



Enterprise Pillar

E3 – Enterprise Strategy

23 November 2010 – Tuesday Morning Session

Instructions to candidates

You are allowed three hours to answer this question paper.
You are allowed 20 minutes reading time before the examination begins during which you should read the question paper and, if you wish, highlight and/or make notes on the question paper. However, you will not be allowed, under any circumstances , to open the answer book and start writing or use your calculator during this reading time.
You are strongly advised to carefully read ALL the question requirements before attempting the question concerned (that is all parts and/or sub-questions).
ALL answers must be written in the answer book. Answers written on the question paper will not be submitted for marking.
You should show all workings as marks are available for the method you use.
The pre-seen case study material is included in this question paper on pages 2 to 7. The unseen case study material, specific to this examination, is provided on pages 8 to 10.
Answer the compulsory questions in Section A on page 11. This page is detachable for ease of reference.
Answer TWO of the three questions in Section B on pages 14 to 17.
Maths Tables and formulae are provided on pages 19 and 20.
The list of verbs as published in the syllabus is given for reference on page 23.
Write your candidate number, the paper number and examination subject title in the spaces provided on the front of the answer book. Also write your contact ID and name in the space provided in the right hand margin and seal to close.
Tick the appropriate boxes on the front of the answer book to indicate the questions you have answered.

E3 – Enterprise Strategy

TURN OVER

DEF Airport

Pre-seen case study

Overview

DEF Airport is situated in country D within Europe but which is outside the Eurozone. The local currency is D\$. It is located near to the town of DEF. It began life in the 1930s as a flying club and was extended in 1947, providing scheduled services within central Europe. A group of four local state governments, which are all in easy reach of the airport (hereafter referred to as the LSGs), took over the running of the airport in 1961. The four LSGs are named North (NLSG), South (SLSG), East (ELSG) and West (WLSG). These names place their geographical location in relation to the airport. In the early 1970s flights from the airport to European holiday destinations commenced with charter flights operated by holiday companies. In 1986, the first transatlantic flight was established and the airport terminal building was extended in 1987.

By 1989 the airport was handling 500,000 passengers per year which is forecast to increase to 3.5 million for both incoming and outgoing passengers in the current financial year to 30 June 2011. The airport mainly serves holidaymakers flying to destinations within Europe and only 5% of the passengers who use the airport are business travellers.

DEF Airport was converted into a company in 1990 and the four LSGs became the shareholders, each with an equal share. The company is not listed on a stock exchange. The airport has undertaken extensive development since 2000, with improvements to its single terminal building. The improvements have mainly been to improve the airport's catering facilities and to increase the number of check-in desks. There has also been investment in the aircraft maintenance facilities offered to the airlines operating out of the airport.

Governance

The Board of Directors has four Executive directors: the Chief Executive, the Director of Facilities Management, the Finance Director and the Commercial Director. In addition there is a Company Secretary and a Non-Executive Chairman. In accordance with DEF Airport's Articles of Association, the Non-Executive Chairman is drawn from one of the four LSGs. The Non-Executive Chairman is the sole representative of all four LSGs. The Chairmanship changes every two years with each of the four LSGs taking turns to nominate the Chair.

The four LSGs have indicated that they may wish to sell their shareholdings in the airport in the near future. If any LSG wishes to sell its shares in the airport it must first offer them to the other three LSGs. Any shares that are not purchased by the other LSGs may then be sold on the open market. A local investment bank (IVB) has written to the Chairman expressing an interest in investing in the airport in return for a shareholding together with a seat on the Board.

Mission statement

The Board of Directors drew up a mission statement in 2008. It states "At DEF Airport we aim to outperform all other regional airports in Europe by ensuring that we offer our customers a range of services that are of the highest quality, provided by the best people and conform to the highest ethical standards. We aim to be a good corporate citizen in everything we do."

DEF Airport development plan

The Board of Directors produced a development plan in 2009. The Board of Directors consulted with businesses in the area and followed central government airport planning guidelines. It was assumed that the views of other local stakeholders would be represented by the four LSGs which would feed comments to the Board through the Chairman.

The plan relates to the development of DEF Airport and its forecast passenger growth for the next two decades. The Board proposed that future development of the airport will be phased and gradual in order to avoid unexpected consequences for the local communities and industry.

Strategic objectives

The following strategic objectives have been established in the development plan:

1. Create a planning framework which enables DEF Airport to meet the demands of the forecast passenger numbers;
2. Reduce to a minimum the visual and audible impacts of the operation of the airport on the local environment;
3. Ensure that the airport is financially secure;
4. Improve land based access to the airport;
5. Minimise the pollution effects of the operation of the airport.
6. Maintain / increase employment opportunities for people living close to the airport.

By the year ending 30 June 2015, DEF Airport is expected to support about 3,000 local jobs and have a throughput of 5 million passengers per year, an increase of 1.5 million from the 3.5 million passengers forecast for the current financial year ending 30 June 2011. In order to accommodate the forecast increased number of passengers and attain the development objectives, it will be necessary for the airport to extend its operational area to the east of the land it currently occupies.

