

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

Thursday 21 May 2015 (morning)

2 hours 15 minutes

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**Instructions to candidates**

- Do not open this examination paper until instructed to do so.
- Section A: answer one question.
- Section B: answer two questions.
- A calculator is required for this examination paper.
- Clean copies of the **business and management formulae sheet and discount tables** are required for this examination paper.
- The maximum mark for this examination paper is **[75 marks]**.

## Section A

Answer **one** question from this section.

### 1. Creative Toys (CT)

*Creative Toys (CT)* manufactures toys and markets them business-to-customers (B2C) online only. The business operates in a leased industrial site and relies on word-of-mouth promotion only. To make customers believe that *CT*'s toys are better than its competitors, *CT* sets prices slightly higher than the competition. Production and sales are mostly between 1 October and 24 December. Most of the employees work on temporary contracts during this busy period. For the remainder of the year, *CT* operates well below capacity utilization.

Table 1 contains selected data for *CT*, for 2014:

**Table 1**

Sales revenue	€300 000
Number of toys sold	12 500
Fixed costs	€121 800
Variable cost per toy	€10

In 2014, the management of *CT* considered a change of the marketing mix to include above the line promotion, lower prices, and an additional sales method called “toy parties”. Toy parties would be hosted by newly recruited *CT* sales representatives and attended by parents and their children. At the parties parents could see the toys and children could play with them. Sales would be made at the parties by the new sales representatives, who would be paid on a commission-only basis.

Toy parties could be held throughout the year and make *CT*'s total sales less seasonal. Based on market research, management has estimated that the parents' demand for toys is price elastic and is planning to set lower prices for all toys sold online and at toy parties. The management has prepared forecasted financial data for *CT*, for 2015, based upon the proposed change to the marketing mix, shown in Table 2 below.

**Table 2**

Cash sales revenue	€352 000
Closing cash balance at year-end 2014	€37 000
Fixed assets	€40 000
Fixed costs	€180 000
Raw materials	€128 000
Sales commissions	€32 000
Other variable costs	€32 000

The Finance Manager will carry out a variance analysis in order to determine whether the proposed change to the marketing mix has been successful.

**(This question continues on the following page)**

**(Question 1 continued)**

- (a) Identify **two** possible types of above the line promotion that *CT* could use. [2]
- (b) Define the term *variance analysis*. [2]
- (c) Explain **two** possible human resource implications for *CT*'s management given the proposed change to introduce “toy parties” as an additional sales method. [4]
- (d) Using information from **Table 1**:
  - (i) calculate the break-even level of output for *CT*, for 2014 (*show all your working*); [2]
  - (ii) construct to scale a fully labelled break-even chart for *CT*, for 2014. [5]
- (e) Using information from **Table 2**, prepare an **annual** cash-flow forecast for *CT*, for 2015. [4]
- (f) Analyse *CT*'s management plan to reduce the price of *CT*'s toys. [6]

**Turn over**

**2. Sleep Well Limited**

*Sleep Well Limited* is a family-run private limited company. They own a luxurious and prestigious hotel, *Sleep Well (SW)*, which is located in an expensive city-centre location in New York, United States (US). Its customers are international travellers who expect comfort and excellent service and are willing to pay a high price. Capacity utilization of the hotel rooms is 95% on most days. However, loyal customers are frustrated that sometimes they cannot reserve a room because the hotel is full.

The hotel management is considering extending the hotel with a new building with larger rooms and the most luxurious facilities. The prices of the larger rooms in the new building will be 50% higher than the rooms in the current building.

Market research commissioned by *SW* highlighted the following:

- In the short term, the economic environment in many of the home countries of *SW*'s customers will deteriorate. However, the economic environment should improve after two years.
- The US dollar is likely to increase in value in relation to other currencies.
- *SW* customers' demand is price inelastic and is income elastic.
- Severe shortage of qualified labour is forecasted in the service industry.

The table below shows the Operation Manager's planned activities for legal procedures and the construction of the new building.

