Diploma in Financial Management

Module B

PROJECT DB2, INCORPORATING SUBJECT AREAS
- **FINANCIAL STRATEGY**
- **RISK MANAGEMENT**

All questions are compulsory and MUST be answered

The project MUST be written in English.

The maximum word count (including appendices and tables but excluding references and bibliography) is 5,000.

The project MUST be TYPED in black ink, one-sided, double-spaced, using a minimum 12-point font size and a 1-inch margin at each side. HANDWRITTEN SUBMISSIONS WILL NOT BE ACCEPTED. The project must be submitted by post, electronic submissions are not acceptable.

The project should be submitted on A4 paper with your student number, project name, date and page number at the top of each page.

A project submission form MUST be completed for each project submitted and attached to the front of the project.

The Association of Chartered Certified Accountants

Section 1 – Financial Strategy
This ONE question is compulsory and MUST be attempted

1 The Antaeus licence

Antaeus is a small, self-governing state that occupies a narrow strip of land at the southern tip of the Nereus Peninsula. It has two million inhabitants and the population is not expected increase in the foreseeable future. The economy has been growing at around 4% per annum in recent years and an OECD report suggests that this rate of growth is set to rise over the next few years. Its democratically-elected government is committed to a strategy of modernisation and has implemented a number of radical reforms in recent years, including the privatisation of state industries.

Geryon plc is the only licensed cellular telephone network business operating within Antaeus. It has been much criticised as it has proved incapable of meeting the needs of an increasingly prosperous and well-educated population. The geography of the country has led to problems in establishing a reliable network and charges for using the network are high. In order to maximise its profits, Geryon plc has focused on business users who are prepared to pay high prices.

The government of Antaeus is aware of these problems and so, to stimulate competition and to improve the level of service available, it has decided to grant a further licence to operate a cellular telephone network within the country. The licence will be put up for auction in two months time and will last for a period of five years. A review will take place at the end of this period in order to see whether the licence should be renewed for a further five years or whether a further auction should take place.

Heracles telecommunications plc is interested in making a bid for the licence. The company currently provides cellular telephone networks throughout Western Europe. Although this has proved to be very profitable, increasing competition and a downturn in the demand for cellular telephones in a number of Western European countries has produced gloomy forecasts of future prospects. As a result, the Board of Directors is seeking more profitable geographical areas for the company's products and services. The Special Projects Division of the company has recently produced, with the help of a number of business information agencies, information that may be useful in formulating a bid for the Antaeus licence.

The following charging structure (expressed in Antaeus dollars) is currently being adopted by Geryon plc for its Antaeus customers:

1. An annual rental charge of AN$50 per cellular telephone payable in advance.
2. An airtime charge of AN$0·50 per minute for local calls and AN$3·00 per minute for international calls.

Heracles telecommunications plc is considering undercutting these charges by offering:

1. An annual rental charge of AN$40 per cellular telephone payable in advance.
2. An airtime charge of AN$0·30 per minute for local calls and AN$2·50 per minute for international calls.

The level of ownership of cellular telephones within the country over the next five years, within various income ranges, is predicted to be as follows:

Percentage of population owning a cellular telephone					
	2003	2004	2005	2006	2007
Income range (AN$)					
50,000+	18	38	57	85	92
30,000 – 49,999	10	18	36	56	70
<30,000	8	12	25	40	50

The expected market share for Heracles telecommunications plc of customers falling within each income range is expected to be:

Expected market share (percentage of customers)					
	2003	2004	2005	2006	2007
Income range (AN$)					
50,000+	20	35	55	68	72
30,000 – 49,999	30	40	65	75	85
<30,000	50	65	80	85	90

The percentage of population falling within each income range over the next five years is predicted to be as follows:

Percentage of population falling within each income range					
	2003	2004	2005	2006	2007
Income range (AN$)					
50,000+	10	12	15	18	20
30,000 – 49,999	26	29	32	35	39
<30,000	64	59	53	47	41

The average usage of a cellular telephone within each income range is predicted to be as follows:

Average usage of cellular telephone per year (minutes)					
	2003	2004	2005	2006	2007
Income range (AN$)					
50,000+	1,200	2,400	5,500	7,900	8,300
30,000 – 49,999	500	950	1,400	2,600	2,750
<30,000	100	450	750	1,100	1,200

The percentage of local calls and international calls over the next five years is predicted to be as follows:

Percentage of local calls and international calls					
	2003	2004	2005	2006	2007
Local	95	86	82	79	77
International	5	14	18	21	23

Nearly all of the international calls are expected to be made by customers within the AN$50,000+ income range.