Financial objectives

Extracts from DEF Airport's forecast income statement for the year ending 30 June 2011 and forecast statement of financial position as at that date are presented in the Appendix. The four LSGs have made it clear to the Board of Directors that the airport must at least achieve financial self-sufficiency. The financial objectives of the airport are to ensure that:

1. The airport does not run at a loss;
2. All creditors are paid on time;
3. Gearing levels must not exceed 20% (where gearing is defined as debt to debt plus equity) and any long-term borrowings are financed from sources approved by the four LSGs.

Corporate Social Responsibility

A key feature of DEF Airport's development plan is to develop "Sustainable Aviation" initiatives in order to reduce the effects of flying on the environment. One effect on the environment is that the airport is subject to specific planning restrictions affecting flights between the hours of 11 p.m. (2300 hours) and 7 a.m. (0700 hours) to reduce aircraft noise. Flights are permitted between these times, but must be specially authorised. Typically, flights between these times would be as a result of an emergency landing request.

A leading international consultancy, QEG, which specialises in auditing the corporate social responsibility (CSR) issues of commercial enterprises, has offered to provide a CSR audit to DEF Airport free of charge. QEG is based in the USA and hopes to expand by offering its services to European enterprises.

DEF Airport's competitors

TUV Airport is located about 100 kilometres away from DEF Airport and serves a highly populated industrial city. The Board of Directors of DEF Airport considers TUV Airport to be its main competitor. There are another three competing airports within 80 kilometres of DEF Airport. TUV Airport purchased one of these three competitor airports and subsequently reduced services from it in order to reduce the competitive threat to itself.

Airlines

Airlines are keen to negotiate the most cost effective deal they can with airports. DEF Airport applies a set of standard charges to airlines but is aware that some of its competitor airports have offered inducements to airlines in order to attract DEF's business.

Airlines across the world are facing rising fuel and staff costs as well as strong competition from within the industry. There has been an overall increase in customer demand for air travel in recent years and low-priced airlines have emerged and are threatening the well-established,

traditional airlines. Consequently, the traditional airlines have begun to cut the number of destinations to which they fly.

There are several low-priced airlines that serve DEF Airport's competitors, but only one, S, also operates out of DEF Airport. S is exploring ways in which it might increase its flights to and from DEF Airport.

DEF's Board of Directors has been approached by a North American airline that wishes to operate services from DEF Airport. This airline specialises in flights for business and first class passengers. However, this airline insists that it would pay DEF Airport in US\$. This is contrary to the airport's policy of accepting payment only in D\$, which is the local currency.

Analysis of revenue by business segment

The forecast split of total revenue of D\$23.4 million by business segment for the current financial year ending 30 June 2011 is:

	%
Aviation income	48
Retail concessions at the airport	20
Car Parking	15
Other income	17
(Other income includes income from property rentals, and other fees and charges.)	

DEF Airport offers discounts for prompt payment.

Aviation income

In addition to the standard charges, which are set out below, there is a range of surcharges which are levied on airlines for such items as "noisy aircraft" (charged when aircraft exceed the Government limits for acceptable noise levels), recovery of costs and expenses arising from cleaning or making safe any spillages from aircraft and extraordinary policing of flights (for example, arrests made as a result of anti-social behaviour on aircraft).

Standard charges made by DEF Airport to the airlines:

Charges per aircraft

Landing charges – large aircraft:	D\$300
Landing charges – medium aircraft:	D\$170

Parking charges for the first two hours are included in the landing charge. Thereafter, a charge of D\$200 per hour is imposed for each large aircraft and D\$250 per hour for each medium aircraft. The parking charge is lower for large aircraft because they take at least two hours to clean and refuel, so they almost always have to pay for an hour's parking, and also because there is less demand for the parking areas used for large aircraft. Medium aircraft tend to take off again within one hour of landing. Approximately 10% of medium sized aircraft landings result in the airline incurring parking charges for one hour. This is normally either because their scheduled departure time requires them to park or because of delays imposed by air traffic restrictions, technical malfunctions or problems with passengers.

Charges per passenger

Passenger Load:

Flights to European destinations:	D\$1.60 per departing passenger
Flights outside Europe:	D\$4.00 per departing passenger
Passenger security	D\$1.20 per passenger arriving or departing

Retail concessions

DEF Airport provides the facilities for a range of shops, bureau de change (dealing in foreign exchange currency transactions for passengers), bars and cafes for the budget conscious passenger.

DEF Airport has a monopoly in the provision of retail concessions and therefore faces no competition.

Car parking

Car parking is an important source of DEF Airport's revenue. The airport has extended its own car parking facilities for customers over recent years. Car parks occupy a large area of what was green belt land (that is land which was not previously built on) around its perimeter. The land was acquired by the airport specifically for the purpose of car parking. A free passenger bus service is provided to take passengers to and from the car parks into the airport terminal building.

