Professional Level – Options Module

Advanced Performance Management

Friday 11 December 2009

Time allowed
Reading and planning: 15 minutes
Writing: 3 hours

This paper is divided into two sections:

Section A – BOTH questions are compulsory and MUST be attempted

Section B – TWO questions ONLY to be attempted

Present Value and Annuity Tables are on pages 12 and 13.

Do NOT open this paper until instructed by the supervisor.

During reading and planning time only the question paper may be annotated. You must NOT write in your answer booklet until instructed by the supervisor.

This question paper must not be removed from the examination hall.

The Association of Chartered Certified Accountants

Paper P5

ACCA

Section A – BOTH questions are compulsory and MUST be attempted

1 The Benjamin Education College (BEC), which is partially government funded, is a well-established provider of professional courses for students of accounting, law and marketing in the country of Brightland.

Its mission statement states that the college 'is committed to providing high quality education to all students'. BEC provides education to private fee-paying students as well as to students who are funded by the government.

The Jackson Business Centre (JBC) which commenced trading during 2004 is also a provider of professional courses for students of accounting, law and marketing in the country of Brightland. It is a privately owned college and all its students are responsible for the payment of their own fees.

Relevant operating data for BEC and JBC for the year ended 30 November 2009 are as follows:

(1) Both BEC and JBC offer a range of courses in accounting, law and marketing on a twice per annum basis.

(2) Fees (budget and actual) payable to BEC and JBC in respect of each student who enrolled for a course

	BEC Privately funded students	BEC Government funded students	JBC Privately funded students
Course type:	$	$	$
Accounting	1,200	900	1,000
Law	1,000	750	1,200
Marketing	800	600	1,200

(3) Salary costs per staff member were payable as follows:

	BEC Budget	BEC Actual	JBC Actual
	$	$	$
Lecturer	50,000	52,000	55,000
Administrative	20,000	20,800	22,000

(4) Budgeted costs for the year based on 8,000 students per annum for BEC were as follows:

	$	Variable cost (%)	Fixed cost (%)
Tuition materials	720,000	100	–
Catering	100,000	80	20
Cleaning	40,000	25	75
Other operating costs	600,000	20	80
Depreciation	40,000	–	100

Variable costs vary according to the number of students attending courses at BEC.

(5) Actual costs (other than salary costs) incurred during the year:

	BEC	JBC
	$	$
Tuition materials	741,600	730,000
Catering	95,680	110,000
Cleaning	40,950	40,000
Other operating costs (including costs of freelance staff)	646,800	645,000
Depreciation	40,000	60,000

(6) The management of JBC is considering introducing on-line tuition support by its lecturing staff.

(7) Both BEC and JBC operated a policy which aimed to employ 60 lecturers throughout the year.

(8) The appendix below shows budget and actual statistics for BEC and actual statistics for JBC.

Appendix

Sundry statistics for the year ended 30 November 2009

	BEC Budget	BEC Actual	JBC Actual
Number of students:			
Accounting	3,600	3,800	4,000
Law	1,500	1,400	1,560
Marketing	1,800	2,000	2,000
Student mix (%) for each course type:			
Privately funded	80	70	100
Government funded	20	30	
Number of enquiries received:			
Accounting	4,800	4,750	5,000
Law	2,000	2,800	2,000
Marketing	2,400	2,500	2,400
Number of lecturers employed throughout the year:	60	60	60
Number of lecturers recruited during the year:			
Accounting	2	6	1
Law	1	3	–
Marketing	1	3	–
Number of administrative staff employed throughout the year	10	10	8
Number of administrative staff recruited during the year	2	8	–
Number of times freelance lecturing staff were used	–	–	20
Number of new courses under development	–	–	4

Required:

The senior management team of BEC has asked you, as management accountant, to prepare a report providing them with the following:

(i) A statement which shows actual and budgeted income statements of BEC and an actual income statement for JBC in respect of the year ended 30 November 2009 on a comparable basis; (10 marks)

(ii) An assessment of the performance of BEC and JBC using both financial and non-financial measures based on the information contained in the question. You should identify other measures of performance which you consider relevant to BEC; (10 marks)

(iii) A discussion of the issues that might restrict the extent to which a performance measurement system is accepted and supported by management and employees; (6 marks)

Professional marks will be awarded in question 1 for appropriateness of format, style and structure of the report. (4 marks)

(30 marks)

2 The RRR Group (RRR) provides roof repair, refurbishment and renewal services to individual customers on a nationwide basis. RRR operates a large number of regional divisions, each of which offers a similar range of services.

RRR expects divisional management to prepare its own annual budget by focusing on the achievement of a net profit figure set at group level. This budget is currently used for planning and reporting.

