



MARKSCHEME

May 2010

BUSINESS AND MANAGEMENT

Standard Level

Paper 1

*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 IB Cardiff.*

The markbands on pages 3–4 should be used where indicated in the markscheme.

Section A			Level descriptors
(c) questions			
Q1 (c)	Q2 (c)	Q3 (c)	
Marks 0–7			
0			<ul style="list-style-type: none"> • No knowledge or understanding of relevant issues, concepts and theories. • No use of appropriate terminology.
1–2			<ul style="list-style-type: none"> • Little knowledge and understanding of relevant issues, concepts and theories. • Little use of appropriate terminology. • No reference is made to the information in the case study.
3–5			<ul style="list-style-type: none"> • A description or partial analysis/examination with relevant knowledge and/or understanding of relevant issues, concepts and theories. • Some use of appropriate terminology. • Some reference is made to the information in the case study, not just to the name of the organization. • At the lower end of the markband responses are mainly theoretical.
6–7			<ul style="list-style-type: none"> • A balanced analysis/examination with accurate, specific, well-detailed knowledge and understanding of relevant issues, concepts and theories. • An analysis/examination that uses appropriate terminology throughout the response. • Explicit references are made to the information in the case study.

Section B	Level descriptors
Q4 (d)	
Marks 0–8	
0	<ul style="list-style-type: none"> • No knowledge or understanding of relevant issues, concepts and theories. • No use of appropriate terminology.
1–2	<ul style="list-style-type: none"> • Little knowledge and understanding of relevant issues, concepts and theories. • Little use of appropriate terminology. • No evidence of judgments and/or conclusions. • No reference is made to the information in the case study.
3–4	<ul style="list-style-type: none"> • A description with some knowledge and/or understanding of relevant issues, concepts and theories. • Some use of appropriate terminology. • No evidence of judgments and/or conclusions. • Some reference is made to the information in the case study, not just to the name of the organization. • The response is mainly theoretical.
5–6	<ul style="list-style-type: none"> • A response with relevant knowledge and understanding of relevant issues, concepts and theories. • A response that uses relevant and appropriate terminology. • Evidence of judgments and/or conclusions that are little more than unsubstantiated statements that has balanced analysis and demonstrates understanding. • Explicit references to the information in the case study are made at places in the response.
7–8	<ul style="list-style-type: none"> • A response with accurate, specific, well-detailed knowledge and understanding of relevant issues, concepts and theories. • A response that uses appropriate terminology competently throughout the response. • A response that includes judgments and/or conclusions that is well supported and underpinned by a balanced analysis. • Explicit references to the information in the case study are made throughout the response.

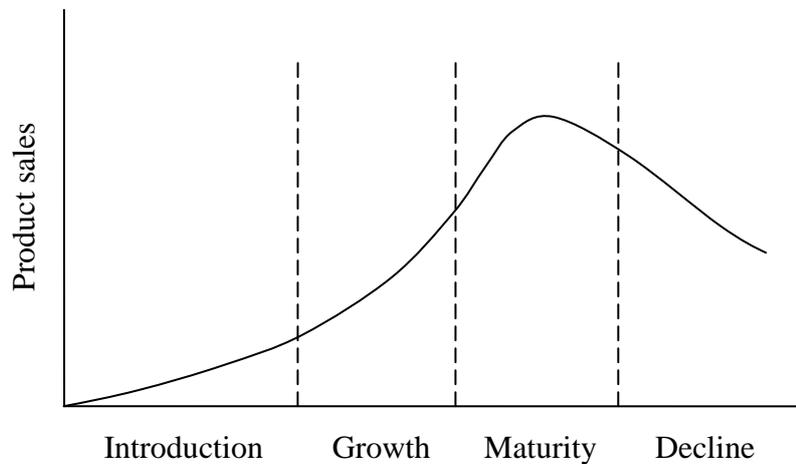
SECTION A

1. (a) Define the following terms:

(i) *product life cycle (line 32)*

[2 marks]

Product life cycle refers to the fact that any new product, once commercialized (*i.e.* first launched on the market) progresses through a sequence of stages conventionally called “introduction”, “growth”, “maturity” and “decline”. The product life cycle (often abbreviated as PLC) is mainly associated with changes in marketing (as the marketing strategy needs to adapt according to the stage).



Candidates may include a figure showing a product life cycle (with the named stages); this can enable them to score *[2 marks]* but this is not required.

Candidates are **not** expected to word their definition **exactly** as above.

Award *[1 mark]* for a basic definition that conveys partial knowledge and understanding.

