Diploma Programme
Programme du diplôme
Programa del Diploma

© 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/.

https://xtremepape.rs/

Business management
Higher level
Paper 2

Monday 3 May 2021 (morning)

1 hour 45 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.
- A calculator is required for this examination paper.
- The maximum mark for this examination paper is **[50 marks]**.

2221 – 5012

6 pages

© International Baccalaureate Organization 2021

https://xtremepape.rs/

Section A

Answer **one** question from this section.

1. 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	67 000
Net profit before interest and tax	**X**	**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) Describe **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) Calculate:

(i) *TPS*' equity; [1]

(ii) *TPS*' return on capital employed (ROCE) (*show all your working*). [2]

(d) Explain **one** effect that the $50 000 long-term debt may have on *TPS*' profit and loss account. [2]

https://xtremepape.rs/

2. Sharon's Super Lunches (SSL)

Sharon's Super Lunches (*SSL*) is a cooperative that provides healthy school lunches. The lunches are delivered daily to students, who order them online. *SSL* aims for a minimum order size of 50 lunches to deliver to a school.

Table 2: Sales and other financial information for *SSL* for one week

Forecasted sales of lunches	3200
Maximum sales of lunches	4000
Price of lunches	$10.20
Variable costs per lunch	$6.40
Fixed costs for *SSL*	$7980

SSL is considering a new promotional strategy for healthy school lunches: they will donate a free school lunch to a student in a lower-income area for each lunch purchased in a higher-income area.

(a) Describe **one** feature of a cooperative. [2]

(b) Using total contribution, calculate the forecasted total profit for *SSL* **before** the introduction of the new promotional strategy (*show all your working*). [2]

(c) Construct a fully labelled break-even chart for *SSL* for **before** the new promotional strategy is introduced (*show all your working*). [4]

(d) Explain **one** advantage to *SSL* from implementing the new promotional strategy. [2]

https://xtremepape.rs/

Section B

Answer **two** questions from this section.

3. Soft Skin Cosmetics (SSC)

Soft Skin Cosmetics (*SSC*) is a private limited company that produces a small range of face creams and soaps. Its products are designed and produced in the United States, and are made from safe, natural ingredients.

SSC has a product-orientated marketing approach. Tiffany Presley, one of the company's co-founders, believes that *SSC*'s consumers value health above fashion. "The skincare market is full of toxic products, but ours are healthy even if they don't smell or look as nice," she says. Chelsea Presley, *SSC*'s other co-founder, wants to develop the first sunscreen free of synthetic chemicals. However, product innovation is costly and risky. If the new sunscreen is a failure, several years of research and development costs will be wasted, which *SSC* cannot afford. *SSC* currently lacks the scale to innovate.

SSC does not pay for advertising. It relies on social media and word-of-mouth promotion. Its brand awareness is very high among young women, and customer reviews are very positive about *SSC*'s quality and effectiveness. The company only sells online, not in retail outlets. To reach unsatisfied demand domestically and internationally, *SSC* would have to broaden its current distribution channels.

SSC practises corporate social responsibility (CSR). It does not test its products on animals, and supports several charities protecting endangered species. Pressure groups publicly recognize *SSC*'s commitment to animal welfare.

Currently, multinational companies dominate the global skincare market. Small emerging companies rarely survive. Chelsea wants to convert *SSC* to a public limited company, but Tiffany disagrees: she argues that shareholder pressure toward profit maximization could jeopardize consumer and animal safety.

(a) State **two** features of product innovation. [2]

(b) Explain **one** advantage **and one** disadvantage for *SSC* of having a product-orientated marketing approach. [4]

(c) Explain **one** advantage **and one** disadvantage to *SSC* of practising corporate social responsibility (CSR). [4]

(d) Discuss Chelsea's idea to convert *SSC* into a public limited company. [10]

https://xtremepape.rs/

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]

(b) Explain **two** benefits to *RV* of the decision to adopt e-commerce. [4]

(c) (i) Calculate the payback period if *RV* chooses **Option 2** (*show all your working*). [2]

(ii) Explain **one** disadvantage to *RV* of using the payback period method of investment appraisal. [2]

(d) Recommend whether *RV*'s directors should choose **Option 1** or **Option 2**. [10]

https://xtremepape.rs/

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 3: *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

(a) Define the term *product orientation*. [2]

(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]

https://xtremepape.rs/

References:

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

https://xtremepape.rs/