market growth is a temporary or longer-term phenomenon. Finally, the cost of such research needs to be considered given the shaky liquidity position of the business.

[6 to 7 marks]

Types of market research are identified, categorised, illustrated and linked to the needs of *Show-off Ltd* and its proposed expansion into new product segments. There is an analysis of the value of different sources of data to *Show-off Ltd*.

[3 to 5 marks]

Some market research methods and types are identified. At the upper end of the band there are links to *Show-off Ltd* and some attempt to identify and classify research, with some appropriate analysis, but at the lower end of the band this will tend to be more descriptive.

[1 to 2 marks]

Some types of market research are listed, but concepts are not developed and/or applied well to *Show-off Ltd*.

(c) Discuss whether the present financial position of *Show-off Ltd* justifies the CEO's planned expansion. [9 marks]

	2004	2005	2006
Sales revenue	\$42m	\$62m	\$98m
Current ratio	1.8	2.2	2.4
Acid test ratio	1.4	1.1	0.8
ROCE	12 %	16 %	22 %
Gross profit margin	42 %	44 %	45 %
Net profit margin	11 %	9 %	8 %
Rate of stock turnover	25 times	30 times	38 times
Gearing ratio	40 %	40 %	70 %

There is little doubt that the business is growing very quickly and the CEO has grounds for his optimism and planned expansion. Sales growth is substantial and the rate of growth has increased from 48 % between 2004 and 2005, to 58 % between 2005 and 2006. This is also reflected in an increase in the speed of stock turnover up to 38 times in 2006 from 25 times in 2004. Given this growth rate, it is likely that further expansion of the business can be justified unless some other external factors threaten the market. The CEO has commented that there is a positive economic environment, which suggests that the immediate future is good. The firm will need to protect itself against possible downturns in the economy in the coming years.

The improvement in the gross profit margin suggests that the firm is gaining from purchasing economies of scale reducing the costs of goods sold. Again this is a positive trend. However, the decline in net profit margin will need further examination. This decline could be caused by some uncontrollable external influence such as exchange rates, energy costs *etc.*, but may also be a reflection that the firm is in danger of overtrading and is losing control of some of its operations.

The possibility of overtrading is also signalled by the change in its liquidity position. The current ratio is improving from 1.8 in 2004 to 2.4 in 2006 – although it may be possible to argue that this ratio is too high. However, the decline in the acid-test ratio from 1.4 to 0.8 over the same period is worrying and means that the firm may not be able to meet its operating expenses, such as wages, raw material purchases and rent. The difference between the current ratio and acid test ratio is stock. Given the growth of the firm and the increase in its stock turnover it may be that the firm is stocking up for a seasonal rush in demand, such as that experienced at Christmas, or worryingly, may be an indication that the firm is losing control of its stock position. If it is anticipating a continuing rise in the demand for its products, which then does not materialise, the firm may be left with surplus stock. The items produced are not perishable, but they are fashion goods and so may become obsolete if they are not shifted quickly.

The expansion of the business will require finance. There is not enough information to know whether the firm could afford this expansion out of its retained profit or a further share issue, but it does appear that past expansion was funded through external loan capital, which has pushed the gearing ratio up to 70 %. This high gearing should be of a concern to present and future investors as it increases the risk to dividend payments and future solvency. Any suggestion that the gearing ratio be pushed higher is probably unwise. Business failure is more often the result of liquidity problems than lack of profitability and *Show-off Ltd* must guard against this danger.

Certainly the significant increase in sales provides support for the expansion proposal, but it may be necessary to consolidate the business at its present level and address its liquidity and stock issues before embarking on product extension. If a source of finance could be found which does not increase the gearing position of the business, such as a rights issue, then expansion may be justified. However, the market for the new products may be more competitive than for laptop and mobile phone accessories and the brand name may have less loyalty. It would be wise to commission detailed marketing research before undertaking any expansion.

[6 to 9 marks]

The discussion of the financial data reflects a good understanding of *Show-off Ltd's* present market position and the accurate interpretation of ratios and financial indicators. The discussion covers a broad range of ratios and financial indicators. There is recognition of the positive and negative aspects of *Show-off Ltd's* financial position and sensible judgments are made about future expansion.

[3 to 5 marks]

There is some understanding of Show-off Ltd's present financial position with some interpretation of ratios and financial indicators, though this may be limited to a narrow range of ratios and financial indicators. Judgments may be limited or omitted.

[1 to 2 marks]

Some financial issues are identified, although these may be descriptive and may be little more than a list of disconnected points.