

**Business management**  
**Higher level**  
**Paper 2**

Friday 9 November 2018 (morning)

2 hours 15 minutes

---

**Instructions to candidates**

- Do not open this examination paper until instructed to do so.
- A clean copy of the **business management formulae sheet** is required for this examination paper.
- Section A: answer one question.
- Section B: answer two questions.
- Section C: answer one question.
- A calculator is required for this examination paper.
- The maximum mark for this examination paper is **[70 marks]**.

7 pages

8818–5012  
© International Baccalaureate Organization 2018

## Section A

Answer **one** question from this section.

### 1. Designer Dolls (DD)

*Designer Dolls (DD)* is a start-up business that will create hand-crafted unique dolls using a job/customized production method. As part of their business plan *DD* undertook a break-even analysis.

**Table 1: Forecasted figures for DD for the first year of operation**

Fixed costs	\$10 000
Variable costs per doll	\$30
Price per doll	\$50
Full productive capacity	900 dolls

- (a) Describe **one** limitation of a break-even analysis. [2]
- (b) Calculate:
  - (i) the number of dolls that *DD* needs to sell to achieve a profit of \$4000 (*show all your working*); [2]
  - (ii) the capacity utilization rate at the break-even quantity for *DD* for the first year of operation (*show all your working*); [2]
  - (iii) the profit or loss in the first year if *DD* sells 400 dolls (*show all your working*). [2]
- (c) Assuming that the quantity of dolls to be sold in the second year is 550 and costs remain unchanged, calculate the price per doll that *DD* would need to charge to make a \$6500 profit. [2]

## 2. Papel

Papel manufactures and sells paper bags. It pays cash for 80% of its raw materials but, to remain competitive, it must sell on credit to all customers. Many debtors are not paying on time and creditors (suppliers) are increasing. The board of directors is concerned about Papel's liquidity position.

The finance manager has provided information from Papel's accounts.

**Table 1: Selected information from Papel's accounts at 31 October 2018**

	000s \$
Accumulated retained profit	14
Cash	3
Cost of goods sold	2
Creditors	20
Debtors	12
Expenses	2
Long-term liabilities (debt)	20
Net fixed assets	60
Sales revenue	5
Share capital	26
Stock	5

- (a) Define the term *debtors*. [2]
- (b) Using information from **Table 1**:
  - (i) construct a fully labelled balance sheet for Papel for the end of October 2018; [5]
  - (ii) calculate the current ratio for Papel for the end of October 2018. [1]
- (c) Explain **one** possible strategy, **other than elimination of credit sales**, for Papel to improve its liquidity position. [2]

**Turn over**

## Section B

Answer two questions from this section.

### 3. KA

KA is a public limited company that designs, manufactures and sells air conditioners. KA's unionized employees are motivated and efficient despite not being involved in any decision making. However, they are resistant to change.

The market and competition for air conditioners are growing rapidly. KA operates at full capacity but stock turnover has slowed.

Primary market research revealed that:

- consumers do not differentiate KA air conditioners from those of its competitors. All products are perceived as medium price and medium quality
- KA's customer service is rated as poor
- customers demand energy-efficient products using ecologically sustainable production methods.

To exploit opportunities and overcome weaknesses and threats, KA's management has decided to redesign its products so that they are energy efficient. KA is considering two options:

- **Option 1:** Implement lean production methods, which includes investing in ecologically sustainable machines that will increase capacity by 10%. Total quality management (TQM) will also be implemented. However, the financial manager is worried about KA's ability to meet high initial costs. The forecasted payback period is three years and average rate of return (ARR) is 4%.
- **Option 2:** Outsource the production to QS, a company known for its reliability and high capacity to produce excellent quality air conditioners using cradle to cradle manufacturing principles. However, QS refuses to sign an exclusive long-term contract with KA, insisting instead on renegotiating the contract every two years. KA will have to close its production facility and will use the cost savings to improve customer service and to reposition and differentiate its air conditioners.

Employees have heard rumours of both options and fear for their jobs. Strike action is being considered.

- (a) Define the term *public limited company*. [2]
- (b) With reference to QS, explain **two** features of cradle to cradle manufacturing. [4]
- (c) Explain **two** possible human resource strategies that KA management could use to reduce employees' resistance to change. [4]
- (d) Evaluate the two options that KA is considering. [10]

#### 4. La Bonita (LB)

*La Bonita (LB)* is a beach hotel owned by Felix and Rose Sanchez. Its current target market is families seeking beach holidays. *LB* offers high-quality service. Customers do not pay in advance and pay in full on departure. *LB* is located near a capital city.

