



Business Management Pillar

Strategic Level Paper

P6 – Management Accounting – Business Strategy

21 November 2006 - 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, make annotations 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). The question requirements are contained in a dotted box.

Answer the ONE compulsory question in Section A on pages 2, 3 and 5. The question requirements are on page 5, which is detachable for ease of reference.

Answer TWO of the four questions in Section B on pages 7 to 10.

Maths Tables and Formulae are provided on pages 11 and 12. These pages are detachable for ease of reference.

Write your full examination number, paper number and the examination subject title in the spaces provided on the front of the examination 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 which questions you have answered.

P6 – Business Strategy

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SECTION A – 50 MARKS

[the indicative time for answering this section is 90 minutes]

ANSWER THIS QUESTION

Question One

Introduction

AAA is a large manufacturing company that specialises in the design and manufacture of televisions. It was formed in 1985, following the merger of two rival companies, and is now one of the three largest TV manufacturers in Asia. AAA employs over 2000 staff at its head office and four manufacturing plants, which are all in the same Asian country, Jurania. AAA is listed on the Juranian stock exchange.

The production system

TV manufacturing is a mass production industry, with high volumes of identical or similar products being made on a production line basis. The products are generally made to order for customers, who are either other electrical manufacturers (who put their name on the product and re-sell it) or large electrical retailers. The manufacture of televisions is still a relatively labour-intensive process, as many of the components need to be assembled in a precise way. Most of the electrical components used in AAA's process are bought in from suppliers, as is the TV screen and cabinet (the plastic case in which the screen and components are contained). The staff who assemble the components are mainly semi-skilled, and have been trained by AAA to perform fairly simple, repetitive operations. When completed, quality assurance staff test the TV sets, and any that are found faulty are returned to the production line to be re-worked.

Components received from suppliers are also tested by the quality assurance staff of AAA. As they do not have the time to test every component, they test a sample of components from each batch delivered. If they find more than one faulty component in every twenty tested, the whole batch is rejected and returned to the supplier.

Business Performance

The following is a summary of the performance of AAA last year. AAA reports its performance in the currency of its home country, the Juranian dollar (J\$):

<i>Financial Performance</i>	<i>Last Year</i>	
	<i>Actual</i> <i>J\$ millions</i>	<i>Budget</i> <i>J\$ millions</i>
Sales revenue	1,793	1,941
Gross (Factory) profit	1,177	1,320
Pre-tax profit	652	790
Capital employed (average)	2,835	2,550
Cash (closing)	179	485
Finished goods inventory (average)	38.2	20.0
Raw material inventory (average)	11.4	9.5
Work in process (average)	0.8	0.3

<i>Other performance indicators</i>	<i>Last year</i>	
	<i>Actual</i>	<i>Budget</i>
Share price (closing) (J\$)	334.50	400.00
Earnings per share (J\$)	46.00	50.00
Number of employees (average)	2,259	2,128
Sales (million units)	2.35	2.40
Number of finished units re-worked	54,000	30,000
Percentage of purchases from suppliers rejected (by value)	4.25	3.00
Average production cost of sales per unit (J\$)	262	259
Average sales price per unit (J\$)	763	809
New product lines developed	12	10
New product lines successfully launched	1	4
Products returned from customers as faulty (per 1,000 units sold)	28	20
Warranty claims (per 1,000 units sold)	56	30
Number of working employee-days lost to industrial disputes	2,500	3,200

The board meeting

At the most recent board meeting of AAA, the Chief Executive Officer asked for suggestions as to how the management of AAA might be improved. One of the non-executive directors suggested that the use of the balanced scorecard might assist in controlling the business, as it had in another company of which she is also a non-executive director. The marketing director mentioned that he had compiled some information about another organisation in the television manufacturing industry, BBB, and asked if that might be of use. The purchasing director mentioned that he had recently been at a conference where a speaker had suggested that the introduction of 'knowledge management' was improving the performance of many organisations. As far as the other directors present at the board meeting were aware, this was not an approach used commonly in their industry.