Competitors have established alternative car parking facilities off-site and provide bus services to and from the airport's terminal. The parking charges made by the competitors are lower than those levied by the airport. Competitor car park operators offer additional services to passengers, such as car maintenance and valeting, which are undertaken while the car is left in their care.

DEF Airport does not have a hotel on its premises. There is a hotel within walking distance of the airport which offers special rates for passengers to stay the night before their flight and then to park their cars at the hotel for the duration of their trip.

Other income

This heading contains a mixture of revenue streams. The Commercial Director reported that some have good growth prospects. Property rental income is likely to decline though as there has been much building development around the airport perimeter.

DEF Airport security

Passengers and their baggage are required to go through rigorous security checks. There is a fast track service provided which can be accessed by all passengers at an extra charge. This is intended to speed up the security process. However, on some occasions this leads to passengers on the normal route becoming frustrated because they are required to wait in lengthy queues to pass through the security checks. Airport security staff are required by law to search all departing passengers and their baggage for suspicious or dangerous items. On the very rare occasions that they discover anything they report their concerns to the police. There are always several police officers on patrol at the airport at any given time and so the police can respond to any report very quickly.

In addition to passenger and baggage screening, DEF Airport security staff are responsible for the security of parked aircraft and airport property. They do this primarily by monitoring all arriving and departing vehicles and their drivers and by monitoring the many closed circuit television cameras that cover the airport.

The airport has had a good record with regard to the prevention of theft from passenger baggage. This is frequently a serious matter at other airports, but DEF Airport has received very few complaints that baggage has been tampered with. DEF Airport's Head of Security regards the security of baggage as very low risk because of this low level of complaints.

The Head of Security at DEF Airport was appointed to his current role in 1990, when the airport was very much smaller than it is today. He was a police sergeant before he joined the airport staff. Immediately before his appointment he was responsible for the front desk of DEF town's main police station, a job that involved managing the day-to-day activities of the other police officers on duty. He was happy to accept the post of Head of Security because the police service was starting to make far greater use of computers. He had always relied on a comprehensive paper-based system for documenting and filing reports.

The Head of Security is directly responsible for all security matters at DEF Airport. In practice, he has to delegate most of the actual supervision of staff to shift managers and team leaders because he cannot be expected to be on duty for 24 hours per day or to manage the security arrangements in great detail while administering the security department. The overall responsibilities of the Head of Security have not been reviewed since his appointment.

Strategic options

The Board of Directors is now actively considering its strategic options which could be implemented in the future in order to meet the strategic objectives which were set out in the airport's development plan.

Extracts of DEF Airport's forecast income statement for the year ending 30 June 2011 and statement of financial position as at 30 June 2011

Forecast income statement for the year ending 30 June 2011

	<i>Note</i>	<i>D\$000</i>
Revenue		23,400
Operating costs	1	<u>(25,450)</u>
Net operating loss		(2,050)
Interest income		70
Finance costs		(1,590)
Corporate income tax expense		<u>(130)</u>
LOSS FOR THE YEAR		<u>(3,700)</u>

Forecast statement of financial position as at 30 June 2011

	<i>D\$000</i>
ASSETS	
Non-current assets	150,000
Current assets	
Inventories	400
Trade and other receivables	9,250
Cash and cash equivalents	<u>3,030</u>
Total current assets	<u>12,680</u>
Total assets	<u>162,680</u>
EQUITY AND LIABILITIES	
Equity	
Share capital	2 17,700
Share premium	530
Revaluation reserve	89,100
Retained earnings	<u>23,200</u>
Total equity	<u>130,530</u>
Non-current liabilities	
Long term borrowings	3 22,700
Current liabilities	
Trade and other payables	<u>9,450</u>
Total liabilities	<u>32,150</u>
Total equity and liabilities	<u>162,680</u>

Notes:

1. Operating costs include depreciation of D\$5.0 million.
2. There are 17.7 million ordinary shares of D\$1 each in issue.
3. The long-term borrowings comprise a D\$6.3 million loan for capital expenditure which is repayable on 1 July 2015 and D\$16.4 million owed to the 4 LSGs. This has no fixed repayment schedule and is not expected to be repaid in the next year.

End of Pre-seen Material
The unseen material begins on page 8

TURN OVER

SECTION A – 50 MARKS

[You are advised to spend no longer than 90 minutes on this question]

ANSWER THIS QUESTION

Question One

Unseen case material

DEF Airport's competitiveness

The Board is concerned about the competitiveness of the airport and there is disagreement within the Board about the best means of competing. One Board member, who has spent most of his working life at DEF Airport, believes that the airport has a local monopoly in its immediate location and that this locational advantage is all that is needed for a successful competitive strategy.