As there are no hotel training schools locally, Felix provides on the job training to all new recruits. A recent survey by *LB* to assess brand loyalty found that existing customers remain loyal because:

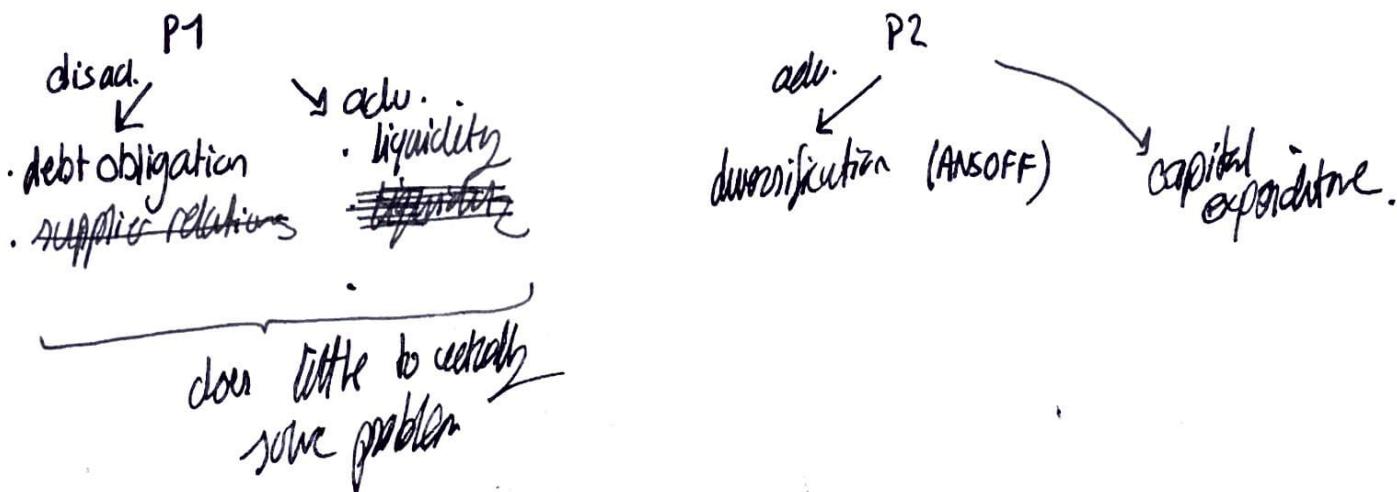
- they appreciate not having to pay in advance, as required at other local hotels
- employees are polite and helpful and particularly good with children
- the services provided are perceived as very good value for money.

However, many customers have commented that the hotel needs to upgrade its facilities.

In winter, *LB* has a very low capacity utilization and monthly cash flows are negative. *LB* gets through these months using bank overdrafts while continuing to pay its suppliers in cash to get generous discounts. Felix is concerned that the cash-flow situation is unsustainable and could get worse because the hotel facilities need upgrading. He proposes that *LB* raises additional finance and finds ways of reducing cash outflows in the winter (proposal 1).

Rose believes that the cash-flow problem is mainly due to low capacity utilization in the winter months. She wants to diversify and attract a new segment for the winter: business customers. However, this would involve significant expenditure, including upgrading and adding new facilities to the hotel (proposal 2).

- |  |      |
|--|------|
| (a) Define the term <i>brand loyalty</i> .   | [2]  |
| (b) Explain two advantages for <i>LB</i> of using on the job training.                 | [4]  |
| (c) Explain the importance to <i>LB</i> of two elements of the extended marketing mix. | [4]  |
| (d) Discuss whether <i>LB</i> should implement proposal 1 or proposal 2.               | [10] |



## 5. Benno

*Benno* is a soft drinks manufacturer. Its mission statement is "to produce healthy drinks without damaging the environment".

Competition in the healthy soft drinks market is fierce.

*Benno* uses a competitive pricing strategy. However, sales of *Benno*'s drinks have fallen significantly over the last five years, particularly in the 12–18 age group. The business has no accumulated retained profits.



*Benno* is committed to innovation and corporate social responsibility (CSR). Its research and development division has recently invented a new biodegradable drink pack ring that starts to break down within two hours of contact with sea water. It dissolves fully in 48 hours. Currently, 98% of pack rings are made of plastic and when dumped in the sea are responsible for the death of many sea creatures.