Activity	Order/Dependency	Duration
A		4 months
B		5 months
C	Must follow A	3 months
D	Must follow B	4 months
E	Must follow C and D	6 months
F	Must follow E	11 months
G	Must follow E	3 months
H	Must follow G	4 months
I	Must follow F and H	2 months

However, the Finance Manager is concerned that strict planning regulations imposed on construction in the city centre could create extra costs and cause delays in the completion of the new building. Selling shares is considered as one option for financing the project. The Marketing Manager is worried about the impact on the customer experience during the construction process.

**(This question continues on the following page)**

**(Question 2 continued)**

- (a) Identify **two** advantages of *Sleep Well Limited* being a private limited company. [2]
- (b) Define the term *capacity utilization*. [2]
- (c) Explain **one** advantage and **one** disadvantage of using the critical path analysis model as a project management tool, for the construction of *SW's* new building. [4]
- (d) Construct a fully labelled network diagram to represent the sequence of activities in the table. Show the earliest starting time (EST) and the latest finishing time (LFT) for each activity **and** identify the critical path. [6]
- (e)
  - (i) Identify any total float from the diagram constructed in part (d) (*no working required*). [1]
  - (ii) Using the total float you identified in part (i), calculate any free float (*show all your working*). [2]
  - (iii) Comment on how *SW* could use any free float as calculated in part (ii). [2]
- (f) Examine the option of the construction of the new building for *SW*. [6]

**Turn over**

## Section B

Answer **two** questions from this section.

### 3. Fujifilm

Throughout its history, *Fujifilm* has innovated. It invented many products such as the first high-speed colour photographic film and the first disposable camera. *Fujifilm* was one of the most trusted brand names in the photographic industry.

*Fujifilm* adapted to changes in the external environment. Digital photography and smartphones were causing a significant reduction in sales of photographic film. Researchers at *Fujifilm* discovered that patented chemicals used in *Fujifilm*'s photographic film products are antioxidants\* that could be used in cosmetic products. In 2007, *Fujifilm* invented a skincare product line and branded it *Astalift*. *Fujifilm* spent a large amount of money developing the new brand name and building awareness and loyalty. *Astalift* quickly became one of the best-selling brands in Japan's skincare product market.

In response to the success of *Astalift*, *Fujifilm*:

- acquired complementary pharmaceutical companies and built research and development (R&D) facilities to develop additional cosmetic products under the *Astalift* brand
- set up a new division that develops medical equipment based on photographic film and imaging technologies (such as digital X-rays) marketed under the *Fujifilm* brand name.

*Fujifilm* understood changes in societal norms, such as lifestyle and income of women in many Asian and European countries. At present 20% of sales are generated outside of Japan. In Europe, *Fujifilm* adapts its marketing mix for consumer preferences in each country. Ultimately, *Fujifilm* wants to transform *Astalift* into a global brand.

Today, only 1% of *Fujifilm*'s revenue comes from photographic film, while 99% of revenue comes from the sales of cosmetics and medical equipment. Now, *Fujifilm* has been so successful that other companies are trying to imitate its success on a global scale. Japan's beverage company *Suntory* has developed its own range of natural skincare products to be marketed under its well-known brand name *Suntory*.

[Source: adapted from: <http://www.economist.com/>  
<http://www.nippon.com/>  
<http://www.brandchannel.com/>]

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\* antioxidants: molecules that prevent the oxidation of other molecules, which can maintain the health of cells; they are often used as preservatives in cosmetics

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**(Question 3 continued)**

- (a) Describe **one** internal factor and **one** external factor possibly affecting innovation at *Fujifilm*. [4]
- (b) Explain **one** benefit of a patent for *Fujifilm*. [2]
- (c) Explain **one** benefit and **one** cost of research and development (R&D) for *Fujifilm*. [4]
- (d) Using the Ansoff matrix, examine *Fujifilm*'s decision to diversify. [6]
- (e) Discuss the decision of *Fujifilm* to create the **new brand**, *Astalift*. [9]

Turn over

#### 4. BDM

*BDM* manufactures motors used in small kitchen appliances. It operates in its original factory built in 1977, which is located near the centre of a large and growing city. Since 1977, property values have risen significantly and are forecasted to increase further. Most of *BDM*'s workers purchased their homes decades ago and live near the factory. Younger workers, however, complain that accommodation near the city centre costs too much for them to live nearby. Older workers are loyal to the company and in many cases have specialized skills.

