



**BUSINESS AND MANAGEMENT
HIGHER LEVEL
PAPER 1**

Thursday 9 November 2006 (afternoon)

2 hours

INSTRUCTIONS TO CANDIDATES

- Do not open this examination paper until instructed to do so.
- Read the case study carefully.
- Section A: answer all the questions.
- Section B: answer one question.

SECTION A

Answer **all** the questions in this section.

1. (a) Identify **three** stakeholders in *SunGen Ltd*. [3 marks]
(b) Explain possible areas of conflict that may arise between two of the stakeholder groups identified in part (a). [8 marks]

2. *SunGen Ltd* have decided to expand and target their products at individual households (lines 91-92).
(a) Examine the internal and external forces driving and restraining this expansion. [8 marks]
(b) Evaluate **two** strategies that *SunGen Ltd* could adopt to manage this process of change. [8 marks]

3. (a) Analyse the advantages **and** disadvantages to *SunGen Ltd* of production “running at an average 98 % capacity” (lines 58-59). [9 marks]
(b) Identify **three** possible sources of finance available to *SunGen Ltd* to finance the expansion of their production capacity and evaluate their suitability. [9 marks]

4. (a) Explain what is meant by “the market for solar power equipment is a niche market” (line 77). [3 marks]
(b) Discuss the marketing issues Ying should address in order to design an appropriate marketing strategy for free standing solar panels (lines 97-98 and Appendix 1). [12 marks]

SECTION B

Answer **one** question from this section.

5. The *SunGen Ltd* board of directors feel that the company has made a positive start and sales of the solar panels are increasing significantly. To ensure long term growth, they are considering new product developments. Their market research has indicated the potential of wind power. However, the development of a suitable product for domestic and business use, in this fast moving and high technology market, will require a significant level of Research and Development (R&D). *SunGen Ltd* will also need to purchase a wind tunnel. As part of a report to the board of directors, Tony McGregor, the production director, has narrowed the choice of wind tunnel down to two and details of these are given below:

Wind tunnel	Investment cost (\$000)
Windx	500
Blown Away	600

Year	Expected net cash flows (\$000)	
	Windx	Blown Away
1	125	245
2	150	225
3	200	175
4	175	125
5	150	100

Assuming a discount rate of 8 %, the discount factors for five years would be:

Year	Discount factor
1	0.926
2	0.857
3	0.794
4	0.735
5	0.681

- (a) Explain the importance of R&D to *SunGen Ltd*. [4 marks]
- (b) Calculate the payback, accounting rate of return (ARR) and net present value for the Windx and Blown Away wind tunnels using a discount rate of 8 %.
(Show your working) [8 marks]
- (c) Using the financial considerations calculated in part (b), recommend which wind tunnel *SunGen Ltd* should purchase, giving reasons for your choice. [8 marks]

6. *SunGen Ltd* are considering the best channels of distribution for the free standing solar panels that are targeted at individual households (*lines 91-92*). Some of the directors believe that they should sell the solar panels through their existing channels in Australia and rely on Australian domestic expansion. Catherine has proposed to the board of directors that they franchise distributors in each country in Europe. However, *SunGen Ltd* has also been approached by a major Asian electrical retailer, Electrosan, which is proposing a joint venture to distribute *SunGen Ltd* products throughout Asia. Electrosan is a well-established company with an existing loyal customer base. The company has not grown significantly in recent years, but has been very positive about the prospects of working with *SunGen Ltd*. Their management team is very experienced and have been running the company for many years with a very traditional management style.

The board of directors need to make a decision about which of these methods of distribution they will adopt for next year as they do not have sufficient financial resources for all of them. The success of each option depends on economic growth in each region. **Table 1** below shows the various possible outcomes of distribution in each region, while **Table 2** shows the costs of each.

Table 1 Expected returns from Asian joint venture, European franchising and Australian domestic expansion

Asian joint venture	Probability (%)	Possible revenue (\$000)
High economic growth	35	1500
Average economic growth	45	1115
Low economic growth	20	800
European franchising		
High economic growth	65	1275
Average economic growth	25	1050
Low economic growth	10	850
Australian domestic expansion		
High economic growth	35	965
Average economic growth	35	850
Low economic growth	30	700

Table 2 Cost of expansion in Asia, Europe and Australia

	Cost of expansion (\$000)
Asian joint venture	385
European franchising	265
Australian domestic expansion	185

(This question continues on the following page)

(Question 6 continued)

(a) Explain what is meant by

(i) franchising

(ii) joint venture.

[4 marks]

(b) Construct a fully labelled decision tree showing which method of distribution is best on financial grounds. *(Show your working and a key)*

[8 marks]

(c) Discuss the potential advantages **and** disadvantages of undertaking a joint venture with Electrosan to distribute *SunGen Ltd* products in Asia.

[8 marks]
