Diploma Programme
Programme du diplôme
Programa del Diploma

Business management
Higher level
Paper 2

Tuesday 26 October 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]**.

6 pages

8821–5012

Section A

Answer **one** question from this section.

1. PB Ltd

Phoebe Bowen, a young entrepreneur, started her own clothing company, *PB Ltd*, on 1 January 2019. On the same day, *PB Ltd* purchased fixed assets for $20 000. The estimated useful life of the assets is six years.

At the end of 2020, Phoebe's newly appointed accountant said that Phoebe had omitted the depreciation of the firm's fixed assets from the accounts. **Table 1** shows selected financial information from the final accounts of *PB Ltd* for the years ending 31 December 2019 and 31 December 2020.

Table 1: Selected financial information from the final accounts of *PB Ltd* for years ending 31 December 2019 and 31 December 2020 (all figures in $000s)

	2019	2020	
Expenses	7	9	✓
Cash	1	1.5	CA
Share capital	6	6	OE
Sales revenue	40	45	✓
Short-term loans	–	0.65	CL
Long-term loans	1	2	LL
Fixed assets	20	20	FA
Tax paid	1.5	1.7	✓
Accumulated retained profit	6	12.9	OE
Stock and debtors	3	2	CA
Dividends paid	1	1.4	✓
Cost of goods sold	24	25	✓
Interest paid	0.5	1	✓

(a) Describe **one** disadvantage of using the reducing/declining balance method of depreciation. [2]

(b) (i) Using the reducing/declining balance method of depreciation, calculate *PB Ltd*'s annual depreciation of fixed assets for 2019 and 2020. Use 5 % as the depreciation rate (*show all your working*). [3]

(ii) Using the selected financial information in **Table 1** and your answer from (b)(i), prepare a balance sheet for *PB Ltd* for 31 December 2020. [5]

2. **Sock Paradise (SP)**

After conducting primary market research, Pam opened *Sock Paradise* (*SP*), which sells colourful socks. *SP* operates a retail stall in a large department store and sells online through its own website.

Table 2 shows selected financial data for *SP* for 2020.

Table 2: Selected financial data for *SP* for 2020

Annual fixed costs of stall rental and operation	$50 000
Annual fixed costs of operating the e-commerce site	$10 000
Variable costs per pair of socks	$4.00
Average sales price per pair of socks	$9.00
Total sales	15 000 pairs of socks

At the end of 2020, the department store told Pam that it would increase rent by $14 000 per year starting on 1 January 2021. Pam forecast total sales for 2021 as 18 000 pairs of socks; other costs and prices were forecast to remain unchanged.

(a) State **two** methods of primary market research. [2]

(b) Using the selected financial data in **Table 2**, calculate for *SP* for 2020:

(i) the break-even level of output (*show all your working*); [2]

(ii) the margin of safety (*show all your working*); [2]

(iii) the net profit (*show all your working*). [2]

(c) Explain how the impact of the increase in rent **and** the forecast increase in sales in 2021 could affect *SP*'s profitability. [2]

Section B

Answer **two** questions from this section.

3. **Healthy Nation (HN)**

Healthy Nation (*HN*) is a pharmaceutical organization that used to operate in the public sector, selling its medicines (drugs) to hospitals at very low prices.

With increasing government funding over several years, *HN* increased the number of employees in its Research and Development Department, which was staffed by scientists, and in the Manufacturing Department. However, both departments were inflexible and inefficient. Resources were significantly under-utilized, and innovation limited.

HN's structure used to be hierarchical, with a very long chain of command and channels of communication. Senior management made the decisions and set the production levels. Consequently, the scientists in the Research and Development Department never developed decision-making skills, and development of new medicines was slow. In 2021, after many years of losses, the government sold *HN* to a profit-maximizing global pharmaceutical manufacturer, *Global Pharma* (*GP*).

To improve productivity, efficiency and flexibility, the management of *GP* reorganized *HN* as a shamrock organization by:

- outsourcing the production function to a well-known manufacturer
- retaining the Research and Development Department, along with its scientists and support staff, and employing additional staff when required.

In addition, two major changes were announced:

- Establishing performance-related pay for the scientists based on a new appraisal system to increase productivity levels.
- Using an expensive external company to provide cognitive training to the scientists to develop innovative decision-making and improve teamwork.

These changes have proved to be very unpopular, and the scientists in particular are resisting the changes and the short time frame in which they will be implemented.