The following costs of establishing a new cellular network have been estimated:

1. Eight cell sites each costing between AN$200,000 and AN$250,000 will be required. The cost of these cell sites will be incurred during the first year of operations.
2. The cost of a cellular phone is AN$300, which will be borne by the company rather than the customer.
3. The cost of offices and other buildings will be AN$950,000 and will be incurred during the first year of operations. These offices will be sold soon after the end of the licence period for between AN$800,000 and AN$900,000.
4. Marketing and promotional operations will have a budget equal to 10% of sales revenue.
5. The variable costs of operating the system (excluding the marketing costs mentioned above) are expected to be 40% of sales revenue.
6. The annual fixed costs of operating the system are expected to be AN$2 million. However, this figure will rise in steps of AN$300,000 for every 10,000 customers (or part of this figure) above a customer base of 100,000.
7. Working capital is estimated at 8% of sales revenue. The working capital investment will be released soon after the end of the licence period.

The Board of Directors of Heracles telecommunications plc met recently to consider the licence bid and three key issues arose. FIrstly, it became apparent that the above figures do not really take account of the possibility that Geryon plc will respond to the new competition by cutting its own charges. However, the continuing problems with the reliability of the network, high operating costs and a poor reputation among customers was likely or prevent Geryon plc from responding effectively within the first three years of the new licence period. Thereafter, Geryon plc could respond by matching the prices of Heracles telecommunications plc and this could result in Geryon plc obtaining a market share of up to 50% of those customers within the AN$50,000+ range, although a more likely figure would be around 40%.

Secondly, it was by no means certain that Heracles telecommunications plc could avoid the technical problems that have dogged Geryon plc. Although the Technical Director was confident that the problems could be solved using technology developed by the company, some of his key staff did not agree. If the technology owned by the company is inadequate, new technology costing between AN$5 million and AN$6 million in the first year will have to be purchased.

Thirdly, the company has recently been approached by Antaeus Telephone Inc, which also has an interest in the forthcoming licence bid. Antaeus Telephones Inc was formed in 1997 as part of the government's privatisation programme. Although owned by private shareholders, the company enjoys a monopoly over the fixed line network that was formerly under state control. Antaeus Telephones Inc has proposed a joint bid with Heracles telecommunications plc for the new licence and, assuming the bid is successful, would expect the revenues and costs of the cellular network to be shared equally. Antaeus Telephones Inc has a reputation for being overstaffed and inefficient, however, it is trying to shed this image and now wishes to branch out into new areas of operations.

The Antaeus licence has excited much interest within the telecommunications industry and competition for the licence is expected to be stiff. Investments analysts specialising in the telecommunications sector believe that the successful bidder will have to pay between AN$ 650 – 720 million in order to secure the licence.

The Board of Directors of Heracles telecommunications plc has decided to meet in the near future to discuss the bid further. The company has a cost of capital of 12%.

Required:

Prepare a report to the Board of Directors of Heracles telecommunications plc concerning the forthcoming bid. In the report, you should:

(a) suggest, with reasons, a guide price for the licence that the directors should consider as a basis for further discussion. (33 marks)

(b) identify and discuss any significant factors that are not included in your answer to (a) above and which should be taken into account before a final decision is made. (7 marks)

(c) discuss the issues that should be taken into account when deciding upon the joint bid proposal from Antaeus Telephones Inc. (10 marks)

Notes:

1. **In answering part (a) all key workings and assumptions must be clearly stated.**
2. **Workings should be in AN$000's and should be to one decimal place.**
3. **Ignore taxation.**

(50 marks)

Section 2 – Risk Management
This ONE question is compulsory and MUST be attempted

Case Study

2 **(a)** Sumlin plc is a UK based firm which produces and sells a wide range of electric motors and mobile electricity generators. Its electric motors are used in many applications which include CD drives, car windscreen wipers, car windows, hydraulic pumps and automatic doors. Its mobile electricity generators are mainly used by the construction industry, the emergency services and armed forces.

Sumlin has prided itself on its engineering expertise and its products have a reputation for reliability and robustness. As a result of this reputation Sumlin has concentrated on its product specification and production capability. Consequently Sumlin has carried out little marketing. Sumlin has traditionally manufactured and sold only within the UK.

However Sumlin is considering a more market orientated strategy and is considering overseas expansion – its long-term plans include the possibility of :

(i) exporting products manufactured in the UK to both European Union countries and to the Far East, and

(ii) setting up a subsidiary manufacturing company in Halamia.