However, other Board members who have recent working experience at other profit-making airports, within and outside Europe, think that DEF's competitive advantage has been reduced by the low-priced airlines that operate from other airports. Within Europe the low-priced airlines have been very successful and passengers are willing to travel further to an airport for cheaper flights, making DEF's location less significant. The low-priced airlines emphasise low fares, cost-containment and operating efficiencies such as online check-in facilities and no ticketing.

The Commercial Director has recently been researching the topic of competitiveness to assist his Board colleagues. He has noted that there are two very distinct types of customer serviced by, and, producing revenue for, DEF Airport. The first type of customer is the 'clients' of the airport: namely the airlines, and these create 'Aviation Income' and contribute to 'Other Income'. The other type of customer is the airline passenger who will use the Retail and Car Parking facilities at DEF Airport because they are passengers on airlines which are using DEF Airport. Both types of customer will have its own particular needs and wants and DEF Airport may have to meet these in different ways if it is to achieve sustainable competitive advantage.

The Commercial Director has also informed his colleagues of the findings of a recent survey of European air passengers. The survey of business and first class travellers revealed that business and first class passengers valued 'Distinctiveness' and this was a big factor in their choice of airport.

'Distinctiveness' was defined in the survey by such factors as having:

- the leading airlines operating from the airport not the low-priced airlines
- luxury passenger lounges
- high class restaurants
- large duty free shops with an extensive range of the most exclusive brands

One passenger in the survey summarised 'Distinctiveness' as 'Offering something which nobody else offers'.

Future strategic development

DEF Airport's process of strategic development is set within the context of its mission statement published in 2008 which states "At DEF Airport we aim to outperform all other regional airports in Europe by ensuring that we offer our customers a range of services that are of the highest quality, are provided by the best people and conform to the highest ethical standards. We aim to be a good corporate citizen in everything we do."

Following on from the mission statement, the Board of Directors produced a development plan in 2009. The Board of Directors consulted with businesses in the area and took account of central

government airport planning guidelines. It was assumed that the views of other local stakeholders would be represented by the four LSGs which would feed comments to the Board through the Chairman.

The plan relates to the development of DEF Airport and its forecast passenger growth for the next two decades. It is proposed that future development of the airport will be phased and gradual in order to avoid unexpected consequences for the local communities and industry. A key feature of DEF Airport's development plan is to develop "Sustainable Aviation" initiatives in order to reduce the effects of flying on the environment.

Strategic development

DEF's strategic objectives are set out in the pre-seen material on page 3.

Future ownership

The four LSGs have indicated that they may wish to sell their shareholdings in the airport in the near future. If any LSG wishes to sell its shares in the airport it must first offer its shares to the other three LSGs. Any shares that are not purchased by the other LSGs may be sold on the open market. A local investment bank (IVB) has written to the Chairman expressing an interest in investing in the airport in return for a shareholding together with a seat on the Board.

IVB has a track record of investing in businesses that are under-performing in terms of profit. In the past when IVB has achieved control of such a business it has engaged in severe cost-cutting to boost the profitability of the business. This prepares the business for a rapid sale to a third party at a substantial profit for IVB. IVB describes itself as 'the business turnaround experts'. IVB has carried out this process four times since 2007. The results for IVB have been very successful in terms of profit for its shareholders but it has been heavily criticised because its actions have led to large-scale job losses in the businesses it has 'turned around'. The Chief Executive of DEF Airport has expressed strong concern to the Chairman about the approach from IVB as he believes that such investment could have very serious consequences for the airport.

Cargo Handling Services

The Director of Facilities Management has been researching the possibility of offering cargo handling services at DEF Airport as a way of increasing profits. The introduction of such services would enable DEF Airport to more fully utilise existing plant and buildings and would not require capital investment. However, DEF Airport would have to increase its expenditure on fixed costs and would also have to employ additional direct labour. The Director of Facilities Management estimates that the earliest the cargo handling services would become operational would be in 2014 as DEF Airport would have to obtain government permissions and secure contracts with shipping agents and transportation companies.

The Director of Facilities Management has discussed this project with the Finance Director who said she welcomed any project which would improve DEF Airport's finances. However, she added 'because the project is some time away and is based on a number of estimates, it is unlikely to get the Board of Directors' approval unless it offers at least D\$200,000 a year in profit from 2014.

The Director of Facilities Management has assembled the following estimates about the introduction of cargo handling services:

1. If the cargo handling services had been in operation in the year to 30 June 2010 this would have generated a revenue of D\$1.5 million which would have increased by 10% per year until the first year of actual operations in the year to 30 June 2014.
2. If cargo handling services are introduced into DEF Airport there will be fixed costs of D\$400,000 each year from the date of their introduction.

TURN OVER

If DEF introduces cargo handling services in 2014, arising from the cargo handling revenue, there will be:

- a 10% probability of a 40% contribution margin
- a 20% probability of a 30% contribution margin
- a 70% probability of a 25% contribution margin

End of unseen material

The requirement for Question One is on the opposite page which is detachable for ease of reference

Required

- (a) **Advise** the Board how DEF Airport could achieve sustainable competitive advantage as defined by Professor M Porter.