Award *[2 marks]* for a full, clear definition that conveys knowledge and understanding similar to the answer above. Key concept: sequential stages.

For **only** a relevant: example **or** application to the case study award *[1 mark]*.

(ii) *brand loyalty (line 51).*

[2 marks]

Brand loyalty refers to consumers' commitment to purchase products from a particular brand (literally, it means "fidelity", "allegiance", "faithfulness" to one brand and not to its competitors). The central idea is that of repurchasing. Brand loyalty is often regarded as the ultimate goal of marketing.

Candidates are **not** expected to word their definition **exactly** as above.

Award *[1 mark]* for a basic definition that conveys partial knowledge and understanding.

Award *[2 marks]* for a full, clear definition that conveys knowledge and understanding similar to the answer above. Key concept: repurchasing.

For **only** a relevant: example **or** application to the case study award *[1 mark]*.

- (b) With reference to *N-Pharma* and its new drug *Pharmatics*, distinguish between “above the line and below the line promotion” (*line 45*). [4 marks]

Above the line (ATL) promotion refers to advertising a brand (*N-Pharma*, in this case) through conventional forms of mass media such as television, radio and newspaper. To launch its new anti-aging drug *Pharmatics*, *N-Pharma* may have led a national campaign on television, with famous actresses praising the beneficial effects of *Pharmatics* to keep their skin smooth and youthful.

Below the line (BTL) promotion refers to advertising through short-term, focused methods such as direct mail, public relations and sales promotions; for *N-Pharma*, it could include discount coupons, sponsorship of health-related events, point-of-sale displays (*e.g.* in drug stores) or giving away samples of *Pharmatics* through doctors. (Most of the pharmaceutical companies actually do BTL promotion through doctors, as for a patient, personal advice from a doctor may hold more value than commercial advertisements.)

NB: “Direct to Consumer” (DTC) advertising is only permitted in some countries. Candidates should not be penalized if they do not discuss TV adverts.

Accept any other relevant answer.

[1 mark]

The answer shows some confused or limited understanding of the difference between ATL and BTL promotion.

[2 marks]

The two concepts are understood, but they are not clearly defined or not applied to the case study.

[3 marks]

The two types of promotion are presented and the distinction is clear; one type of promotion (ATL **or** BTL) is well illustrated but the other is not.

[4 marks]

The two types of promotion are well presented and the distinction is clear; ATL **and** BTL are defined as two advertising strategies and the distinction between them is clearly illustrated.

(c) **Apply The Boston Consulting Group (BCG) matrix to *N-Pharma’s* product portfolio.** **[7 marks]**

The BCG matrix distinguishes between four types of products according to their market share and to the growth rate of the market in which they are sold.

		Relative market share	
		High	Low
Market growth rate	High	Stars	Question marks
	Low	Cash cows	Dogs

N-Pharma’s product portfolio lends itself well to a BCG matrix:

- Pharmax is a cash cow (well-established, high market share of “around one-third of the market for painkillers in Japan and the USA” (*lines 33–34*) in a market which is “growing very slowly” (*line 35*))
- Pharmaflo is a star (launched less than ten years ago, it “already has a high 15 % share in a market that is still growing rapidly”)
- Pharmaslim is a question mark: “the market [...] is growing rapidly” but “gaining market share is proving more difficult than anticipated” (*lines 41–43*).

Accept any other relevant application e.g. about Pharmaceuticals.

Award a maximum of **[2 marks]** if the matrix is only drawn with no application. Award a maximum of **[4 marks]** if the matrix is correctly applied but with no explanation.

Marks should be allocated according to the markbands on page 3.

2. (a) **“Since 1980, *N-Pharma* has been a public limited company with its shares traded on the Tokyo Stock Exchange” (lines 83–84). Outline two key aspects of this form of ownership. [4 marks]**

The key aspects of this form of ownership include the following points:

- *N-Pharma* sells its shares to the general public, so anyone can be an investor and have part ownership of the company
- *N-Pharma* has access to capital markets and is thereby able to raise more funds (which was not so easy when it was a private company prior to 1980)
- *N-Pharma’s* accounts must be audited and released to the public (they are public information)
- *N-Pharma* may be vulnerable to takeover bids (line 117); its value may also be very dependent upon stock exchange fluctuations
- *any other relevant aspect.*

Award [1 mark] for each correct key aspect identified, and [1 mark] for the development of each of these key aspects.