(a) Define the term *public sector*. [2]

(b) Explain **one** benefit **and one** limitation for *GP* resulting from the implementation of the shamrock organization structure for *HN*. [4]

(c) Explain **one** advantage **and one** disadvantage for *GP* resulting from the introduction of cognitive training for *HN*'s scientists. [4]

(d) Discuss **two** human resource strategies that *GP* could use to reduce the scientists' resistance to the changes. [10]

4. **Smith's Foods Ltd (SF)**

Charles Smith and seven friends started a private limited company, *Smith's Foods Ltd* (*SF*), to produce ready-made healthy meals for people with diabetes*. Using a cost-plus (mark-up) pricing strategy, *SF*'s mission is to make inexpensive, widely available meals that help diabetics manage their carbohydrate intake accurately.

Despite reliance on inexpensive social media marketing, *SF* grew rapidly. Due to this rapid growth, however, the quality of its products deteriorated, and a number of its meals were found to contain different quantities of carbohydrate than those stated on the packaging. Negative comments appeared on *SF*'s Instagram page. Charles responded quickly to reassure customers and offered refunds. *SF*'s response led to the company receiving an industry award for ethical behaviour.

expensive machinery

Charles introduced flow production to reduce the cost of *SF*'s meals, which changed *SF*'s scale of operations and increased its gearing ratio. However, Charles had little business experience of using flow production and problems emerged. EoS

External stakeholders began to look into *SF*'s operations. One supermarket chain, *Good Foods* (*GF*), contacted Charles and offered to take over *SF*, keeping Charles on the board of directors. This takeover would allow *SF*'s meals to be produced at a lower cost and reach a wider target market. *GF* would also finance research and development into new meals with more carefully controlled carbohydrate levels.

However, *SF* would close. Negative publicity would be considerable. The remaining shareholders have threatened to launch a new business, creating their own brand of meals for people with diabetes in direct competition with *GF*.

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* diabetes: a medical condition that causes a person's blood sugar level to become too high. People with diabetes need to be mindful of the amount of carbohydrates (which includes sugar) they include in their diet.

(a) Define the term *cost-plus (mark-up) pricing strategy*. [2]

(b) Explain **two** benefits for *SF* of using social media marketing. [4]

(c) Explain **one** benefit **and one** cost to *SF* of using a flow production method. [4]

(d) Discuss whether Charles should accept *GF*'s offer of a takeover. [10]

Benefit:
- market development (ANSOFF)
- access to finance

Limitation
- severe loss of control
- stakeholder conflict. → increasing bureaucracy
- bad publicity (amplified by SMM)

5. Office Supplies (OS)

Office Supplies (*OS*) is a family-owned private limited company that, for 40 years, has operated three retail office supply stores in a small city. *OS* offers a wide range of office products (such as computer paper and stationery) and office machinery (such as computers and printers). When each store opened, *OS* purchased the buildings using long-term loan capital. *OS*'s objective is to have enough profit to finance the company's working capital and pay annual dividends.

no loyalty

OS has no clear marketing strategy. Traditionally, *OS* competed with several other office supply stores operating in the same city. The market was not competitive, however, and most customers went to the nearest office supply store. *OS*'s prices were comparable to those of other retail office supply stores, and the company did little promotion.

Nationally, the retail office supply store industry is declining. Many retail office supply stores have had to close, and new competitors have entered the market, many of which benefit from some or all of the following:

- Specialization in particular office products
- Economies of scale leading to more competitive prices
- Greater convenience, including e-commerce with door-to-door delivery

Like other physical retail stores, *OS* has seen its sales decline. Gross and net profit margins have fallen. Last year, to ensure enough funds for capital expenditure and revenue expenditure, *OS*'s board of directors chose not to pay dividends. *OS* also anticipates the need for additional finance next year. *OS*'s board is considering changes to the company's marketing mix in response to new competitors.

(a) State **two** marketing objectives that a company might have. [2]

(b) With reference to *OS*, explain **one** advantage **and one** disadvantage of operating as a private limited company. [4]

(c) With reference to *OS*, explain the difference between capital expenditure and revenue expenditure. [4]

(d) Discuss possible changes to any **two** elements of *OS*'s marketing mix. [10]

Product Place Price Promotion

Place ↓ E-commerce & delivery

Price ↓ new strategy

Promotion → build loyalty

References:

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(a) The declining balance method of depreciation ~~eq~~ suffers from GIGO (garbage in - garbage out). While it is usually more accurate than the straight line method, the depreciation rate is still merely an estimate, and could be inaccurate, having adverse effects on the balance sheet.