A focus group of loyal customers used regularly by *Benno*'s marketing department is wholeheartedly in favour of the new drink rings. However, the marketing director has read recent studies that suggest:

- purchases of green products are not increasing, despite the positive attitude of many consumers towards sustainability and biodegradable products
- consumers continue to prioritize price when purchasing soft drinks.

To manufacture the new drink rings, machinery costing \$5 million would be needed. Drink ring production unit costs would rise from 10 cents to 15 cents and prices of a six-pack of *Benno* soft drinks would have to increase by 5%. *Benno*'s net profit margin on a six-pack is 10%.

*Benno*'s director of corporate social responsibility favours the change to the new drink rings but is opposed by both the finance director and marketing directors.

[Source: Image provided with permission from E6PR™]

- (a) Define the term *innovation*. [2]
- (b) Explain **two** roles of *Benno*'s mission statement. [4]
- (c) Explain **one** advantage and **one** disadvantage for *Benno* of using a focus group of loyal customers. [4]
- (d) Recommend whether *Benno* should replace its plastic drink rings with the new biodegradable drink rings. [10]

ADV :

- loyalty thru CSR
- maintain commitment to innovation

DISADV :

- rising variable cost
- rising capital expenditure

### Section C

Answer **one** question from this section. The organizations featured in sections A and B and in the paper 1 case study may not be used as a basis to your answer.

6. With reference to an organization of your choice, examine the impact of **innovation** on **promotional strategy**. [20]
  7. With reference to an organization of your choice, examine the impact of **globalization** on **change** in operations management. [20]
  8. With reference to an organization of your choice, examine the impact of **ethics** and **culture** on human resource management. [20]
-



4 PAGES / PÁGINAS

Candidate session number: / Numéro de session du candidat: / Número de convocatoria del alumno:

18 NTZD P 2 - B M H L

Candidate name: / Nom du candidat: / Nombre del alumno:

At the start of each answer to a question, write the question number in the box using your normal hand writing / Avant de répondre à une question, inscrivez son numéro à la main dans la case appropriée / Al comienzo de cada respuesta, escriba a mano el número de pregunta en la casilla.

Example  
Ejemplo

27

27

Example  
Ejemplo

3

3

1

(a) Break even analysis assumes that the costs of goods (or the average variable costs) increases linearly. However, factors such as economies of scale (or vice versa) may invalidate this assumed linear growth. ②

1

$$(b)(i) \text{ Profit} = P \times Q - (P - AVC) \times Q - TFC$$

$$\therefore 4000 = 20Q - 10000$$

$$\therefore Q = 14000/20$$

$$= 700 \text{ dolls}$$

②

1

$$(ii) \text{ BEQ occurs when } TR = TC$$

$$\text{Hence } 5Q = 30Q + 10000$$

$$\therefore 20Q = 10000$$

$$\therefore Q = 500$$

Therefore, capacity utilisation rate =  $\frac{500}{900} \times 100\%$

= 55.56%. ②

$$(iii) \text{ Profit} = 20 \times 400 - 10000$$

$$= -2000$$

$$\therefore \text{Loss of } \$2000$$

②



04AX01

8/



$$(c) \text{ Profit} = (P - \text{AVC})Q - \text{TFC}$$

$$\therefore 6500 = (P - 30)Q - 10000$$

$$\therefore (P-30)550 = 16500$$

$$\therefore P-30 = 30$$

$$\therefore P = 60$$

(2)

$$\therefore \text{Price per doll} = \$60$$

2/



04AX02

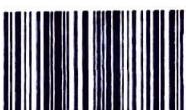
4

(a) Brand loyalty is achieved through the 7 Ps, particularly through promotion, and is an idea whereby customers continue to buy products from a particular brand or company over competition. This means that, despite this → more acceptable to raising prices  
→ give cause & effect

(b) On the job (OTJ) training refers to providing training to employees on site, using internal labour and resources. Advantages:

- highly specialised towards the business providing OTJ training. LB can provide training specific to the operations of their own hotel. Particularly, this means that guests may become accustomed with the culture and specific systems, probably the reason why LB has such high brand loyalty.
- Employees need not OTJ training is usually cheaper than off the job because outsourcing need as other companies need not be paid. In the case of LB, this is beneficial due to their precarious cash flow position, particularly in the winter, where they must reduce cash outflow as much as possible.