BBB

BBB is a major rival of AAA, and is based in a neighbouring Asian country, Mesnar. BBB is a private company, owned by a wealthy industrialist. BBB compiles its accounts in the local currency of Mesnar, the Mesnari Riyal (RM). Both the Mesnari Riyal and the Juranian Dollar are freely traded currencies, and the current spot exchange rate between the two is J\$1:RM2.50. There is free and unrestricted trade between Jurania and Mesnar.

Question one and the requirement continue on page 5, which is detachable for ease of reference

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The following information has been obtained from BBB's filed accounts from last year, and from the trade association of which both AAA and BBB are members.

	<i>Last year</i>
Sales revenue (RM million)	1,400
Total production cost of sales (RM million)	435
Profit before tax (RM million)	557
Capital employed (RM million)	1,589
Closing inventories (RM million)	17
Number of employees (closing)	740
Number of units sold	780,000
Number of warranty claims in the year	19,800

Required

- (a) Prepare a balanced scorecard appraisal of the performance of AAA last year.

*Note: There are up to 10 marks available for calculations in this section. You are **not** required to compare the performance of AAA with that of BBB in this section.*

(25 marks)

- (b) As the management accountant of AAA, prepare a benchmarking report for the directors that compares the performance of AAA last year with that of BBB for the same period. You should refer to your answer to part (a) in making your comparison.

*Note: There are up to 8 marks available for calculations in this section, and up to 2 marks for the use of an appropriate report format. You are **not** required to reproduce the calculations from your answer to part (a) in this section, but may do so if you wish.*

(15 marks)

- (c) Advise the directors of AAA how the introduction of knowledge management might lead to AAA developing a sustainable competitive advantage over BBB.

(10 marks)

(Total for question One = 50 marks)

(Total for Section A = 50 marks)

End of Section A

Section B starts on page 7

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SECTION B – 50 MARKS

[the indicative time for answering this section is 90 minutes]

ANSWER TWO QUESTIONS FROM FOUR

Question Two

CTC, a telecommunications company, has recently been privatised by the government of C after legislation was passed which removed the state monopoly and opened up the communications market to competition from both national and overseas companies – a process known as deregulation.

Prior to the deregulation, CTC was the sole, protected, supplier of telecommunications and was required to provide 'the best telecommunications service the nation can afford'. At that time the government dictated the performance levels required for CTC, and the level of resources it would be able to bring to bear to meet its objectives.

The shares were floated on the C Stock Exchange with 80% being made available to the population of C and up to 20% being made available to foreign nationals. The government of C retained a 'golden share' to prevent the acquisition of CTC by any foreign company. However, the privatisation meant that many of the traditional ways in which the industry had operated would need to change under the new regulations. Apart from the money received from the flotation, the government privatised CTC in recognition of both the changing global environment for telecommunications companies, and the overseas expansion opportunities that might exist for a privatised company. The government recognises that foreign companies will enter the home market but feels that this increased competition is likely to make CTC more effective in the global market.

You have recently been appointed as the management accountant for CTC and have a background in the commercial sector. The Board of Directors is unchanged from CTC's pre-flotation days.

Required:

- (a) Explain to the Board of Directors why the objectives of CTC will need to change as a result of the privatisation of CTC and the deregulation of the market. *(10 marks)*
- (b) Produce two examples of suitable strategic objectives for CTC, following its privatisation and the deregulation of the market, and explain why each would be an appropriate long term objective. *(4 marks)*
- (c) Advise the Board of Directors on the stages of an appropriate strategic planning process for CTC in the light of the privatisation and deregulation. *(11 marks)*

(Total for Question Two = 25 marks)

Section B continues on the next page

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Question Three

DDD is a relatively small, specialist manufacturer of chemicals that are used in the pharmaceutical industry. It does not manufacture any pharmaceutical products itself since these are made by different processes and under different conditions. DDD obtains its raw materials, which are quite simple, from large chemical companies, and modifies them by a number of patented processes before selling them on to a few pharmaceutical companies. DDD makes significantly higher margins than its suppliers, which manufacture in bulk.

