

International Baccalaureate
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88145014

## BUSINESS AND MANAGEMENT <br> STANDARD LEVEL <br> PAPER 2

Thursday 20 November 2014 (morning)
1 hour 45 minutes

## 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.
- A clean copy of the Business and Management formulae sheet is required for this examination paper.
- The maximum mark for this examination paper is [60 marks].


## SECTION A

Answer one question from this section.

## 1. Suparman Fish (SF)

Gepa Suparman owns and operates four fishing boats in Indonesia. There is a growing demand for canned (tinned) food, including cans of fish. Gepa wants to enter the secondary sector by opening a small factory producing cans of fish.

Gepa's business will be called Suparman Fish (SF) and will be a private limited company. Gepa will own all of the shares. The factory will be located in a village three miles from the harbour. Because unemployment is high in the village, Gepa should easily find workers for the new factory. In addition to the manager's salary, workers' wages, and the cost of fish, supplies, and cans, $S F$ will have the semi-variable cost of electricity.

Gepa has prepared a four-month cash-flow forecast based on the following information:

- opening balance month $1: \$ 15000$.
- month 1 : sales revenue of $\$ 1000$, increasing by $20 \%$ per month.
- manager's salary: $\$ 300$ per month.
- workers' wages: $\$ 175$ per worker per month.

| Month | 1 | 2 | 3 | 4 |
| :--- | :---: | :---: | :---: | :---: |
| Number of workers | 2 | 3 | 4 | 5 |

- variable costs (fish, supplies, and cans) are equal to $40 \%$ of sales revenue.
- semi-variable cost of electricity: fixed cost of $\$ 100$ per month, plus a variable cost of $\$ 0.10$ per kilowatt hour (kwh). Month 1 usage: 100 kwh , increasing by $10 \%$ each month.

Although $S F$ would create several jobs in the village, many residents are not happy about the new factory. The new factory would use chemicals, which cause pollution. Residents are concerned about the unpleasant smells from the factory. A representative from the local employment office is concerned whether Gepa's factory will provide a safe working environment.
(a) (i) Define the term secondary sector. [2 marks]
(ii) Identify two advantages to $S F$ of being a private limited company.
[2 marks]
(b) Explain why electricity is a semi-variable cost for $S F$.
(c) Prepare a monthly cash-flow forecast for $S F$ for the first four months of operation. [6 marks]
(d) Calculate SF's forecast net profit for the first four months of operation (show all your working).
(e) Calculate $S F$ 's forecast net profit margin for the first four months of operation. [1 mark]
(f) Examine two potential stakeholder conflicts when Gepa opens his factory. [5 marks]

## 2. Raapin Guitars ( $R G$ )

Raapin Guitars $(R G)$ manufactures guitars in Finland. Over many decades, it has built a reputation for producing high quality, handmade guitars. Apprentices* are recruited when they are 16 or 17 years old. Each apprentice completes a seven-year training program. They are then considered "professional craftsmen" and can expect permanent careers at $R G$. Each craftsman works with two apprentices to produce high-quality guitars using a batch production method.

Last year, $R G$ sold 4920 guitars at an average price of $€ 1200$ each. It employed 42 professional craftsmen earning $€ 50000$ per year and one manager earning $€ 70000$ per year.

| Annual fixed costs | $€$ |
| :--- | :--- |
| Insurance | 120000 |
| Rent | 480000 |
| Manager's and craftsmens' salaries | X |
| Apprentices' salaries | 700000 |
| Lease on equipment | 600000 |


| Variable costs per guitar | $€$ |
| :--- | ---: |
| Materials | 225 |
| Supplies | 35 |
| Other | 15 |

Recently, $R G$ has struggled to recruit talented teenagers for the apprentice program. Most teenagers in Finland complete secondary school and go to university. Many of them graduate as engineers and design technologists. As a consequence, Anni Raapin, Chief Executive Officer (CEO) of $R G$, is considering changing the overall production process at $R G$. She wants to change from a traditional batch production process using professional craftsmen, to an automated flow production process led by two highly trained engineers. These engineers will manage the new production process operated by low-skilled workers.

Even if $R G$ changes to this new production process, the professional craftsmen will not be made redundant. The oldest craftsmen will be offered early retirement. Others will become managers of the new flow production process; the youngest ones will become low-skilled workers. As the craftsmen retire, they will be replaced by workers who have not trained as apprentices and have no knowledge of the traditional batch production process. These new workers will be paid half the salary of the previous professional craftsmen.

[^0](Question 2 continued)
(a) (i) Describe how one demographic change in Finland affects $R G$.
(ii) Identify two features of a flow production process.
(b) Calculate for $R G$ for one year:
(i) manager's and craftsmens' salaries (figure X ).
(ii) the break-even level of output (show all your working).
(iii) the profit or loss last year (show all your working).
(c) Construct a fully labelled break-even chart for $R G$.
(d) Analyse the possible impacts of Anni's proposed changes on the motivation of the workers at $R G$.

## SECTION B

Answer two questions from this section.

