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Business management

Higher level

Paper 2

24 October 2023

Zone A afternoon | **Zone B** afternoon | **Zone C** 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 formulae sheet** is required for this examination paper.
- Section A: answer one question.
- Section B: answer two questions.
- Section C: answer one question.
- A calculator is required for this examination paper.
- The maximum mark for this examination paper is **[70 marks]**.

Section A

Answer **one** question from this section.

1. Xiaoping Enterprises (XE)

Xiaoping Enterprises (XE) manufactures hang gliders and originally manufactured one model, the Seagull. In 2021, XE had \$1 300 000 in capital expenditure to create a new production line to manufacture a new model hang glider, the Horizon. XE would sell each Horizon hang glider for \$5000. XE's chief financial officer (CFO) budgeted for the sale of 2400 Horizon hang gliders in the first year.

In 2022, production and sales began.

XE's CFO prepared data to analyse the variances in production of the Horizon (see **Table 1**).



Table 1: Budgeted and actual profit and loss account figures for XE's Horizon model for 2022 (all figures in \$000s)

	Budgeted figures	Actual figures	Variance
Sales revenue	12 000	X	A
Cost of goods sold	6500	6600	B
Gross profit	5500	5150	C
Expenses, including \$350 depreciation	4200	3800	D
Net profit before interest and tax	1300	1350	E

On 31 December 2022, XE stopped producing the Horizon and sold the machinery that had been purchased to create the new production line for the model for \$850 000.

Table 2: Discount rates at 6 %

Year	Discount rate
1	0.9434
2	0.8900

- (a) Define the term *capital expenditure*. [2]
- (b) Using a discount rate of 6 % (**Table 2**), calculate the net present value (NPV) of the production line for the Horizon at the beginning of 2022 **and** its first year of operating profit (*show all your working*). [3]
- (c) Using **Table 1**, calculate:
- (i) XE's actual sales revenue for the Horizon, **X**, in 2022 (*no working required*); [1]
- (ii) the variances **A**, **B**, **C**, **D** and **E**, in 2022 (*no working required*). [2]
- (d) Referring to your calculations in part (c), explain which variance had the greatest impact on XE's operating profit variance in 2022. [2]

2. Bonds Electrical Supplies (BE)

Bonds Electrical Supplies (BE) is a wholesaler operating in the tertiary sector. In 2022, *BE* purchased more stock than usual to take advantage of discounts that several electrical supply manufacturers were offering. However, much of this new stock did not sell.

Table 3: Selected financial information for *BE* for the years ending 31 December 2021 and 31 December 2022 and as of 31 December 2021 and 31 December 2022 (all figures in \$000s)

	2021	2022
Cash	3000	1000
Cost of goods sold	18 195	18 600
Creditors	1500	2157
Debtors	2992	8908
Long-term debt	21 000	20 650
Sales revenue	36 400	36 800
Stock	6000	9246
180-day loan	1200	1350

Table 4: Selected financial ratios calculated based upon financial information for *BE* for the years ending 31 December 2021 and 31 December 2022 and as of 31 December 2021 and 31 December 2022

	2021	2022
Acid-test (quick) ratio	2.22	2.83
Current ratio	X	5.46
Debtor days	30	Y
Stock turnover in days	120	Z

- (a) State **two** types of business or organization, **other than** a wholesaler, that operate in the tertiary sector. [2]
- (b) Using information in **Table 3**, calculate for *BE*:
 - (i) the current ratio for 2021, **X**, in **Table 4** (*show all your working*); [2]
 - (ii) debtor days for 2022, **Y**, in **Table 4** (*show all your working*); [2]
 - (iii) the stock turnover in days for 2022, **Z**, in **Table 4** (*show all your working*). [2]
- (c) Referring to the information in **Table 3** and **Table 4**, and your calculations in part (b), explain the change in *BE*'s liquidity between 2021 and 2022. [2]

Section B

Answer **two** questions from this section.

3. Anna’s pet salon

In 2024, Anna Holborn plans to start a new business: a pet grooming salon. Although Anna has no managerial experience, she is eager to work for herself. In Anna’s city, three pet salons already exist. The market is very competitive.



Table 5: Selected data on the three existing pet salons

Salon	Prices	Reputation out of four stars (★)	Independent or franchise
A	Medium	★★★	Franchise
B	Low	★	Independent
C	High	★★	Franchise

Anna is considering two options for opening her salon:

- **Option 1:** Open it as an independent business, called *AH Salon*.
- **Option 2:** Open it as a franchise of *Paws Boutique (PB)*, a nationwide chain of pet grooming salon franchises that currently has no franchise in Anna’s city.

Table 6: Anna’s forecasted initial costs of starting a pet salon as an independent business (Option 1) or as a PB franchise (Option 2)

	Option 1: As an independent business	Option 2: As a PB franchise
Equipment	\$15 000	\$12 000
Grooming supplies	\$10 000	\$10 000
Initial local promotion	\$5 000	\$2 000
Legal fees	\$2 000	\$4 000
Purchase of franchise	Not applicable	\$10 000
Total	\$32 000	\$38 000

If Anna buys a *PB* franchise, she must pay 5 % of revenue to the franchiser. The franchiser will pay for regional and national – but not local – promotion. Anna must purchase equipment from the franchiser. In other cities, *PB* franchises are rated medium in terms of price and ★★ in terms of reputation.