- (b) **Prepare a SWOT analysis showing *only* the opportunities and threats for *N-Pharma*. [4 marks]**

The case study refers to several opportunities and threats (see below) though candidates may be credited for others, if appropriate (for example about exchange rates between currencies):

Opportunities include:

- illnesses and more health problems all around the world, resulting in an increasing demand for drugs (e.g. the more people at risk of heart attacks, the higher the demand for Pharmaflo) (lines 38–39)
- further trends for youth-obsessed looks, resulting in an increasing demand for anti-aging products such as Pharmatics (line 44)
- financial difficulties for competitors (especially small ones who could then be taken-over more easily) (lines 129–130)
- changes in the regulations on joint ventures at the European Union Commission (as it would enable the joint venture with *R-Taylor*) (lines 135–136).

Threats include:

- economic recession, leading to customers buying cheaper generic drugs rather than *N-Pharma* branded products (lines 53–54)
- another financial crisis, leading to a drop in the price of shares as in 2008 (lines 109–110)
- political tensions between China and Japan, creating problems with the development of the Beijing subsidiary (lines 146–147)
- more instances of PR problems e.g. another ethical scandal (lines 88–91).

Accept any other relevant answer.

In a SWOT analysis, opportunities and threats are external factors; consequently, an “internal threat” (such as industrial action in the Canadian subsidiary) and an “internal opportunity” (such as Susan James adopting a new leadership style) are not acceptable. They are misclassifications and the candidate cannot gain any marks for them.

Candidates are not expected to explain nor develop the opportunities and threats they identify; a list is acceptable.

[1 mark]

For a limited answer, with just a couple of valid points.

[2 marks]

For a basic answer, some of the opportunities and threats are correct and appropriate but some are not.

[3 marks]

For a satisfactory answer overall; most opportunities and threats are correct and appropriate, but the answer shows a slight imbalance (for example: three opportunities but only one threat).

[4 marks]

For a clear answer, with at least two correct and appropriate opportunities, and at least two correct and appropriate threats. One or two misclassifications may be present.

- (c) **Analyse *N-Pharma*'s position using the information in the SWOT analysis (additional information, page 3) and your answer to part (b).**

[7 marks]

Analysing an organization's **market position** using a SWOT analysis can be done in several ways, so this task may be addressed differently by candidates. For example:

- some candidates may develop a position map and answer in terms of marketing (with references to concepts such as positioning and USP)
- some candidates may decide to use Porter's five forces model in their answer and to examine *N-Pharma*'s position towards its competitors (*i.e.* analysing *N-Pharma*'s competitive advantage)
- some candidates may structure their analysis by successively examining *N-Pharma*'s position in different national/continental markets
- some candidates may not use additional tools but can analyse the SWOT using the key points from the SWOT analysis (additional information and answer to part (b)).

Accept any other relevant analysis.

All these approaches are fine – what is assessed here is the candidate’s ability to analyse *N-Pharma’s position* by referring to the SWOT analysis. Just repeating key points from the SWOT analysis (additional information and answer to part (b)) should not be credited though: candidates must use these elements in their answer, and not just copy them.

Marks should be allocated according to the markbands on page 3.

3. (a) Define the following terms:

(i) *profitability (line 64)*

[2 marks]

The ability of a business to generate consistent sales revenue to cover costs over a period of time. It can be measured by using profit ratios such as GPM, NPM or ROCE.

Candidates are **not** expected to word their definition **exactly** as above.

Do not award any extra mark for the formulae of the profitability ratios (gross profit margin, net profit margin).

Award *[1 mark]* for a basic definition that conveys partial knowledge and understanding.

Award *[2 marks]* for a full, clear definition that conveys knowledge and understanding similar to the answer above. Key concept: consistent.

For **only** a relevant example **or** application to the case study award *[1 mark]*.

For a definition of profit (as opposed to profitability): award *[1 mark]*.

(ii) *liquidity (line 111).*

[2 marks]

The term “liquidity” is used in several cognate ways, which all relate to the availability of cash or the convertibility of assets into cash. The liquidity of an asset is its ability to be sold quickly and without any price discount – but a business itself could be described as having liquidity if it can easily meet its needs for cash (*i.e.* in simple terms, liquidity is the ability of a business to pay the bills). Two ratios can help calculate the liquidity of a business: the current ratio and the acid test (quick) ratio.

Candidates are **not** expected to word their definition **exactly** as above.

Do not award any extra mark for the formulae of the profitability ratios (current ratio, acid test (quick) ratio).

Award *[1 mark]* for a basic definition that conveys partial knowledge and understanding.

Award *[2 marks]* for a full, clear definition that conveys knowledge and understanding similar to the answer above. Key concept: convertibility.

For **only** a relevant: example **or** application to the case study award *[1 mark]*.