Your advice should include discussion under the following headings:

- (i) Overall cost leadership; (7 marks)
- (ii) Differentiation; and (7 marks)
- (iii) Either: Cost focus **or** Differentiation focus. (7 marks)

*Note: You are **not** required to draw Porter's generic competitive strategy model*

- (b) If IVB becomes one of the shareholders in DEF Airport, **advise** the Board:

- (i) why its approach to strategy formation and its mission might be challenged by IVB; (6 marks)
- (ii) which of the **six** strategic objectives in the development plan might be opposed by IVB; give reasons for your choices; (6 marks)
- (iii) how the future operations of the Airport might be affected. (7 marks)

- (c) **Recommend**, with reasons, whether the cargo handling services project should be undertaken. Your recommendations should be based solely on the outcome for 2014.

Note: 6 marks are available for calculations

(10 marks)

(Total marks for Question One = 50 marks)

(Total for Section A = 50 marks)

*End of Section A
Section B starts on page 14*

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TURN OVER

SECTION B – 50 MARKS

[You are advised to spend no longer than 45 minutes on each question in this section]

ANSWER TWO OF THE THREE QUESTIONS – 25 MARKS EACH

Question Two

DLC is a company which provides private telephone network services. It sells its services exclusively to business customers and, since its foundation in 2007, DLC has been very successful. DLC has been able to charge a premium price for its services and in financial years 2008 and 2009 achieved a Return on Capital Employed (ROCE) of 50% and 48% respectively. DLC's success has been built on excellence in two key success factors: Technological Innovation and Customer Service. DLC currently employs 80 people and in 2010 will have annual revenue of \$24 million.

Technological innovation

DLC has been able to continually innovate its services based on the 'leading edge' skills of its founder and chief executive, X, who previously worked in a research institute. DLC's technological innovation also requires substantial, continued capital investment and DLC spent \$6 million on this in 2009. X owns 100% of DLC's share capital. X has been able to attract several of her former colleagues to join DLC and they have contributed to the culture of research excellence and technological innovation.

Customer service

DLC's business has been the design, installation and maintenance of private telephone networks for large organisations. A recent contract completed by DLC was for a large media organisation to provide a network to support 7,000 current users, with provision for this number to be extended to 10,000 within three years. This type of business is very rewarding for DLC as it is not price sensitive. However, meeting the service requirements of the client is vitally important.

DLC's control system

DLC's only financial control system is a traditional one of budgetary control. Budgets are prepared using the actual levels of expenditure for the previous budget year together with an additional amount designed to reflect forecast levels of inflation. Monthly management accounts are prepared in which actual expenditure is compared to budgeted expenditure. DLC also computes monthly its overall Return On Capital Employed (ROCE) which X considers to be the best control measure available for her to use.

DLC has no system which explicitly sets targets and reports upon Technological Innovation and Customer Service. X considers DLC's performance in these two areas is best represented by the company's ROCE. DLC's sales achievement against budget is reported upon in total: there is no attempt made at sectional analysis. When X started DLC, she knew every detail about every customer and contract and their levels of profitability. However, as DLC has expanded she can no longer do this, which she feels is a weakness.

DLC's strategic aims

DLC has no formal written statement of strategy. However, X has expressed the following strategic aims: she wants the company to continue expanding within the same market/business segment, and to provide a rewarding lifestyle for herself and secure well-paid jobs for DLC's employees.

The requirement for Question Two is on the opposite page

Required

- (a) **Discuss** the usefulness and limitations of DLC's control system. (12 marks)
- (b) **Advise** X how non-financial performance measures could assist in the evaluation of DLC's two key success factors. (6 marks)
- (c) **Evaluate** how Customer Profitability Analysis could assist in the achievement of X's strategic aims for DLC. (7 marks)

(Total for Question Two = 25 marks)

Section B continues on the next page

TURN OVER

Question Three

JKL is a small European company based in the south of the UK which employs 35 people. It has an annual revenue of €9 million. One aspect of its recently formulated strategy is an aspiration to expand into a neighbouring country, France, by means of organic growth.

The reason that JKL's strategy for expansion is based on organic growth is due to JKL's past experience. Two years ago, the directors of JKL negotiated the purchase of a UK business, LMN, located in the west of the UK. At the time of this acquisition, LMN was regarded by JKL as having complementary capabilities and competences. However, within a short time after the acquisition, JKL judged it to have been a failure and LMN was sold back to its original owner at a loss for JKL.

JKL employed consultants to analyse the reasons for the failure of the acquisition. The consultants concluded that the failure had happened because:

1. JKL and LMN had very different accounting and control systems and these had not been satisfactorily combined;
2. JKL and LMN had very different corporate cultures and this had posed many difficulties which were not resolved;
3. JKL had used an autocratic management style to manage the acquisition and this had been resented by the employees of both companies.

