

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 written permission from the IB.

Additionally, the license tied with this product prohibits commercial 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, is not permitted and is subject to the IB's prior written consent via a license. More information on how to request a license can be obtained from <https://ibo.org/become-an-ib-school/ib-publishing/licensing/applying-for-a-license/>.

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 de l'IB.

De plus, la licence associée à ce produit interdit toute utilisation commerciale 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, n'est pas autorisée et est soumise au consentement écrit préalable de l'IB par l'intermédiaire d'une licence. Pour plus d'informations sur la procédure à suivre pour demander une licence, rendez-vous à l'adresse suivante : <https://ibo.org/become-an-ib-school/ib-publishing/licensing/applying-for-a-license/>.

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 que medie la autorización escrita del IB.

Además, la licencia vinculada a este producto prohíbe el uso con fines comerciales 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— no está permitido y estará sujeto al otorgamiento previo de una licencia escrita por parte del IB. En este enlace encontrará más información sobre cómo solicitar una licencia: <https://ibo.org/become-an-ib-school/ib-publishing/licensing/applying-for-a-license/>.

Business management

Higher level

Paper 1

Monday 26 October 2020 (afternoon)

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 case study** is required for this examination paper.
- Read the case study carefully.
- A clean copy of the **business management formulae sheet** is required for this examination paper.
- Section A: answer two questions.
- Section B: answer question 4.
- Section C: answer question 5.
- A calculator is required for this examination paper.
- The maximum mark for this examination paper is **[60 marks]**.

Section A

Answer **two** questions from this section.

1. (a) With reference to *DA*, outline **two** suitable methods of sampling (lines 112–113). [4]
(b) Explain the factors that *DA* would need to consider before deciding to outsource some of its production (line 110). [6]
2. (a) Outline **two** STEEPLE factors that have influenced *DA*'s business strategy. [4]
(b) Explain how knowledge of the product life cycle may have influenced *DA*'s product range. [6]
3. (a) Outline **one** benefit of Viv's leadership style **and one** benefit of Salah's leadership style (lines 82–84). [4]
(b) Explain suitable sources of finance for **Option B**. [6]

Section B

Answer the following question.

4. There are several important items to be discussed at *DA*'s board meeting, three of which are outlined below.

Item 1: Budgets. *DA* produces its budgets based on the functional areas of the business. For example, the Marketing, Production, Innovation and Corporate Social Responsibility (CSR) Departments are all separate cost centres. Pierre is proposing that budgets should be more detailed so that, for example, each of *DA*'s products has its own cost centre and each separate innovation project is also a cost centre.

Item 2: Recommendations from the management consultants. The management consultants propose bringing *DA* more up to date with employment practices by replacing the many benefits that employees get with a low basic pay and a profit-related bonus, and charging market rents for the housing in Ville d'Ablet. There will also be penalties on employees for failing to meet targets. The CSR department are opposed to this idea because they believe it will change the culture of the business, which has built up over many years.

Item 3: The manufacture of rechargeable batteries used in cordless products. *DA* currently makes its own rechargeable batteries. In 2019, it made 10 000 batteries. The variable cost is €15 per battery and the fixed costs are €30 000. *XL*, a public limited company, is a major manufacturer of batteries. *DA* has contacted *XL* to manufacture the rechargeable batteries, which they will buy from *XL* at €17 each.

- (a) Define the term *public limited company*. [2]
- (b) Explain **one** advantage **and one** disadvantage for *DA* of changing from function-based cost centres to the cost centres proposed by Pierre. [4]
- (c) (i) Calculate the difference between the cost for *DA* to make the rechargeable batteries and the cost to buy them from *XL*. [3]
- (ii) Suggest **one** other factor that *DA* should consider before deciding whether to make the rechargeable batteries or buy them from *XL*. [1]
- (d) Discuss the likely impact on *DA*'s organizational culture of the changes recommended by the management consultants. [10]

Turn over

Section C

Answer the following question.

5. The final item in the board meeting (**Item 4**) is to discuss and decide which of the directors' proposals, Option A, B or C, to implement.

Mia withdrew her proposal (**Option C**), and there is now additional information available on the remaining two proposals.

Additional information on Option A: Market development

Louise plans to target the mass market and proposes using the brand name DuLow for the redesigned products. She is planning for *DA* to outsource production to *Star Electrics (SE)*. *SE* uses mass production together with some customization of products. *SE* keeps costs low by importing cheap raw materials and paying low wages.

Ben, the human resource management director, is concerned about the impact this change would have on *DA*'s employees and about the impact of DuLow on *DA*'s other brands. He has collected relevant information on household electrical appliances (see **Figure 1**).

Figure 1: Data on household electrical appliances, France

- The market is expected to grow by 0.5% per annum.
- Average spending per household is €114 per annum.
- Major national brands have 95% of the market share.
- Top-selling brands compete on advertising and price.
- Washing machines and vacuum cleaners are at saturation.
- Sales of kettles, toasters and microwaves are growing at 1% per annum.
- Sales of food mixers have high growth.

Louise has estimated that the investment necessary to launch the DuLow product range will have a payback of about two years and an average rate of return (ARR) of about 30%. This assumes high market penetration.