(b) **Using data from Appendix 2, calculate the liquidity ratios for the USA subsidiary of N-Pharma in the financial years 2008 and 2009.**

[4 marks]

$$\text{Current ratio} = \frac{\text{Current assets}}{\text{Current liabilities}}$$

$$\text{Acid test (quick) ratio} = \frac{\text{Current assets} - \text{stock}}{\text{Current liabilities}}$$

	Current ratio	Acid test ratio
2008	1.02 (accept 1)	0.68 (accept 0.7)
2009	0.89 (accept 0.9)	0.48 (accept 0.5)

(this is to 2 d.p.)

Award *[1 mark]* for each correct calculation.

- (c) **Analyse the liquidity ratios calculated in part (b) from the perspective of two stakeholders of N-Pharma.** [7 marks]

This is a case of “own figure rules” – candidates may make valid points in their answer even if they did not accurately calculate the ratios in 3(b).

The contents of the answer will depend on the choice of the two stakeholders. There is no expectation that candidates will choose one external and one internal stakeholder.

Examples:

- Chosen stakeholder: suppliers. The current ratio has dropped from just over 1 in 2008 to 0.89 in 2009, which means that the USA subsidiary may not be able to pay off its debts and bills. Suppliers should be very concerned by this decrease, as the USA subsidiary may not have enough liquidity over the next 12 months. The decrease in cash directly available (from US\$190m in 2008 to US\$60m in 2009) only worsens the subsidiary’s financial situation and some suppliers may insist on rapid payment and terminate or renegotiate contracts. This could affect the operations and add operational problems to the subsidiary.
- Chosen stakeholder: Suzuko Tanaka. As auditor, her role is to analyse the situation and make recommendations to the Tsukuba headquarters. She may recommend that the Tsukuba headquarters review the status of all the current borrowings of the USA subsidiary. As auditor, she should also examine why the stock is increasing so much (from US\$250m in 2008 to US\$356m in 2009) and what can be done to help get rid of the stock (although the high amount of stock could just mean that sales are booming and that they are producing masses to keep up with demand). Suzuko will need other data to understand the overall situation.

Accept any other relevant analysis.

If **only one** stakeholder is taken into consideration, or if the answer is generic without referring to the perspective of two different stakeholders, the answer cannot score above the [3–5 marks] markband.

Marks should be allocated according to the markbands on page 3.

SECTION B

4. (a) Define the following terms:

(i) *delegation (line 59)*

[2 marks]

Delegation (sometimes called “deputation”) refers to the transfer and sharing of authority and control of tasks and duties to another person. Typically, it allows a subordinate to make decisions and to feel empowered at work. The overall responsibility remains with the manager.

Candidates are **not** expected to word their definition **exactly** as above.

Award **[1 mark]** for a basic definition that conveys partial knowledge and understanding.

Award **[2 marks]** for a full, clear definition that conveys knowledge and understanding similar to the answer above. Key concepts: transfer of authority within limits.

For **only** a relevant: example **or** application to the case study award **[1 mark]**.

(ii) *performance-related pay (PRP) (line 72).*

[2 marks]

Performance-related pay (PRP) is a method of financial motivation whereby employees earn according to how well (or how much) they work. “Piece work” is the most common example of PRP, although many schemes of commission are also based on the principle of PRP.

Candidates are **not** expected to word their definition **exactly** as above.

Award **[1 mark]** for a basic definition that conveys partial knowledge and understanding.

Award **[2 marks]** for a full, clear definition that conveys knowledge and understanding similar to the answer above. Key concept: rewarding performance.

For **only** a relevant: example **or** application to the case study award **[1 mark]**.

- (b) *N-Pharma* is considering several strategic options for its future growth, including a takeover (*Option 1(b)*) and a merger (*Option 3*). Distinguish between a merger and a takeover. **[4 marks]**

A merger occurs when two companies combine and form a new, larger company: the merger of *N-Pharma* and *Anigam* would result in the creation of a new company (which would develop and market both human and animal drugs, and be present in all the countries where *N-Pharma* and *Anigam* already separately operate). Senior managers of both companies would need to support the merger.

A takeover can be defined as the acquisition of a company; typically a large company (such as *N-Pharma*) takes control of a smaller one (small European pharmaceutical ones, *line 126*). A takeover may occur even if the senior managers of the company being purchased do not want it.

The main difference is the fact that mergers are usually the result of positive negotiations and decisions, whereas takeovers are often “hostile”, creating tension and resentment in the smaller company that has been absorbed by the other.

Accept any other relevant answer.

Award **[1 mark]** for a correct definition of one of the two concepts.