④



04AX03

5/

(c) People: hotels must always strive to provide good, welcoming, friendly customer service, as customers are paying for this. LB uses this element of the 7Ps to enhance brand loyalty as customers find that employees are "polite and helpful".

Process: ~~per~~ Both holidaymakers and business travelers will find process particularly important, as they would rather spend time on other activities. LB's policy to only collect payment after the stay ~~not~~ only differentiates them from others but is an element of the extended marketing mix that encourages loyalty, as evidenced by the recent survey.

(+)

(d) Due to a previous cash flow situation at LB during off-peak winter months, both owners have prepared two ideas to ~~not free to~~ improve LB's strategy.

Option 1 involves reducing expenditure and raising finance:

Driving	Restraining
<del>(2)</del> short term liquidity - (4)	Raise Finance
£4	4



4/



4 PAGES / PÁGINAS

Candidate session number: / Numéro de session du candidat: / Número de convocatoria del alumno:

						-					
--	--	--	--	--	--	---	--	--	--	--	--

Candidate name: / Nom du candidat: / Nombre del alumno:

--	--	--	--	--	--	--	--	--	--	--	--

At the start of each answer to a question, write the question number in the box using your normal hand writing / Avant de répondre à une question, inscrivez son numéro à la main dans la case appropriée / Al comienzo de cada respuesta, escriba a mano el número de pregunta en la casilla.

Example  
Ejemplo 27

27

Example  
Ejemplo 3

3

4

Raising finance through methods such as debentures such as bank ~~lending~~ would likely inject cash into the business, giving them a much stronger liquidity position, as well as enough working capital to address the various issues regarding the Hotel's physical evidence. This involves upgrading facilities, hence ensuring they secure customer loyalty during the summer months. The fact, also, that a liquidity fee ~~is~~ this is needed during the winter months is because customers during peak times, construction would detract from the ~~customer experience~~: the main reason why this driving force is a 4 on the FER.

However, a well known accounting principle dictates that short term issues should be financed through short term finance. Taking out debentures to cover for a cyclical ~~drop~~ drop in demand would prove to merely create a worse long term issue. In the case of LB, the debt obligations would detract from their long



04AX01



term financial position, meaning they would be less able to maintain their good will for money brand image, and may lose key customers. In general, LB should attempt to either fix the negative cash flow issue or find the financial variation with retained profits or short term finance which has not been identified in proposal 1: this is the reason why the restraining force is a 4.

### ~~PROPOSAL~~ PROPOSAL 2:

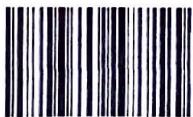
Driving	Restraining
(S) New market segment - Diversification	- High risky expenditure (R)

The second proposal would offer the significant advantage of a new market segment. As defined on the matrix, the diversification strategy would widen LB's target market, diversifying their revenue streams and decreasing the risk of negative cash flow, particularly during the identified winter months, as well as other variations in leisure travel demand (e.g. during Recession). Seen as they are located near a capital city, LB should seriously consider the major driving force of diversification on the FTR.



However, the second proposal has also some significant risk, particularly within the realm of capital expenditure. For LB, the market is untested, and according to the Ansoff Matrix, requires them to invest in new facilities to be able to offer a new business-focused product on the new market segment. Like with proposal 1, this would require raising capital, and has ~~the~~ a range of risks such as long term obligation. However, if planned properly, should not be a very large issue, which is why proposal 2 only has a 3 for the restraining force.

In conclusion, it is recommended that LB undertakes the second proposal, as the diversification on the Ansoff Matrix would provide the ~~b~~ a range of benefits for the driving force, outweighing the restraining force of "3" on the FFA. The first proposal, on the other hand was found to be flawed due to the idea of financing short term liquidity issues with long term finance.



04AX03

5

(a) innovation is a concept by which creative businesses and/or individuals undertake entrepreneurial activity to improve a product or idea, or develop a new one, usually filling some sort of gap in the market.

②

(b) Benno Mission statements exist to give clear organisational purpose to employees within the organisation. This ensures that employees, managers and leaders are efficiently striving towards a common goal. In particular, Benno's mission statement also displays elements of CSR, which according to Daniel Pink, is critical in ~~properly~~ motivating employees through purpose!

The mission statement also clearly outlines Benno's commitment to innovation and CSR to 8 potential customers, likely contributing to brand loyalty among the more environmentally aware customers. This is clearly seen within their loyal focus group.