## 3. SGS

SGS operates a worldwide delivery business. SGS's aim is to deliver all packages on time, at low prices, anywhere in the world. Its Chief Executive Officer (CEO) Jean-Paul Lominé is known even by customers as an autocratic leader. Twice a year he sets prices and targets for costs and customer satisfaction.
$S G S$ has three main competitors, Company A, B and C.

|  | Perception <br> of price | Perception of <br> reliability |
| :--- | :--- | :--- |
| SGS | Low | Medium |
| Company A | Medium | High |
| Company B | Low | Low |
| Company C | High | High |

Primary market research revealed that customers value delivery on time, but many would pay higher prices for a more environmentally friendly service. It also showed that customers did not know whether $S G S$ followed socially responsible "green" (environmentally friendly) practices. Customers also believed that the company's current autocratic leadership style did not fit with "green" practices.

Jean-Paul decided to change his leadership style from autocratic to situational*. He wrote a new aim for $S G S$ : to make it the world's greenest delivery company. He ordered the Operations Department to recommend possible strategies. The Operations Department suggested two:

- purchase new, energy-efficient airplanes
- adopt new software to set fuel-saving air routes.

The Finance Department calculated that purchasing new airplanes would be a significant cost resulting in higher prices to customers. Tactically $S G S$ would purchase a new airplane each time an existing airplane required significant expenditure to keep it flying. Adopting new software would require major computer upgrades, but the cost of the investment would be quickly recovered from fuel savings. The Marketing Director reported to Jean-Paul that if customers did not realize that SGS was now more environmentally friendly, they might think that it had only increased prices. Jean-Paul, however, refused to listen to the Marketing Director.

[^1]
## (Question 3 continued)

(a) Identify two methods of primary market research that $S G S$ may have used.
(b) Using information from the table, construct a fully labelled position/perception map of $S G S$ and its three main competitors.
(c) Explain one disadvantage of Jean-Paul changing to a situational leadership style.
(d) Examine the relationship between investment, profit and cash flow for $S G S$.
(e) Discuss the interrelationships between SGS's aims, strategies and tactics.
[7 marks]

## 4. Hair \& Beauty (H\&B)

Bettina runs a successful hairdressing salon called Hair \& Beauty $(H \& B)$. She offers a range of services such as haircutting, colouring, and beauty treatments such as body massages. H\&B's popularity is mainly based on Bettina's expertise, networks and personality. Many local celebrities rely on her sense of style; as a consequence, $H \& B$ 's customer base is growing rapidly.

Bettina currently has 12 employees. They are paid good salaries plus commission, but Bettina is very controlling and demanding. Morale and job satisfaction are falling; absenteeism and staff turnover are high. Some workers have expressed concerns about not spending enough time with their families. As a result, Bettina is reluctantly planning to introduce a flexitime workscheme.

Her younger brother Gavin wants to open a $H \& B$ franchise in a small city nearby where several hairdressing salons already operate. None, however, is perceived as stylish and high quality. Bettina will be responsible for training the new employees. She will also pay for the advertising costs. In return, Gavin will pay Bettina an annual fee of $10 \%$ of his sales revenue and maintain $H \& B ' s$ high standards and quality.

Gavin's personal savings are insufficient to meet the start-up costs of the new salon. He will ask for a bank loan. He has already prepared a business plan for his bank manager.
(a) Describe one source of finance, other than a bank loan, that Gavin could use to fund the start-up of the new salon.
(b) (i) Explain one disadvantage to $H \& B$ of introducing a flexitime workscheme.
(ii) Explain one advantage and one disadvantage to $H \& B$ of using a commission-based financial reward package.
(c) Analyse the importance of Gavin's business plan when seeking finance from his bank manager.
(d) Evaluate the use of franchising as a growth strategy for Bettina and her salon, $H \& B$.

## 5. Reading enables all People ( $R P$ )

$R P$ is a non-profit and non-governmental organization (NGO) that teaches reading to financially disadvantaged children and teenagers. RP's mission statement is: "To educate those in need in order to foster social inclusion and change".
$R P$ has 64 paid full-time staff and 350 part-time volunteers, mostly college students, who work in all areas of the city where $R P$ is located. Volunteers do not work under a contract. $R P$ is experiencing communication problems. One young volunteer complained, "I often receive contradictory information. One person says one thing and another says something else". RP's organizational structure is tall. There are several formal methods of communication present at $R P$, but most of the information passes through informal communication channels.
$R P$ is planning to extend its literacy program to rural areas. The program will last five years. $R P$ 's current sources of finance are insufficient to fund the new program. At present, $R P$ is only financed by national businesses. Alice Lire, RP's Chief Executive Officer (CEO), has contacted the government for financial support. However, the state budget is limited and chances of government cooperation are low.

As part of its corporate social responsibility policy, McMikey, a multinational company that markets products to children, is willing to pay for the books for the program for two years. Alice is ready to accept the offer, but she would prefer McMikey to guarantee its support for five years. However, there is internal disagreement at McMikey. The Finance Manager believes that it would be too costly. However, the Marketing Manager argues that McMikey's brand image would be improved by a longterm association with RP's literacy program.
(a) Define the term mission statement.
(b) Explain one formal method of communication that might be used at $R P$.
(c) Explain one advantage and one disadvantage for McMikey of having a corporate social responsibility policy.
(d) Analyse the impact on $R P$ of McMikey's offer to pay for the books.
(e) Evaluate RP's use of a very large number of part-time volunteers.


[^0]:    * apprentice: typically a young person between 15 and 25 years old, who is learning a trade or occupation.

[^1]:    * situational: style of leadership that is also called situation leadership