Award **[2 marks]** if both concepts are correctly defined; such an answer is just theoretical.

Award **[3 marks]** if both concepts are defined with reference to *N-Pharma* and the case study.

Award **[4 marks]** if the answer explicitly stresses the difference between a merger and a takeover.

To achieve full marks **[4 marks]**, the answer must clearly distinguish between a merger and a takeover. The question is not “define a merger and define a takeover”: it is not marked as **2+2**. The aim of this point of assessment is to ensure that candidates understand the difference between the two.

- (c) **Laura Davies anticipates “that the Australian employees of *N-Pharma* will respond positively to non-financial rewards” (lines 80–81). Explain how non-financial rewards might affect job satisfaction and productivity. [4 marks]**

Some employees (such as the Australian employees of *N-Pharma*) may prefer non-financial rewards (such as job enrichment, job enlargement, empowerment and teamwork) to financial rewards (unlike the Canadian employees who are more motivated by financial rewards). Different types of non-financial rewards can affect job satisfaction and productivity in slightly different ways:

- Job enrichment means giving employees more interesting, challenging and complex tasks. It gives them the chance to test themselves and to use their full range of skills and abilities, which may be very relevant for *N-Pharma*'s researchers and scientists. They can thereby obtain a greater sense of achievement and possibly more praise or recognition of their work. Besides, employees may respond better as their managers have shown trust in the fact that they possess the ability to handle the increasing complexity and pressures of their work.
- Job enlargement means giving employees more tasks to do of a similar nature or complexity. This will reduce the monotony or repetition involved in their work; job rotation is a part of this and involves having a wider variety of tasks to do, perhaps rotating jobs with other members in one's team, but not increasing the challenge of the job. This might be more relevant for some of the lower skilled employees of *N-Pharma*.
- Empowerment means that power or authority is given to employees so they can make their own decisions regarding their working life. For instance employees may have control over how to use their time and decide which tasks could be done from home. According to the case study, the Australian employees are very keen on flexitime and teleworking, so empowerment could be a good strategy for Laura to change the employment patterns and practices at the Australian subsidiary so as to ensure higher productivity and stronger job satisfaction.
- Teamworking is where employees work in groups or teams. This can also meet an employee's social needs, as a person can more easily build friendships and feel a sense of belonging to a unit or group and hopefully to the business as a whole. It is very likely that *N-Pharma* researchers and scientists already work in teams, as R&D is a collective process, but Laura could put other teams in place, for example quality circles and management teams.

Accept any other relevant explanation as well as reference to methods such as flexi-working which arguably exemplifies non-financial rewards in practice.

Candidates are likely to write about these four methods/rewards; some could equally decide to answer firstly about job satisfaction (what it means and how non-financial rewards affect it) and secondly about productivity (what it means and how non-financial rewards affect it).

Award [1 mark] for each correct reward identified, and [1 mark] for the explanation of each of these rewards.

- (d) **To what extent would a change in Susan James' leadership style improve productivity and morale at the Canadian subsidiary of *N-Pharma*?** [8 marks]

Susan's authoritative leadership style contradicts with the Canadian employees' desire for more delegation and a wider span of control. Her inability to communicate and the tall organizational structure have only made the situation worse.

On the one hand, changes in her leadership style could improve productivity and morale:

- Employees are dissatisfied and disillusioned, which explains why their productivity is lower than in other *N-Pharma* subsidiaries (resulting in the Canadian subsidiary trading at a loss). By listening to the employees and providing them with the delegation, empowerment and other non-financial rewards they want, Susan could boost their morale and enhance their productivity.
- By becoming more democratic, Susan could involve employees in the decision-making processes to help identify some of the problems at the subsidiary (for example there might be some issues about supply chain or organizational culture that she is not aware of). Once involved by a democratic leader, employees could help solve the problems and prevent the causes of low productivity.
- By becoming more democratic, Susan could develop good two-way communication with her staff; communication has clearly been a problem in the past, hence the escalation towards industrial action could be avoided through a different leadership style.

On the other hand, further problems could arise from a (sudden) change in leadership style:

- Susan could lose the support from her management team and even from Yukio who sent her there because of her non-compromising attitude.
- Employees and negotiators may feel that she is malleable and threaten further action; to be successful, a democratic leader needs the support of the employees, but the situation may have been too conflictual to change.
- Susan herself could struggle psychologically as leadership styles are intrinsically linked to a person's own values and belief system; although she could be trained and coached to change her leadership style, it would remain unnatural for her (not believing in it herself, would she be able to make her workforce believe she has changed?).

Accept any other relevant answer.

Marks should be allocated according to the markbands on page 4.