④



04AX04

6/

**4 PAGES / PÁGINAS**

Candidate session number: / Numéro de session du candidat: / Número de convocatoria del alumno:

					-			
--	--	--	--	--	---	--	--	--

Candidate name: / Nom du candidat: / Nombre del alumno:

--

At the start of each answer to a question, write the question number in the box using your normal hand writing / Avant de répondre à une question, inscrivez son numéro à la main dans la case appropriée / Al comienzo de cada respuesta, escriba a mano el número de pregunta en la casilla.

--

Example  
Ejemplo

27

2	7
---	---

Example  
Ejemplo

3

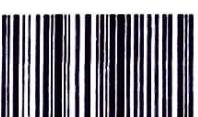
3
---

--

(c) Advantage: the loyal focus group will provide customer perspective and feedback to the organisation. The customer, which is a very important stakeholder, must be able to influence the business into making decisions which will make them more loyal. For example, Bennet's loyal focus group gave positive feedback to the new energy drink rings, outlining its usefulness in primary market research. → This description is for adv. ↳ loyal aware of company & mission ANY group

Disadvantages: loyal focus groups will normally be very biased towards particular businesses actions, especially regarding the fact that they are already loyal. It is a limited view of the overall market, which is evidenced by the fact that studies suggest the opposite of what the loyal customer focus group suggested. ↳ It may mean that the business, therefore, is not listening to various other customer demographics such as 12-18 year olds where sales have declined.

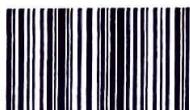
(3)



(1) Benno is considering ~~the~~ introducing innovative new biodegradable ~~drinks~~ ~~into~~ ~~the~~ ~~market~~ ~~due~~ ~~to~~ ~~various~~ ~~driving~~ ~~and~~ ~~restricting~~ forces which accompany the decision.

Driving	Restraining
(3) brand loyalty - through CSR	Introduce new drink rings 4 <del>BB</del>
(1) commitment to innovation	- rising variable costs (4) - fixed capital expenditure <del>(4)</del> (4)

Introducing the new product would enable Benno to adhere to their mission statement, "without damaging the environment". This would not only ensure that they offer clear direction to employees, but also maintain the set of loyal customers which support the idea, as shown within the loyal focus group. Maintaining brand loyalty is crucial due to the ~~from~~ fierce competition, to ~~for~~ which Benno is losing customers. If they are able to attract ~~be~~ be assured of a loyal customer base, there is a good chance they could weather the declining sales revenue. There are, however, many unknowns, hence the 3 on the FFA.



while the driving force of maintaining a commitment to innovation is low (1), it still remains important that Benno adhere to its own fundamental principles and directions to ensure employees can all strive for a common goal. Such environmental innovation keeps Benno current in the fast moving and competitive world of soft drinks manufacturing, and could let them acquire new market share due to changing social trends towards the environment. However, this is unlikely as the marketing director has emphasised the importance of price low prices in the industry.

#### The +

New, innovative products, usually see a rise in variable costs due to the nature of new products and the materials required for them. In the case of Benno, unit costs with the new innovation would ~~not~~ raise by 50% ( $10^c$  to  $15^c$ ), which is a significant shift to say the least. Importantly to recognise is the severely competitive market and the price-minded nature of consumers, as shown by the ~~marketing~~ marketing director. A rise of 5% in the soft drink would likely result in more customer losses, as the current decline in sales revenue indicates limited brand loyalty, and further accentuates the importance of pricing strategy in this particular industry. Hence, the rebranding



face holds paramount importance with a 4 on the FFA.

Finally, another ~~biggest~~ side-effect of innovation is high initial costs, especially during the R&D and ~~stage~~ and launch stage of the product life cycle. To afford the \$5 million capital expenditure on machinery, Benzo would need to likely reuse finances externally, which would negatively impact future cash flow and liquidity. Furthermore, there is no guarantee that this project will have a good PBP (if any) due to the likely non-significant impact of CSR on the price-sensitive customers. There is, therefore, a good chance that the project fails to return the investment, which would likely send the organisation into solvency.

In conclusion, due to the identified ~~market~~ nature of the industry (price sensitive), it is recommended that Benzo not undergo this innovative change. This is not only shown clearly on the FFA (4 vs. 3), but is accentuated by the unlikely chance of success as outlined prior.

