

© International Baccalaureate Organization 2021

All rights reserved. No part of this product may be reproduced in any form or by any electronic or mechanical means, including information storage and retrieval systems, without the prior written permission from the IB. Additionally, the license tied with this product prohibits use of any selected files or extracts from this product. Use by third parties, including but not limited to publishers, private teachers, tutoring or study services, preparatory schools, vendors operating curriculum mapping services or teacher resource digital platforms and app developers, whether fee-covered or not, is prohibited and is a criminal offense.

More information on how to request written permission in the form of a license can be obtained from https://ibo.org/become-an-ib-school/ib-publishing/licensing/applying-for-a-license/.

© Organisation du Baccalauréat International 2021

Tous droits réservés. Aucune partie de ce produit ne peut être reproduite sous quelque forme ni par quelque moyen que ce soit, électronique ou mécanique, y compris des systèmes de stockage et de récupération d'informations, sans l'autorisation écrite préalable de l'IB. De plus, la licence associée à ce produit interdit toute utilisation de tout fichier ou extrait sélectionné dans ce produit. L'utilisation par des tiers, y compris, sans toutefois s'y limiter, des éditeurs, des professeurs particuliers, des services de tutorat ou d'aide aux études, des établissements de préparation à l'enseignement supérieur, des fournisseurs de services de planification des programmes d'études, des gestionnaires de plateformes pédagogiques en ligne, et des développeurs d'applications, moyennant paiement ou non, est interdite et constitue une infraction pénale.

Pour plus d'informations sur la procédure à suivre pour obtenir une autorisation écrite sous la forme d'une licence, rendez-vous à l'adresse https://ibo.org/become-an-ib-school/ib-publishing/licensing/applying-for-a-license/.

© Organización del Bachillerato Internacional, 2021

Todos los derechos reservados. No se podrá reproducir ninguna parte de este producto de ninguna forma ni por ningún medio electrónico o mecánico, incluidos los sistemas de almacenamiento y recuperación de información, sin la previa autorización por escrito del IB. Además, la licencia vinculada a este producto prohíbe el uso de todo archivo o fragmento seleccionado de este producto. El uso por parte de terceros —lo que incluye, a título enunciativo, editoriales, profesores particulares, servicios de apoyo académico o ayuda para el estudio, colegios preparatorios, desarrolladores de aplicaciones y entidades que presten servicios de planificación curricular u ofrezcan recursos para docentes mediante plataformas digitales—, ya sea incluido en tasas o no, está prohibido y constituye un delito.

En este enlace encontrará más información sobre cómo solicitar una autorización por escrito en forma de licencia: https://ibo.org/become-an-ib-school/ib-publishing/licensing/applying-for-a-license/.





Business management Standard level Paper 2

Monday 3 May 2021 (morning)

1 hour 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 one question.
- A calculator is required for this examination paper.
- The maximum mark for this examination paper is [30 marks].

-2- 2221–5014

[2]

Section A

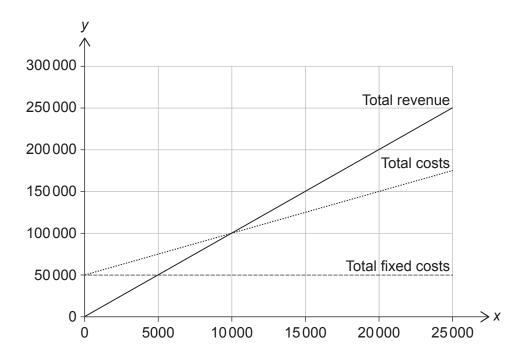
Answer **one** question from this section.

1. Hafs

Hafs is a new cooperative. It plans to manufacture wastepaper bins for the household market.

Hafs has forecast its sales in 2021 as 25 000 units. Its forecasted break-even chart is shown in **Figure 1**.

Figure 1: Forecasted break-even chart for Hafs for 2021



- (a) State **two** features of a cooperative.
- (b) Using **Figure 1**:
 - (i) explain what the *y* axis shows; [2]
 - (ii) calculate forecasted profit if sales are 25 000 units in 2021 (show all your working); [2]
 - (iii) calculate the total contribution in 2021 if *Hafs* only sells 20 000 units (*show all your working*). [2]
- (c) Explain whether an increase in total fixed costs has an impact on unit contribution. [2]

-3- 2221-5014

2. The Pie Store (TPS)

The Pie Store (TPS) bakes pies and sells them in its three retail stores. When developing its brand, TPS used the mathematical symbol pi (π) . In 2020, each store made a profit.

Table 1: Financial information for TPS' three retail stores for 2020 (all figures in \$)

	Store 1	Store 2	Store 3
Sales	180 000	223 000	170 000
Cost of goods sold	90 000	120 000	85 000
Gross profit	90 000	103 000	85 000
Expenses	66 000	76 000	67000
Net profit before interest and tax	Х	Y	Z

At the end of 2020, the balance sheet for *TPS* (the three stores combined) showed \$200 000 in assets and \$120 000 in liabilities. \$50 000 of the liabilities was long-term debt.

(a)	Desc	ribe one step in the development of a brand.	[2]
(b)	Calculate:		
	(i)	which store made the highest net profit before interest and tax (no working required);	[1]
	(ii)	which store had the highest profitability (show all your working).	[2]
(c)	c) Calculate:		
	(i)	TPS' equity;	[1]
	(ii)	TPS' return on capital employed (ROCE) (show all your working).	[2]
(d)		ain one effect that the \$50000 long-term debt may have on <i>TPS</i> ' profit and account.	[2]

-4- 2221-5014

Section B

Answer **one** question from this section.