Several patents are due to expire in the next three years.

The large pharmaceutical companies, which are DDD's customers, are suffering reduced profits as governments reduce the price they are prepared to pay for drugs. As a result, the pharmaceutical companies are pressuring DDD to reduce its prices.

The majority of the shares are owned by members of the family which started the business some years ago and who still take an active part both as managers of the business and as development chemists. There is a share option scheme for the employees and this is well supported.

Required:

As management accountant for DDD you have been asked to:

- (a) Advise the Board of Directors of the possible threats related to the patent expiries;
(10 marks)
- (b) Evaluate suitable courses of action that DDD might take to maintain its profits in the face of the threats identified in (a);
(12 marks)
- (c) From your analysis recommend, with a brief justification, the most appropriate course of action for DDD.
(3 marks)

(Total for Question Three = 25 marks)

Section B continues on the opposite page

Question Four

EEE is an established chemical company extracting flavours and oils from plant materials and supplying them to the flavours and fragrances industries. The shareholders include institutional investors (20%), employees and pensioners of the company (20%) and the descendants of the family (30%) who founded the business approximately 100 years ago. The remainder of the shares are in public ownership. The company is reasonably successful but, recently, there has been pressure on margins and its future is not guaranteed.

The majority of the Board of Directors are members of the founding family who have always taken an active part in the management of the business.

When the company was originally started, the surrounding area was mainly used as agricultural land but, over time, a residential area has developed around the factory. Although many of the workers in the factory live locally, some of the housing is quite expensive and has attracted affluent residents from the local city.

The chemical engineers at EEE have recently developed, and patented, a new process which would allow EEE to extract onion oil and garlic oil at far better yields than those obtained by existing processes. The market for these oils is very profitable and presents a significant opportunity for EEE to gain a real competitive advantage in its industry.

Unfortunately, as with all extraction processes, there will be some leakage and, although perfectly safe and compliant with all safety legislation, the smell of the oils will offend some of the more affluent residents who have complained to local government officers.

There is very little other industry in the area and EEE is a large contributor to the local economy. One of the trade union representatives working in EEE is also an elected council member serving in the local government.

Required:

As management accountant you have been asked to:

- (a) Advise the Board of Directors of the advantages to EEE of conducting a stakeholder analysis in the context of the proposed investment decision;

(5 marks)
- (b) Analyse the principal stakeholders in EEE in the context of the proposed investment in the new process;

(15 marks)
- (c) Recommend an acceptable course of action to the Board of Directors in the light of the stakeholder analysis conducted in (b).

(5 marks)

(Total for Question Four = 25 marks)

Section B continues on the next page

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Question Five

FFF is a manufacturer of specialist portable communications equipment, which is designed for use in hazardous and dangerous conditions. Developments of new technology in recent years, such as wireless mobile telephony, infra red thermal imaging and global positioning has allowed FFF to create new products.

The market for such equipment has grown significantly over the past five years. The customer base includes fire services, oil and chemical companies and the government. FFF now recognises that, during this period of rapid growth, the market has attracted a number of new entrants and may even be reaching a level of overcapacity.

The directors feel that they do not know as much as they should about the existing, and new, companies in the industry. The market is now maturing and, although FFF is managing to maintain its margins and leading market share (45%), it is likely that the characteristics of the industry will change.

Required

As management accountant you are required to:

- (a) Advise the board of the advantages of adopting a formal approach to competitor analysis;
(10 marks)
- (b) Advise the directors of the stages in a formal competitor analysis process and identify any information that would need to be gathered at each stage for FFF.
(15 marks)

(Total for Question Five = 25 marks)

(Total for Section B = 50 marks)

End of Question Paper

Maths Tables and Formulae follow on pages 11 and 12

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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Strategic Level Paper

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November 2006

Tuesday Morning Session