Halamia is a developing country which has had a history of about 50 years of political upheaval. However within the last five years it has changed its name, introduced democracy and, with the help of Western and Japanese financial institutions, set up a good banking and financial infrastructure as well as a small, but thriving, stock market. However the financial markets have not yet introduced the full range of financial derivative products.

Halamia is being considered as the base for Sumlin's overseas manufacturing activity due to

(i) its geographical position – production in Halamia will enable Sumlin to service a large part of the world market outside Europe and Asia,

(ii) the attractive package of financial incentives which the current Government of Halamia is offering to attract inward investment – these incentives currently include a low tax rate for the first twenty years of operations in Halamia and a relaxation of the usual stringent exchange controls on money transfers out of the country (this would, under current rules, allow profits from the operations to be repatriated to the UK without any restrictions or withholding taxes – again this is for the first twenty years of operations).

There are mixed views within the management team of Sumlin about the proposed long-term expansion. Most members of the management team are enthusiastic about the proposals but, due to the lack of experience in overseas transactions, they are concerned about how their long term overseas expansion plans will alter the risks faced by the firm. Sumlin's production director believes it would be safer not to set up any overseas manufacturing subsidiary but to manufacture in the UK and make export sales. He also suggests that all export sales should be invoiced in £ sterling to reduce foreign exchange exposure.

Required:

Produce a report for the management of Sumlin which deals with their concerns. The report should:

(i) describe the current currency risks faced by Sumlin; (4 marks)

(ii) both describe and discuss the additional risks which Sumlin's long-term expansion plans might entail, and ways in which those risks might be managed; (18 marks)

and

(iii) discuss the advantages and disadvantages of the production director's views. (8 marks)

(b) After commissioning the report requested in (a) above, Sumlin has entered into two ad hoc overseas ventures to exploit opportunities which are not part of its long-term plans – these are:

(i) the sale of some equipment to the Halamian government with a contract price of 20 million Halamian Francs (HF 20 million) and with payment being due to Sumlin in six months' time, and

(ii) a bid to buy some production machinery from a firm in the United States of America. Sumlin has bid a total of $10,797,000. Sumlin will learn in three months' time whether or not it has been successful in its bid. Payment will be expected at the time of any acceptance of its bid with delivery of the machinery to be completed within the following two months.

Again, these two ventures are causing Sumlin's management team some concern as there is little experience or understanding of the impact of currency risks.

One of the non-executive directors has stated:
'Both the Halamian Franc and the US Dollar have been volatile currencies when compared to Sterling but both have shown distinct trends. Currently one pound Sterling is worth about 5 Halamian Francs. But as that country is now very soundly run I would expect the exchange rate to change to about 4·5 Francs to the pound in six months. Therefore I feel we ought to do nothing to hedge this exposure and, in six months, take advantage of the strength of the Halamian Franc. With regard to the bid to buy machinery from America, I am convinced that our bid is a good one and it is certain to be accepted. The US Dollar is currently not particularly healthy and so I would again suggest we do nothing so when, in three months, we need to pay Dollars we can do so at the better rate.'

Most other members of the management team would prefer not to take risks and would prefer to be as certain as is possible of the monetary impact, when measured in Sterling, of the two ventures.

The Treasury section of Sumlin's bank has provided the following information:

Exchange Rates	$US/£	HF/£
Spot	1·5200 – 1·5240	5·1000 – 5·2500
3 Months Forward	1·5000 – 1·5080	5·1600 – 5·3200
6 Months Forward	1·4900 – 1·4990	5·2200 – 5·3900

Money Market Annual Interest Rates	Borrowing	Lending
UK	10%	8%
Halamia	15%	11%

These interest rates apply to any borrowing or lending for less than 12 months.

The Bank is prepared to offer three month over-the-counter Dollar/Sterling options at the following prices:

	COSTS	
	CALL	PUTS
Exercise Price ($/£)		
1·4750	2·20c	0·75c
1·5000	1·75c	1·25c
1·5250	1·35c	1·80c

The option contracts are based on a contract size of £2,000 and the prices quoted are cents per £ payable now. Calls and puts relate to the purchase and sale of Sterling. All options are European.

Required:

(i) Comment on the views of the non-executive director and indicate the potential risks and benefits of following his advice. (6 marks)

(ii) Using, as appropriate, the forward market, the money market and the currency options market demonstrate how Sumlin plc could sensibly hedge its foreign exchange risks. Recommend which hedging technique(s) should be selected. (14 marks)

(50 marks)

End of Project