(b)(i)	Fixed Assets	Dep (5%)	New
2019	\$ 20000	\$1000	\$19000
2020	\$ 19000	\$950	\$18050

∴ the value of the fixed assets at the end of 2019 is \$19000, and at the end of 2020, \$18050

\$1000 depreciation

\$1950 depreciation overall, accumulated.

(b)(ii) Balance sheet for PB Ltd as at 31 Dec. 2020

	$ ('000s)
Fixed assets	20
Depreciation (accumulated)	1.95
Net Fixed Assets	18.05
Current assets:	
Cash	1.5
Stock & debtors	2
Total current assets	3.5
Current liabilities	
short-term loans	0.65
Total current liabilities	0.65
Working capital	2.85
TA - CL	20.9
less: long term loans	2
Net Assets	18.9
Financed by:	
Share capital	6
Acc. ret. profits	12.9
Owner's equity	18.9

4

(a) Cost-plus is a pricing strategy whereby a margin is placed on top of the ~~production~~/COGS of each individual product. This ensures consistent ~~profit~~ profitability despite potential cost fluctuations.

(b) - Social media marketing has the potential to reach a very large number of people around the globe, especially due to the visible uptake of technology and social media in most countries. It is clear that SMM helped SF grow rapidly, as they likely were able to reach a large customer base through the online platforms.

- It also offers a low cost marketing solution, as it can be managed in-house (BTL). As opposed to mass-media marketing, for example, SF has been able to reach a large number of potential customers with relatively few marketing overheads.

(c) Benefit: flow production is a production method whereby high levels of automation are used in order to receive continuous and high levels of output. Naturally, this will introduce economies of scale in the production line, as is evidenced by the mentioned change in "scale of operations." In this way, SF is able to adapt to, and efficiently take advantage of the rapid growth they have experienced.

Cost: adopting high levels of automation ~~to~~ requires high capital expenditure into new machinery and employee training. As SF's gearing ratio has increased, it is likely they took on debt (e.g. through long term loans as this is a long term project*) in order to finance this with enough capital. This, however, means that SF's long term liquidity position will worsen as they are obliged to pay back debt.

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(d) Charles is considering allowing Good Foods (GF) to complete a takeover of their company. This is accompanied by a variety of ~~ads~~ driving and restraining forces.

Driving		Restraining
(3) Market development –	Accept offer	– bad publicity (4)
(3) access to capital –		– stakeholder conflict (4)
6		8

During a takeover, both companies involved are given access to new customer bases, also known as ~~market~~ market development on the Ansoff Matrix. This increases market diversification, as well as sales revenue as new customers can begin using the good / service. In the case of GF's offer, the takeover would ~~make SF a~~ likely make SF a division within GF, enabling them to use the already established retailer as a distribution channel in the marketing mix, benefitting from the economies of scale of having products sold in a supermarket chain. This aspect of reaching a wider target market is clearly stated, and has a high probability of success as supermarkets have a very diverse customer base, some of whom would likely purchase SF's meals.

Furthermore, companies that produce highly specialised goods and services must continually innovate in order to maintain a loyal customer base, and beat competition which likely has more resources and economies of scale. However small organisations often ~~~~ do not have the scale or liquidity to be able to innovate. In the case of SF, their gearing ratio has increased, worsening this problem even more in the longer term. A takeover by ~~SF~~ GF would give SF finance for innovative R&D, enabling them to continue innovating new health products for their niche and specialised target market.

However, takeovers by larger companies such as supermarket chains ~~are~~ often mean ethics and altruistic objectives are sacrificed for ultimately financial objectives. The need to cut costs on thin profit margins would be further cause for concern for SF, ~~especially~~ especially problematic, and likely go against the pretence that was set when they got the industry award for ethical behaviour. This ~~would~~ would become an increasing issue when considering SF's online presence, which acts as a double-edged sword. They could quickly lose loyal customers and their ~~g~~ reputation if the takeover was not handled with delicacy. It would be crucial for SF that they maintain as good an ethical profile as possible, however this is highly unlikely hence the "4" on the FFA.

