



88145012



**BUSINESS AND MANAGEMENT
HIGHER LEVEL
PAPER 2**

Thursday 20 November 2014 (morning)

2 hours 15 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.
- 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. Deep Sea Catch (DSC)

Deep Sea Catch (DSC) operates as a sole trader on an island popular with tourists. *DSC* specializes in supplying fresh fish to local hotels on a daily basis.

The local government has given *DSC* a permit to catch a maximum of 70 kilograms of fish per day. However, there has been an increase in illegal fishing (without permits), in addition to overfishing by *DSC*'s other competitors (with permits), which has reduced fish stocks in the area. Given the increasing competition among fish suppliers on the island, hotels will only pay a fixed price of \$10 per kilogram of fish.

DSC's cost of operation and the quantity of fish caught varies depending on factors such as weather conditions, the availability of fish, and the number of competitors.

Local hotels demand that:

- the fish they buy meet strict national health and safety standards, to ensure the quality of the fish for tourists
- fish are caught ethically without endangering other sea creatures, such as sea turtles or dolphins.

An environmental pressure group is also pressuring the government for:

- more strict regulations on the fishing industries, targeting suppliers without permits
- a reduction in the quantity of fish that each supplier can sell
- new legislation for a compulsory installation of new and sophisticated technological equipment for ethical fishing.

DSC is well known for fishing responsibly and within government legislation. However, the owner is worried about the possible high costs of some of the new legislation.

Unsold fish is stored and kept in a refrigerator for up to two days. After two days, the stored fish is sold to a processing factory for \$4 per kilogram. For example, fish caught on Monday, but still not supplied to the hotels by Tuesday evening, will be sold on Wednesday to the processing factory.

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(Question 1 continued)

DSC uses the system of last-in-first-out (LIFO) for the stock valuation. The table below shows a typical week’s supply of fish at DSC:

Day of the week	Kilograms of fish caught by DSC and the cost of fishing	Kilograms of fish supplied by DSC
Monday	20 @ \$5	10
Tuesday	30 @ \$8	20
Wednesday	20 @ \$6	20
Thursday	40 @ \$5	30
Friday	20 @ \$8	20
Saturday	40 @ \$8	30
Sunday	40 @ \$5	30

- (a) Describe **two** features of a sole trader. *[4 marks]*

- (b) (i) Using the table above and the last-in-first-out (LIFO) method of stock valuation, calculate the value of the closing stock of fish on Sunday *(present all your working in table format)*. *[8 marks]*

- (ii) Using the information provided, calculate DSC’s typical weekly gross profit after taking into account the number of fish sold to the processing factory *(show all your working)*. *[3 marks]*

- (iii) Calculate DSC’s typical weekly gross profit margin *(show all your working)*. *[2 marks]*

- (c) Explain **one** advantage for DSC if they provide fish meeting national quality standards. *[2 marks]*

- (d) Using the PEST model, examine the impact of the external environment on DSC. *[6 marks]*

2. Stay Float (SF)

Stay Float (SF) is a family-owned private limited company that produces rowing boats. Dan is the Marketing Director and Ori, his brother, is the Finance Director. Together they own 75% of *SF*'s shares. The main target market is university boat clubs that require custom-made rowing boats. *SF* produces two models of boat, "The Single" and "The Quad", using a job production method. Each model of boat is treated as separate profit centres.

SF is market-orientated and highly responsive to customer needs. Customers are willing to wait a long time for the completion of a boat because of its high quality and flexible design. Employees are highly skilled and motivated. *SF* uses a price skimming strategy.

Increasing overseas competition of cheaper mass-produced rowing boats and a cut in university activity budgets has caused a fall in demand for *SF*'s boats. As a result, *SF* is experiencing cash flow difficulties. Dan and Ori are considering two different strategic options to reduce costs and find new market segments for both boats:

- (Option 1) change the production method to flow production to improve the working capital cycle. However, Ori is concerned about how this will be financed.
- (Option 2) subcontract the production of the "The Quad" overseas and continue producing "The Single" at the current location.