The consultants recommended that JKL should consider the use of change agents to assist in any future acquisitions.

JKL has learnt that a French competitor company, XYZ, may shortly be up for sale at a price which would be very attractive to JKL. XYZ has a very good reputation in its domestic market for all aspects of its operations and its acquisition would offer JKL the opportunity to widen its skill set. None of JKL's staff speaks fluent French or is able to correspond in French. A small number of XYZ's staff speak English fluently but none of its staff are able to correspond in English.

Required

- (a) **Discuss**, in the context of JKL, the respective advantages and disadvantages of pursuing a strategy of expansion by:
- (i) Organic growth
 - (ii) Acquisition;

(8 marks)

- (b) **Recommend** what actions JKL should take to prevent the difficulties that occurred in the failure of the acquisition of LMN from happening if it acquires XYZ.

(9 marks)

- (c) **Discuss** how a change agent could assist in the successful acquisition of XYZ.

(8 marks)

(Total for Question Three = 25 marks)

Section B continues on the opposite page

Question Four

Y is the proprietor of a small business which provides gardening services. It has been established for three years. Y does not employ anyone in her business as she prefers to keep her business simple and to minimise the amount of administration. Y operates her business as a 'lifestyle business': A lifestyle business has been defined as *'A small commercial enterprise operated more for the owner's enjoyment and satisfaction than for the profit it earns'*. Her business is not a high-growth business. It exists to provide her with an income sufficient to give her the lifestyle she desires.

Y has invested in her business so that she has all the machinery to enable her to provide a wide range of gardening services. She has established a list of ten key customers which together yield her sufficient income. She frequently gets requests from potential new customers because of her excellent reputation for creativity and reliability. However, she will only take on a new client if an old client leaves; this rarely happens.

Y has invested very little in information technology. She has a mobile phone which has all her customers' numbers entered in the memory. She also maintains a large diary each year which records the work she has done and which is the basis for her invoicing. Y writes her invoices by hand and thinks that all her customers pay her regularly, although she never checks if there are any amounts outstanding. Once a year she lends her diary to her accountant who deals with her tax affairs. Y has kept all the yearly diaries from the start of her business. Y does not own a computer.

Y was married six months ago and her husband is a full-time student so all of the family income comes from Y's gardening business. Y has recently learnt that she is having a baby and she is concerned that her income will be insufficient to support her family. Y is aware that a contract for the maintenance of a large luxury hotel's grounds will be up for tender in the near future. The hotel contract will run for the next two years, with the possibility of a rolling annual extension, dependent upon Y meeting the high levels of quality and service expected by the hotel. The hotel has a reputation for excellence and will be a very demanding client. However, the hotel pays premium prices to its suppliers which it monitors very closely for adherence to contract specifications.

If she secures the contract, Y's income would increase and become adequate for her new needs. However, in order to carry out the contract and continue to service the ten existing customers, Y would need to employ at least three gardeners and an administrative assistant to deal with the hotel's requirements.

Required

Assuming Y secures the hotel contract:

- (a) **Discuss** whether she will be able to maintain her lifestyle business strategy. (4 marks)
- (b) **Advise** Y of the purposes and benefits of using in her business:
- (i) an information systems strategy;
 - (ii) an information technology strategy;
 - (iii) an information management strategy.
- (12 marks)
- (c) **Recommend** what actions Y will have to take to implement each of the three strategies referred to in (b). (9 marks)

(Total for Question Four = 25 marks)

End of Question Paper

Maths Tables and Formulae are on Pages 19 and 20

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MATHS TABLES AND FORMULAE

Present value table

Present value of \$1, that is $(1 + r)^{-n}$ where r = interest rate; n = number of periods until payment or receipt.

Periods (n)	Interest rates (r)									
	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%
1	0.990	0.980	0.971	0.962	0.952	0.943	0.935	0.926	0.917	0.909
2	0.980	0.961	0.943	0.925	0.907	0.890	0.873	0.857	0.842	0.826
3	0.971	0.942	0.915	0.889	0.864	0.840	0.816	0.794	0.772	0.751
4	0.961	0.924	0.888	0.855	0.823	0.792	0.763	0.735	0.708	0.683
5	0.951	0.906	0.863	0.822	0.784	0.747	0.713	0.681	0.650	0.621
6	0.942	0.888	0.837	0.790	0.746	0.705	0.666	0.630	0.596	0.564
7	0.933	0.871	0.813	0.760	0.711	0.665	0.623	0.583	0.547	0.513
8	0.923	0.853	0.789	0.731	0.677	0.627	0.582	0.540	0.502	0.467
9	0.914	0.837	0.766	0.703	0.645	0.592	0.544	0.500	0.460	0.424
10	0.905	0.820	0.744	0.676	0.614	0.558	0.508	0.463	0.422	0.386
11	0.896	0.804	0.722	0.650	0.585	0.527	0.475	0.429	0.388	0.350
12	0.887	0.788	0.701	0.625	0.557	0.497	0.444	0.397	0.356	0.319
13	0.879	0.773	0.681	0.601	0.530	0.469	0.415	0.368	0.326	0.290
14	0.870	0.758	0.661	0.577	0.505	0.442	0.388	0.340	0.299	0.263
15	0.861	0.743	0.642	0.555	0.481	0.417	0.362	0.315	0.275	0.239
16	0.853	0.728	0.623	0.534	0.458	0.394	0.339	0.292	0.252	0.218
17	0.844	0.714	0.605	0.513	0.436	0.371	0.317	0.270	0.231	0.198
18	0.836	0.700	0.587	0.494	0.416	0.350	0.296	0.250	0.212	0.180
19	0.828	0.686	0.570	0.475	0.396	0.331	0.277	0.232	0.194	0.164
20	0.820	0.673	0.554	0.456	0.377	0.312	0.258	0.215	0.178	0.149