Finally, stakeholder conflict is always prominent during large scale organisational change like this. Primarily, SFs shareholders have threatened to launch a new business, where they could directly compete. However, this is a relatively small issue as they could hardly benefit from SFs economies of scale post-takeover. The larger issue is that of discontinuity and demotivation for other ~~st~~ stakeholders within the organisation, due to the increased bureaucracy and longer chains of command from being in a much larger company. This could have adverse effects on productivity and motivation for workers, and is another significant restraining force on the FFA.

In conclusion it was identified that the bad publicity and stakeholder conflicts from the ~~merger~~ takeover would be more significant restraining ~~force~~ forces than the market development and financial support. As evidenced by the FFA, it is recommended that SF ~~remains~~ does not accept the takeover offer.

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5

(a) · Increase brand awareness
· improve brand value

prerequisite.

(b) advantage: the shareholders of OS can be selectively chosen as private limited companies operate as invite only for shareholders. This ~~has~~ means that the company can have clearer organizational objectives and there will likely be less stakeholder' conflict. ~~As~~ OS is family-owned, meaning all shareholders (owners) are part of the same family, likely increasing cohesiveness in the ~~leadership~~ leadership and management.

disadvantage: private companies cannot as easily raise money through selling shares to the public. ~~This~~ This mean that to raise capital, OS must take out long term loans like they did to purchase their buildings, which ultimately decreases their long term liquidity position, and increases the profit required to maintain their working capital.

(c) Capital expenditure
- spending on fixed assets
- not directly related to the COGS ~~of the~~ which contributes to sales revenue
- usually financed using medium-to-long term finance options
- In the case of OS, their purchase of buildings is an example of capital expenditure, and was financed through long term debt.

Revenue expenditure:
- spending on costs that are directly related to the sales output (e.g cost of goods sold)
- Usually funded using short term capital, or retained profits.
- In the case of OS, they will need to spend cash on their purchase of office supplies before they are bought by customers. They aim to ~~fund this~~ to use retained profits to finance their working capital.

(d) Office Supplies (OS) is currently situated in a declining industry, and it is recommended they consider various elements of their marketing mix. The first is the adoption of innovative e-commerce and delivery solutions in their distribution channels.

Driving			Restraining	
(2) customer convenience -	e-commerce & delivery		- investment costs	(1)
(3) new market -			- high competition in online market	(3)
	5	4		

The adoption of e-commerce and delivery ~~to~~ to ~~their~~ any place marketing mix can dramatically improve and expand the potential target market of a company. This is ~~because~~ because ~~existing~~ e-commerce sites can be accessed from nearly everywhere, and ~~requires~~ does not require, for example, the high costs of brick-end-mortar stores. ~~This~~ This market extension on the Ansoff Matrix would likely ~~solve~~ help ~~temporal~~ temporarily solve the issue of a declining market as it would give OS access to a much larger market which they could potentially take ~~advan~~ advantage of.

However, as this is market development on the ~~AA~~ Ansoff Matrix, there are a variety of additional risks involved. Largely, the online market is an unknown for OS, and in their case, is already abundantly competitive. The major change from their current local marketing mix would mean that they would need to alter their objectives to better compete with ~~next~~ national and multinational office supply companies. Furthermore, there is no guarantee that this will work for OS, as ~~I~~ it is likely that they are not well known beyond their small city. This, therefore leads to another element of the marketing mix: promotion.

Driving		Restraining
(3) Brand value -	Build customer loyalty	- increase expenditure. (2)
	3 | 2	

In order to increase loyalty and build ~~brand~~ brand value, organisations can engage in promotional strategies like BTL and ~~ATL~~ promotion. Importantly, in the case of OS this would enable them to increase their profit margins as customers ~~could~~ would be happy to pay more for a product that is ~~only~~ provided by a national or multinational company. Hence this strategy would make them more competitive, especially within ~~their~~ the small city out of which they operate.

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However, building customer loyalty through the promotional mix would likely increase overheads in at least the short term. This means that OS would either need to raise money through debt, or raise ~~money~~ cash through becoming public, and sacrificing control. Furthermore, it would go against their objective of funding their working capital internally with retained profits. Furthermore, concerns have been made surrounding the nature of the industry: where customers place convenience over other factors, including brand value. However, it is clear that more must be done ~~to~~ to ~~off~~ be able to remain current in the market.

In conclusion, it is recommended that ~~OS~~ OS undertake the promotional mix strategy in order to respond to the moving industry.