Sales price for "The Single": \$15 000.

Sales price for "The Quad": \$25 000.

Current financial data for 2014:

Total fixed costs for <i>SF</i>	\$50 000
Variable cost per boat	"The Single": \$12 000 "The Quad": \$18 000
Actual number of boats produced and sold	"The Single": 6 boats "The Quad": 4 boats
Production capacity	20 boats in total

Financial data if *SF* subcontracts "The Quad" overseas (Option 2):

- production capacity for the subcontractor: 40 boats.
- the total fixed cost will be reduced by \$14 000.
- *SF* will pay a variable cost of \$14 000 per boat to the subcontractor.
- *SF* will reduce the price of the mass-produced "The Quad" by 20% and double the quantity sold in the first year.
- the quantity of "The Single" (6 boats) sold will remain unchanged.

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(Question 2 continued)

- (a) Describe **two** features of *SF* operating as a private limited company. *[4 marks]*

- (b) Explain **two** advantages and **one** disadvantage for *SF* of operating “The Single” and “The Quad” as separate profit centres. *[6 marks]*

- (c) Calculate for *SF* (*show all your working*):
 - (i) the current capacity utilization in 2014. *[2 marks]*

 - (ii) the break-even quantity for “The Single” if the subcontracting option (Option 2) is chosen. *[2 marks]*

 - (iii) whether the production of “The Quad” should be subcontracted overseas (Option 2), assuming that the sales of “The Single” stay the same as in 2014. *[5 marks]*

- (d) Analyse the suggestion that *SF* should change from job production to flow production (Option 1). *[6 marks]*

SECTION B

Answer **two** questions from this section.

3. Cheap4U (C4U)

Cheap4U (C4U), a public limited company (plc), operates a successful low-price airline service. *C4U* offers a basic service targeting low-income families and students. It is positioned as offering the lowest price for a flight. Staff training for flights is on-the-job and *C4U* uses non-financial motivation such as job enlargement. *C4U* has recently experienced difficulty in recruiting enough flight staff. As a result, flight staff are overworked and there have been complaints by some passengers about poor service.

In 2013, *C4U* suffered its first loss in 11 years. *C4U* carried out a review and the following three issues were identified:

- given the staff shortages, *C4U* flights are often delayed or cancelled.
- some advertising for popular flights is considered to be unethical. For example, cheap one-way flights are promoted without stating that the return flight is twice as expensive.
- new low-price competitors are emerging, using newer and more fuel-efficient aircrafts.

C4U is considering offering a new international flight service, *Quality4U (Q4U)*. This service will only be offered at certain times. *Q4U* will target higher-income consumers by offering excellent aircraft facilities, free internet access and more comfortable seats. Four new fully equipped aircrafts will need to be purchased. *C4U's* gearing ratio is rising at over 80%. New sources of finance will be required.

C4U is also considering new methods of staff training for the new *Q4U* service:

- One new method of off-the-job training could be conducted by a hotel which is famous for its high quality of customer service. This new training method will increase *C4U's* costs at a time when its working capital is limited.
- Secondly, all flight staff will have to study for and pass an examination to meet international quality standards of customer service. *C4U's* senior management is insisting that staff study in their own free time. Flight staff have complained and have consulted their representatives about possible industrial action, as they feel that they are already overworked.

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(Question 3 continued)

- (a) Describe **one** feature of:
- (i) job enlargement. *[2 marks]*
 - (ii) international quality standards. *[2 marks]*
- (b) Explain how each of the three issues identified, could have impacted on *C4U*'s revenue, leading to its first loss in 11 years. *[6 marks]*
- (c) Analyse **two** appropriate sources of finance that *C4U* could use to purchase the new aircrafts for the new *Q4U* service. *[6 marks]*
- (d) Evaluate the two new methods of training and examination that *C4U* are considering to prepare flight staff for the new *Q4U* service. *[9 marks]*

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4. Creative Bleu (CB)

Creative Bleu (CB) is an Australian media private limited company which has produced many innovative television (TV) commercials. Jennifer Joyce, the Chief Executive Officer (CEO), set up the company with three college friends. *CB* now employs 24 people.