Periods (n)	Interest rates (r)									
	11%	12%	13%	14%	15%	16%	17%	18%	19%	20%
1	0.901	0.893	0.885	0.877	0.870	0.862	0.855	0.847	0.840	0.833
2	0.812	0.797	0.783	0.769	0.756	0.743	0.731	0.718	0.706	0.694
3	0.731	0.712	0.693	0.675	0.658	0.641	0.624	0.609	0.593	0.579
4	0.659	0.636	0.613	0.592	0.572	0.552	0.534	0.516	0.499	0.482
5	0.593	0.567	0.543	0.519	0.497	0.476	0.456	0.437	0.419	0.402
6	0.535	0.507	0.480	0.456	0.432	0.410	0.390	0.370	0.352	0.335
7	0.482	0.452	0.425	0.400	0.376	0.354	0.333	0.314	0.296	0.279
8	0.434	0.404	0.376	0.351	0.327	0.305	0.285	0.266	0.249	0.233
9	0.391	0.361	0.333	0.308	0.284	0.263	0.243	0.225	0.209	0.194
10	0.352	0.322	0.295	0.270	0.247	0.227	0.208	0.191	0.176	0.162
11	0.317	0.287	0.261	0.237	0.215	0.195	0.178	0.162	0.148	0.135
12	0.286	0.257	0.231	0.208	0.187	0.168	0.152	0.137	0.124	0.112
13	0.258	0.229	0.204	0.182	0.163	0.145	0.130	0.116	0.104	0.093
14	0.232	0.205	0.181	0.160	0.141	0.125	0.111	0.099	0.088	0.078
15	0.209	0.183	0.160	0.140	0.123	0.108	0.095	0.084	0.079	0.065
16	0.188	0.163	0.141	0.123	0.107	0.093	0.081	0.071	0.062	0.054
17	0.170	0.146	0.125	0.108	0.093	0.080	0.069	0.060	0.052	0.045
18	0.153	0.130	0.111	0.095	0.081	0.069	0.059	0.051	0.044	0.038
19	0.138	0.116	0.098	0.083	0.070	0.060	0.051	0.043	0.037	0.031
20	0.124	0.104	0.087	0.073	0.061	0.051	0.043	0.037	0.031	0.026

Cumulative present value of \$1 per annum, Receivable or Payable at the end of each year for n years

$$\frac{1-(1+r)^{-n}}{r}$$

Periods (n)	Interest rates (r)									
	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%
1	0.990	0.980	0.971	0.962	0.952	0.943	0.935	0.926	0.917	0.909
2	1.970	1.942	1.913	1.886	1.859	1.833	1.808	1.783	1.759	1.736
3	2.941	2.884	2.829	2.775	2.723	2.673	2.624	2.577	2.531	2.487
4	3.902	3.808	3.717	3.630	3.546	3.465	3.387	3.312	3.240	3.170
5	4.853	4.713	4.580	4.452	4.329	4.212	4.100	3.993	3.890	3.791
6	5.795	5.601	5.417	5.242	5.076	4.917	4.767	4.623	4.486	4.355
7	6.728	6.472	6.230	6.002	5.786	5.582	5.389	5.206	5.033	4.868
8	7.652	7.325	7.020	6.733	6.463	6.210	5.971	5.747	5.535	5.335
9	8.566	8.162	7.786	7.435	7.108	6.802	6.515	6.247	5.995	5.759
10	9.471	8.983	8.530	8.111	7.722	7.360	7.024	6.710	6.418	6.145
11	10.368	9.787	9.253	8.760	8.306	7.887	7.499	7.139	6.805	6.495
12	11.255	10.575	9.954	9.385	8.863	8.384	7.943	7.536	7.161	6.814
13	12.134	11.348	10.635	9.986	9.394	8.853	8.358	7.904	7.487	7.103
14	13.004	12.106	11.296	10.563	9.899	9.295	8.745	8.244	7.786	7.367
15	13.865	12.849	11.938	11.118	10.380	9.712	9.108	8.559	8.061	7.606
16	14.718	13.578	12.561	11.652	10.838	10.106	9.447	8.851	8.313	7.824
17	15.562	14.292	13.166	12.166	11.274	10.477	9.763	9.122	8.544	8.022
18	16.398	14.992	13.754	12.659	11.690	10.828	10.059	9.372	8.756	8.201
19	17.226	15.679	14.324	13.134	12.085	11.158	10.336	9.604	8.950	8.365
20	18.046	16.351	14.878	13.590	12.462	11.470	10.594	9.818	9.129	8.514