(This question continues on the following page)

(Question 5 continued)

Additional information on Option B: Product development

Salah's plan requires new production lines, one for each product. Salah thinks that cellular manufacturing, together with a flow production assembly line, would be a good way to manufacture the interchangeable modules. The investment cost is estimated to be €100 million if production lines are converted gradually and €20 million more if all conversions are done at the same time. Salah estimates the following net cash inflows (excluding the initial investment cost) (**Table 1**).

Table 1: Forecast financial information for Option B (figures in € millions)

Year	Net cash inflow (excluding initial investment cost of €100 million)
1	20
2	30
3	40
4	60
5	30

Louise does not think *DA* can afford the project because profits are low. Dodi, the finance director, thinks that the investment is too large and he believes that some shareholders are also concerned about the size of future dividends. Salah believes that shareholders will be pleased about the revenues that this investment will generate. Mia is worried that the products would be expensive to market and it would be difficult to make a profit. She also thinks that demand for these new products will be difficult to predict.

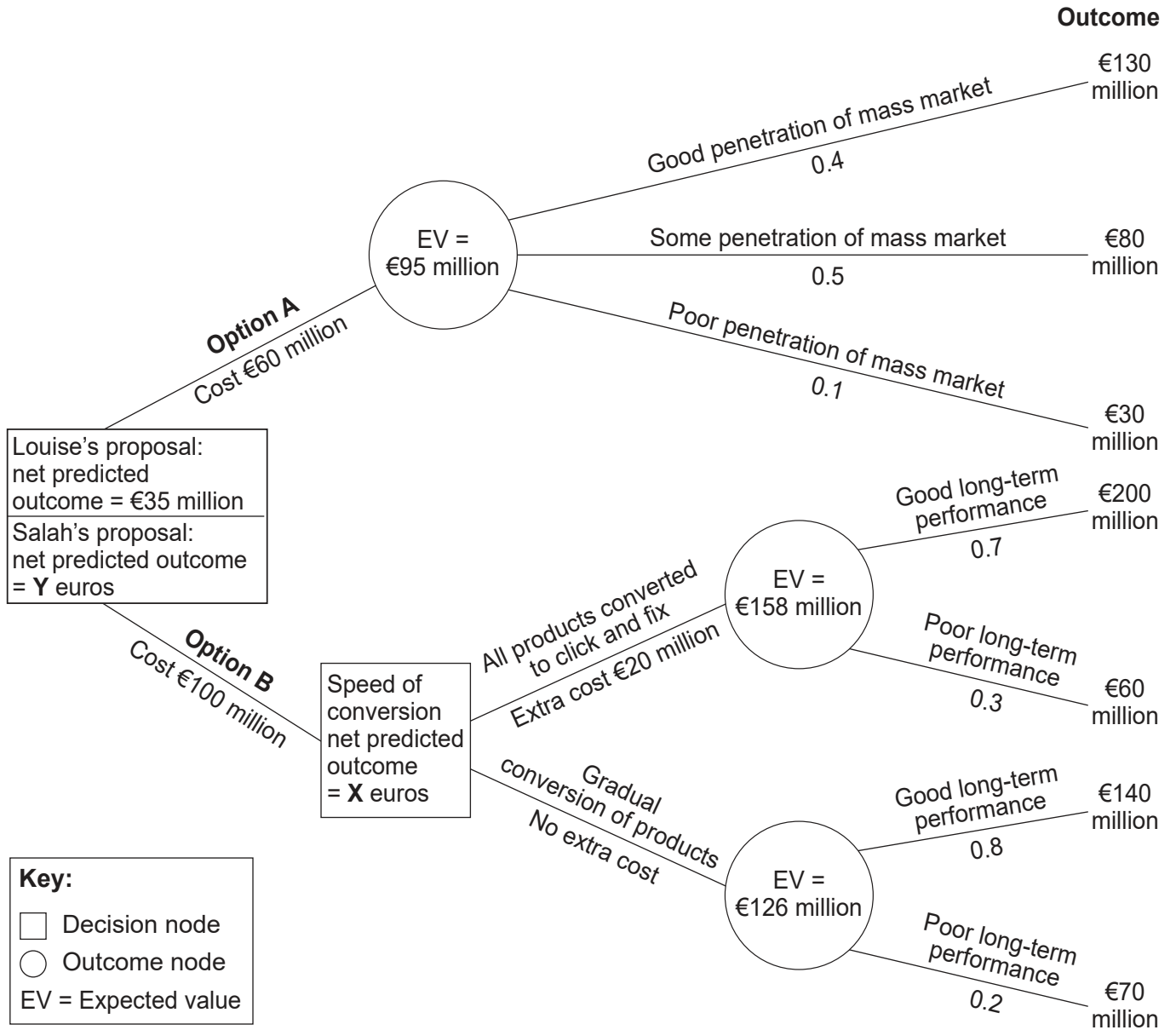
(This question continues on the following page)

Turn over

(Question 5 continued)

Additional information for both options

Figure 2: Decision tree



Using the case study and additional information from Sections B and C, recommend whether DA should choose **Option A** or **Option B**. You may find it useful to complete and use the decision tree and to analyse **Table 1**.

[20]