3. Buzza

Jo and Demi Straus established *Buzza*, a partnership, in 1999. *Buzza* manufactures women's fashion accessories, such as handbags and scarves. Jo, a gifted designer, directs the design team. Demi, a business graduate, organized the business by function. She manages most of those functions.

In 2012, they converted *Buzza* to a private limited company to help obtain finance for the business's expansion. Jo and Demi retained 60% ownership between them.

Because of the brand's reputation, *Buzza* can recruit creative graduates from design universities. Graduates receive 12-month contracts, which are renewed only if *Buzza* accepts their designs. *Buzza* tells graduates that, generally, only half of all contracts are renewed. The average age in the design team is 26. Labour turnover in the design team is much higher than in similar exclusive brands.

Wealthy consumers interested in the latest fashions find *Buzza* a highly desirable and exclusive brand. Only approved retail outlets sell *Buzza* products. New collections are produced four times a year. At the end of each season, retailers return unsold products to *Buzza*. Last year, these unsold products were valued at \$15 million. At present, *Buzza* sends returned products to an incinerator plant to be destroyed. A recent television documentary revealed that *Buzza* incinerates perfectly good products, which led to damaging social media comments.

In response to the negative publicity, Jo and Demi are considering two options:

Option 1: Sell surplus products at greatly reduced prices on its website.

Option 2: Break down returned products to recover raw materials for re-use in future products. This process of breaking down returned products will be time consuming and costly.

(a) State three of Buzza's main business functions. [2]
(b) Explain one advantage and one disadvantage to Buzza of operating as a partnership. [4]
(c) Explain one advantage and one disadvantage of the high labour turnover of designers at Buzza. [4]
(d) Discuss the two options that Jo and Demi are considering. [10]

- 5 - 2221-5014

4. ReVolve Ltd (RV)

ReVolve Ltd (RV) manufactures and sells high-quality, high-priced bicycles to high-income earners. Operating in a niche market, its advertising slogan and unique selling point/proposition (USP) is "hand made to order, in the USA, delivered within seven days". Brand loyalty is strong, but brand recognition outside of its customer base is weak. 98% of its sales are to customers living within 50 miles of the business.



Prior to 2017, *RV* received an increasing number of customer complaints that phone lines were often engaged and calls not returned. As such, it adopted e-commerce. Its website now allows customers to:

- customize their choice of bicycle
- place orders
- · pay for purchases
- have their questions answered.

RV employs 20 highly paid, skilled employees using job production. To retain these workers, *RV* has raised their wages significantly since 2016.

Increasing competition from imports of hand-made high-quality bikes has forced down prices in this niche market. *RV* has been making increasingly larger losses since 2017. In 2020, its sales fell by 15%. Inflation is forecasted at between 2% and 3% for the next three years. As such, *RV*'s directors are considering two options to enable it to lower the prices of its bicycles.

Option 1: Offshore production to China, where production costs are significantly lower. The bicycles would be manufactured using batch production. *RV* would focus only on the design and marketing of its bicycles.

Option 2: Invest in new job production techniques that enable parts to be glued rather than welded, which only requires unskilled labour. Investment would cost \$3 500 000 and the forecasted annual net cash flow is \$600 000.

(a) Define the term niche market. [2] Explain **two** benefits to *RV* of the decision to adopt e-commerce. (b) [4] Calculate the payback period if *RV* chooses **Option 2** (*show all your working*). (c) (i) [2] Explain **one** disadvantage to RV of using the payback period method of (ii) investment appraisal. [2] Recommend whether RV's directors should choose Option 1 or Option 2. (d) [10] **-6-** 2221-5014

5. KapTan

KapTan (*KT*), which manufactures rechargeable batteries for cordless consumer products like vacuum cleaners, began five years ago as a business with a product orientation. It sells business to business (B2B). Multinational companies dominate the rechargeable battery industry, and *KT* suffered from cash-flow problems in its first year of trading. Its profits are small and, in the last two years, have fallen.

KT has now developed an innovative battery that is small and lightweight. This battery is an emergency power source allowing electric cars to reach a charging station. However, the battery can only be used ten times before it runs out. *KT* has insufficient finance to create a battery that can be recharged an unlimited number of times.

Through market research, KT has discovered that:

- no other emergency batteries for electric cars exist
- owners of electric cars fear running out of power
- KT's new battery could be obsolete in five years.

KT has the capacity to produce 90 000 of these new batteries each year. The average cost is \$200 per unit. *KT* has insufficient funds to invest in additional capacity.

KT is considering two options:

Option 1: Market and sell directly to existing car owners through business to consumer (B2C) at a retail price of \$400. *KT* will need to borrow significant capital to finance this option.

Option 2: Accept an offer of a five-year strategic alliance with a manufacturer of electric cars. *KT* would provide its product exclusively at \$250 per unit. Sales are guaranteed.

Table 2: KT's forecasted and guaranteed worldwide unit sales (in 000s) for the two options

Year	Option 1 forecasted sales	Option 2 guaranteed sales
1	50	40
2	60	50
3	100	85
4	110	80
5	90	60
Total sales	410	315



- (b) With reference to **Option 1**, for *KT*, explain the relationship between the product life cycle, investment, profit and cash flow. [4]
- (c) With reference to KT, explain **two** problems that a new business may face. [4]
- (d) Recommend whether KT should choose **Option 1** or **Option 2**. [10]

Reference	ces:
4.	[Bicycle] Hall, E., (2006). My new bicycle [online]. Available at https://www.flickr.com/photos/mulegirl/99132433 (CC BY-SA 2.0) https://creativecommons.org/licenses/by-sa/2.0/ [Accessed 29 August 2019].
All other	texts, graphics and illustrations © International Baccalaureate Organization 2021