Periods (n)	Interest rates (r)									
	11%	12%	13%	14%	15%	16%	17%	18%	19%	20%
1	0.901	0.893	0.885	0.877	0.870	0.862	0.855	0.847	0.840	0.833
2	1.713	1.690	1.668	1.647	1.626	1.605	1.585	1.566	1.547	1.528
3	2.444	2.402	2.361	2.322	2.283	2.246	2.210	2.174	2.140	2.106
4	3.102	3.037	2.974	2.914	2.855	2.798	2.743	2.690	2.639	2.589
5	3.696	3.605	3.517	3.433	3.352	3.274	3.199	3.127	3.058	2.991
6	4.231	4.111	3.998	3.889	3.784	3.685	3.589	3.498	3.410	3.326
7	4.712	4.564	4.423	4.288	4.160	4.039	3.922	3.812	3.706	3.605
8	5.146	4.968	4.799	4.639	4.487	4.344	4.207	4.078	3.954	3.837
9	5.537	5.328	5.132	4.946	4.772	4.607	4.451	4.303	4.163	4.031
10	5.889	5.650	5.426	5.216	5.019	4.833	4.659	4.494	4.339	4.192
11	6.207	5.938	5.687	5.453	5.234	5.029	4.836	4.656	4.486	4.327
12	6.492	6.194	5.918	5.660	5.421	5.197	4.988	4.793	4.611	4.439
13	6.750	6.424	6.122	5.842	5.583	5.342	5.118	4.910	4.715	4.533
14	6.982	6.628	6.302	6.002	5.724	5.468	5.229	5.008	4.802	4.611
15	7.191	6.811	6.462	6.142	5.847	5.575	5.324	5.092	4.876	4.675
16	7.379	6.974	6.604	6.265	5.954	5.668	5.405	5.162	4.938	4.730
17	7.549	7.120	6.729	6.373	6.047	5.749	5.475	5.222	4.990	4.775
18	7.702	7.250	6.840	6.467	6.128	5.818	5.534	5.273	5.033	4.812
19	7.839	7.366	6.938	6.550	6.198	5.877	5.584	5.316	5.070	4.843
20	7.963	7.469	7.025	6.623	6.259	5.929	5.628	5.353	5.101	4.870

FORMULAE

Annuity

Present value of an annuity of \$1 per annum, receivable or payable for n years, commencing in one year, discounted at $r\%$ per annum:

$$PV = \frac{1}{r} \left[1 - \frac{1}{[1+r]^n} \right]$$

Perpetuity

Present value of \$1 per annum, payable or receivable in perpetuity, commencing in one year, discounted at $r\%$ per annum:

$$PV = \frac{1}{r}$$

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LIST OF VERBS USED IN THE QUESTION REQUIREMENTS

A list of the learning objectives and verbs that appear in the syllabus and in the question requirements for each question in this paper.

It is important that you answer the question according to the definition of the verb.

LEARNING OBJECTIVE	VERBS USED	DEFINITION
Level 1 - KNOWLEDGE What you are expected to know.	List State Define	Make a list of Express, fully or clearly, the details/facts of Give the exact meaning of
Level 2 - COMPREHENSION What you are expected to understand.	Describe Distinguish Explain Identify Illustrate	Communicate the key features Highlight the differences between Make clear or intelligible/State the meaning or purpose of Recognise, establish or select after consideration Use an example to describe or explain something
Level 3 - APPLICATION How you are expected to apply your knowledge.	Apply Calculate Demonstrate Prepare Reconcile Solve Tabulate	Put to practical use Ascertain or reckon mathematically Prove with certainty or to exhibit by practical means Make or get ready for use Make or prove consistent/compatible Find an answer to Arrange in a table
Level 4 - ANALYSIS How are you expected to analyse the detail of what you have learned.	Analyse Categorise Compare and contrast Construct Discuss Interpret Prioritise Produce	Examine in detail the structure of Place into a defined class or division Show the similarities and/or differences between Build up or compile Examine in detail by argument Translate into intelligible or familiar terms Place in order of priority or sequence for action Create or bring into existence
Level 5 - EVALUATION How are you expected to use your learning to evaluate, make decisions or recommendations.	Advise Evaluate Recommend	Counsel, inform or notify Appraise or assess the value of Advise on a course of action

Enterprise Pillar

Strategic Level Paper

E3 – Enterprise Strategy

November 2010

Tuesday Morning Session