Anna has limited financial resources. She has prepared a forecast for the first year. She forecasts, as a *PB* franchise, an average of 200 pet grooming services per month at a price of \$30. As an independent business, she forecasts that sales would be 10 % lower. For both options, fixed costs, including her salary, would be \$2800 per month. Variable costs would be \$5 per pet grooming.

(This question continues on the following page)

(Question 3 continued)

- (a) Define the term *variable costs*. [2]
- (b) Using **Table 5**, construct a product position map/perception map of the three existing pet salons. [4]
- (c) Explain **two** problems that Anna may encounter when starting a new business. [4]
- (d) Recommend whether Anna should open her pet salon as an independent business (**Option 1**) or as a *PB* franchise (**Option 2**). [10]

4. Vegan Supplies (VS)

Five years ago, Michael Thompson opened *Vegan Supplies* (VS) as a vegan food* wholesaler selling to the restaurant industry. Two years ago, VS also began producing its own range of high-quality vegan food. VS's vegan product range includes cheese and burgers, kebabs and sausages. Michael built VS's customer base for this product range by frequent attendance at trade exhibitions. VS mostly employs staff who are vegan, and Michael has a broad objective of promoting veganism. VS's vision statement is "to build a vegan world". Michael encourages an organizational culture designed to promote vegan philosophy and lifestyles.

A total of 60 % of VS's sales are products purchased for resale, and the remaining 40 % of sales are from VS's own vegan product range. However, sales of the VS brand vegan foods from their own production are increasing, and Michael is keen to see this trend continue.

Michael works closely with suppliers and restaurants to provide the products that restaurants want. VS mainly uses below-the-line promotion to market their products. VS's quality control inspector is approaching retirement, and Michael is considering whether to keep a system of quality control or move to a system of quality assurance. He is aware that changes must be made to operate a system of quality assurance, such as total quality management (TQM). Michael must convince employees that the move to quality assurance is worthwhile. Giving employees responsibility for their own working may prove challenging. Michael plans to invest in different training methods to ensure the change works effectively.

* vegan food: food that does not contain animal products, including meat, dairy, and eggs

- (a) Define the term *objective*. [2]
- (b) With reference to VS, explain **two** elements of organizational culture. [4]
- (c) Explain **one** advantage **and one** disadvantage for VS of using below-the-line promotion. [4]
- (d) Recommend whether Michael should move from a system of quality control to a system of quality assurance. [10]

5. Ultimate Warrior Gym PLC (UWG)

Ultimate Warrior Gym PLC (UWG) has 212 gyms nationwide. Ali Smith is the chairman and majority shareholder. *UWG*'s business model involves providing high-tech equipment and employing personal trainers (PTs). In the past, *UWG* has struggled to recruit well-qualified PTs. *UWG* encourages its gym managers to be intrapreneurs.

UWG is competitively priced, offers monthly contracts, and is open 24 hours a day, seven days a week. *UWG* uses social media marketing, including online forums. Through these forums, many members and PTs have formed friendships that give membership a rewarding social dimension. 95 % of *UWG*'s members renew their monthly contract.

PTs are paid minimum wage but are allowed to organize private training sessions with *UWG*'s members. Consequently, it is common for only one member of staff to be on duty at a time. Recently, a gym member was seriously injured while lifting inappropriate weights unsupervised.

The accident was a news item in the national media and required a crisis management response. Ali immediately recorded a video and posted it to *UWG*'s social media platforms. Apologizing for the accident, he announced that the PT contracts will be changed and they will no longer be allowed to arrange private training sessions. Ali also offered compensation to the person who was injured. However, an image mocking *UWG* was shared 50 000 times on social media.

The crisis management response pacified investors, but 30 % of the PTs are conducting strike action, and some gyms have had to close due to a lack of employees. Comments on *UWG*'s online forums indicate that most members sympathize with the PTs.

Ali is considering which industrial/employee relations methods *UWG* could use to get the PTs to accept a new contract.

- (a) Define the term *intrapreneur*. [2]
- (b) With reference to *UWG*, explain **two** reasons why Ali's crisis management response may have been effective. [4]
- (c) Explain **one** advantage **and one** disadvantage for *UWG* of using social media marketing. [4]
- (d) Evaluate **two** industrial/employee relations methods that *UWG* could use to get the PTs to accept a new contract. [10]

Section C

Answer **one** question from this section. The organizations featured in sections A and B and in the paper 1 case study may not be used as a basis to your answer.

6. With reference to an organization of your choice, examine the impact of **globalization** on operations management **strategy**. [20]
7. With reference to an organization of your choice, examine the impact of **culture** on **ethics**. [20]
8. With reference to an organization of your choice, examine the impact of **innovation** on **change** in human resource management. [20]

Companies, products, or individuals named in the stimuli are fictitious and any similarities with actual entities are purely coincidental.

References:

1. DanCardiff, n.d. *Man hang gliding with blue sky at the background - stock photo*. [image online] Available at: <https://www.gettyimages.co.uk/detail/photo/man-hang-gliding-with-blue-sky-at-the-background-royalty-free-image/89886809?phrase=hand%20glider&adppopup=true> [Accessed 13 March 2023]. Source adapted.
3. BONDART, n.d. *Professional male groomer making haircut of poodle teacup dog at grooming salon with professional equipment - stock photo*. [image online] Available at: <https://www.gettyimages.co.uk/detail/photo/professional-male-groomer-making-haircut-of-poodle-royalty-free-image/1407302298?adppopup=true> [Accessed 9 March 2023]. Source adapted.