Recently, *BDM*'s sales have rapidly increased through internal growth, and the factory should reach full capacity within several years. *BDM*'s loyal customers value its unique selling proposition (USP): lower prices than competitors of comparable quality. Customers are small businesses located in the city which use *BDM*'s motors to help with the manufacture of inexpensive appliances for local markets. 5% of *BDM*'s sales are made through business-to-business (B2B) e-commerce. Sales are increasing.

*BDM* is profitable. Stock turns over in 35 days and creditor accounts are settled in 30 days. Last year, *BDM*'s sales revenue was \$24 000 000 and its debtor's accounts balance was \$2 176 000 at the end of its financial year. The industry standard of credit terms is for customers (debtors) to pay in 30 to 35 days. Because of the poor management of sales growth and use of just-in-case stock control, *BDM* has a liquidity problem.

To resolve its liquidity problem, *BDM* is considering two options:

- (Option 1) sell the factory and relocate to a much larger one located 27 kilometres from the city centre. The new factory (for *BDM*) would cost significantly less.
- (Option 2) sell the factory and lease it back from the purchaser. Change to just-in-time stock control management and shorten the credit terms given to customers from 30 to 15 days.

- (a) Define the term *internal growth*. [2]
- (b) Identify **two** features of e-commerce. [2]
- (c) Calculate the debtor days ratio (*show all your working*). [2]
- (d) Explain **two** problems, **other than** liquidity, for *BDM*, of rapid sales growth. [4]
- (e) Analyse the possible impact on pricing and place in the marketing mix, if *BDM* moves from its current location (**Option 1**). [6]
- (f) Discuss *BDM*'s **Option 2** to resolve its liquidity problem. [9]



## 5. Chips to Go (C2G)

*Chips to Go (C2G)* produce potato chips for the British market. C2G’s Chief Executive Officer (CEO) is Charles Chip who is a dynamic entrepreneur famous for taking risks with chip flavours such as “banana and sour cream” and “chocolate fudge” and promoting them with humour especially appealing to British culture. C2G has created a number of successful snack products under the C2G family brand. Charles uses intuitive rather than scientific decision-making. He rarely consults with senior managers or considers financial data.

C2G’s value as a company in terms of goodwill, brand value and other intangible assets is tied very closely to the personality and lifestyle of Charles. He is the company’s most valuable intangible asset and is very popular among the younger generation. He is constantly in the news trying to travel around the world in a canoe, or taking risks by parachuting off high buildings to gain free publicity and word-of-mouth promotion. Current and potential investors have contacted the finance department as to what may happen to the value of these intangible assets if Charles were to have a serious accident.

C2G is looking for ways to increase market share in an increasingly competitive domestic snack market. One long-time aim for Charles has been the creation of a potato chip with all the taste of regular chips but without any fat. The marketing department of C2G is very excited with this idea but the Production Manager has indicated to Charles that it cannot be produced. Charles has been told and was furious.

A second strategic option could be to launch the potato chips into a new international market. One of Charles’s closest advisers has argued that C2G would need to be careful with its product and promotion, as overseas customers may not share British tastes in potato chips, or British humour in promotion. He urges Charles to take time to carry out extensive market research of the new international market.

- (a) Describe **two** stakeholder conflicts at C2G. [4]
  - (b) Explain **two** reasons why it may be difficult to value C2G’s intangible assets. [6]
  - (c) With reference to C2G, compare and contrast intuitive and scientific decision-making. [6]
  - (d) Evaluate the strategic decision to launch C2G’s potato chips into a new international market. [9]
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