The organizational culture is technological, collaborative, innovative and task-orientated. Flexible project teams of four are created and rotated to generate new and creative ideas. On occasions, decisions are made intuitively. All employees have equal input into the decision-making process. *CB* has an employee share-ownership scheme, and profits are shared among all of the shareholders. Jennifer has a democratic leadership style. Staff turnover at *CB* has been very low.

CB has received a substantial contract to produce a TV commercial. The commercial will be for a new product. The commercial will also help *CB* gain entry into a new international market: South Korea. The long-term financial benefits for *CB* could be significant, but Jennifer is worried that *CB* will use all its working capital on this operation. Moreover, *CB* does not have a Korean speaker amongst its staff.

Jennifer and the staff see the production of the TV commercial as an opportunity for *CB* to enter a new market and grow. Jennifer has two strategic options for *CB*:

- grow internally by producing the TV commercial in Australia. *CB* would finance the whole operation and employ additional staff: translators, local Korean actors, and technical support staff.
- form a joint venture with a Korean media company. *CB* would share the costs of the operation with them. The TV commercial would be produced in Seoul, South Korea. Given the size of the operation, *CB* would relocate one of their teams to Seoul.

- (a) Define the term *organizational culture*. [2 marks]
- (b) Identify **two** key features of intuitive decision-making. [2 marks]
- (c) Explain **two** benefits and **one** cost to *CB* of using an employee share-ownership scheme. [6 marks]
- (d) Analyse the effectiveness of using flexible project teams for *CB*. [6 marks]
- (e) Recommend which of the two strategic options *CB* should pursue. [9 marks]

5. Moving back to the US

Reducing costs has been a significant driving force in pushing multinational companies to offshore manufacturing. However, as emerging economies develop, labour costs are rising.

Between 2005 and 2010, wages of factory workers in China rose by 69%. An analyst for *Boston Consulting Group* said that “the cost advantages from offshoring are falling to such an extent that some American multinationals with manufacturing offshore are returning home to supply their American customers”. By 2015, the cost advantage of offshoring manufacturing for the United States (US) market will disappear. The analyst has forecasted, based on the same time series technique as sales forecasting, that wages will continue to grow at around 17% a year in China, but remain stable in the US.

Gary Pisano, of Harvard Business School, said that some American companies that had considered offshoring parts of their business are choosing to expand within the US. *General Motors*, for example, will invest US\$2 billion to create 4000 jobs at 17 manufacturing plants in the US.

A growing number of multinational companies, especially from high-income countries, are starting to see the benefits of keeping their manufacturing “at home”. For many producers, labour costs are a small proportion of the total cost. Also, long and complex supply chains have become unreliable due to changes in external factors such as the increase of oil prices, political instability and natural disasters such as earthquakes.

However, Gary Pisano also argues that:

- in some industries, such as consumer electronics, the US no longer has the necessary supply chain
- some multinational companies will continue to build most of their new factories in emerging economies, where the demand is growing fastest
- some of the new factories in the US have been financed by government subsidies, which will soon stop
- in India, despite rising wages, its innovative software development and call-centre offshoring industries are likely to retain its cost advantages because of increasing productivity.

[Source: adapted from “Moving back to America”, *The Economist*, 14 May 2011]

(This question continues on the following page)

(Question 5 continued)

- (a) (i) Identify **one** possible variable cost of production, **other than wages**, that a manufacturing company may face. [1 mark]
- (ii) Identify **one** possible fixed cost of production that a manufacturing company may face. [1 mark]
- (iii) Define the term *offshoring*. [2 marks]
- (b) The *Boston Consulting Group* analyst used the same technique as sales forecasting to predict changes in wages. Explain **one** advantage and **one** disadvantage of using this technique. [6 marks]
- (c) Examine the possible impacts on China of the US multinational companies offshoring manufacturing to China. [6 marks]
- (d) Discuss the suggestion that US multinational companies are likely to increase the scale of manufacturing at home. [9 marks]
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