Table A shows actual results for Alpha division for the years ending 30 November 2008 and 30 November 2009, together with data representing an average of a number of similar competitor company divisions.

RRR has given Alpha division a budgeted profit requirement of $20m for the year to 30 November 2010. The management of Alpha division has prepared the strategy shown in Table B as the framework for the achievement of the budget profit requirement for the year to 30 November 2010.

RRR plc has, however, decided that in line with current 'beyond budgeting' philosophy, each division should follow a number of adaptive processes including the following:

(1) Setting 'stretch goals' aimed at relative improvement and avoiding dysfunctional decision-making.

(2) Evaluation and rewards at each division based on relative improvement contracts (with hindsight).

(3) Action planning that focuses on a strategy to achieve continuous value creation for the group.

As an incentive to the overall achievement of goals and the creation of 'value', a set of KPI's (key performance indicators) will be introduced in 2010 and used on the basis of the data in Table C.

Divisional staff will be paid a bonus as a percentage of salary based on the overall weighted percentage score deduced from the analysis as per table C.

Required:

(a) Evaluate the extent to which the budget of Alpha division for the year ending 30 November 2010 is achievable and consistent with the 'beyond budgeting' philosophy detailed above.

Note: Your answer should include specific examples from the data contained in the question to illustrate your discussion. (14 marks)

(b) (i) Apply the KPI performance appraisal process shown and explained in Table C, using actual data for 2008 and 2009 in order to show the bonus (as a % of salary) that would have been achieved by Alpha division for the year ending 30 November 2009; (12 marks)

(ii) Discuss potential benefits that may be derived from the application of the KPI appraisal and bonus approach, both for Alpha division and throughout the RRR Group. (4 marks)

(30 marks)

Table A
Summary of financial and other operating information

	Alpha division 2009 $m	Alpha division 2008 $m	Competitor divisions 2009 $m
Sales revenue	90·0	80·0	85·0
Less Costs:			
Cost of sales (note 1)	60·0	50·0	
Marketing	8·5	8·0	
Staff training	4·0	4·0	
Remedial work on orders (note 2)	0·8	0·5	
Customer enquiry costs (note 3)	1·5	1·4	
Customer complaint related costs (note 4)	0·2	0·1	
Total costs	75·0	64·0	69·5
Net profit	15·0	16·0	15·5
Number of:			
Customer enquiries	15,000	16,000	
Customer orders placed	10,000	8,800	
Orders placed requiring remedial work	300	440	
Customer complaints	100	132	

Note 1: includes materials, wages/salaries, vehicle and machine costs, etc
Note 2: following inspection by surveyors after work implemented
Note 3: initial survey and site analysis
Note 4: investigation & action on complaints.

Table B
Proposed strategy for Alpha division for year to 30 November 2010

It is estimated that the budgeted profit requirement of $20m will be achieved as a consequence of the following:

– The number of orders received and processed will be 11,000 (with average price levels remaining as per 2009 actual price levels) from an initial total of 15,500 customer enquiries
– The marketing cost allowance would be reduced to $7·2m
– The training cost allowance would be reduced to $3m
– Cost of sales ($) will rise by 10% from the 2009 actual total to allow for the combined effect of volume and price changes
– Remedial work on orders will total $1m for material, labour and overhead costs
– Initial survey and analysis costs on customer enquiries will remain at the 2009 average cost per enquiry
– Customer complaint related costs are expected to rise to $0·25m.

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Table C
Staff bonus calculation for the year ended 30 November 2009 using Key Performance Indicators (KPI's) based on relative contract factors

KPI	Weighting Factor (A)	KPI Total Score % (B)* (see below for basis)	Weighted Score % (A) x (B)
Revenue 2009 versus previous year	0·15		
Revenue 2009 versus competitor	0·20		
Profit 2009 versus previous year	0·15		
Profit 2009 versus competitor	0·20		
Quality items 2009 versus previous year:			
No. of orders requiring remedial work	0·075		
No. of complaints investigated	0·075		
% of enquiries converted into orders	0·15		
Total	1·000	Bonus (%) =	?

(B)* – each KPI score value is positive (+) where the 2009 value shows an improvement over the previous year OR negative (–) where the 2009 value shows poorer performance than in the previous year.
Each KPI score value is the % increase (+) or decrease (–) in 2009 as appropriate.

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Question 3 begins on page 8.

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Section B – TWO questions ONLY to be attempted

3 You are the management accountant of the SSA Group which manufactures an innovative range of products to provide support for injuries to various joints in the body. The group has adopted a divisional structure. Each division is encouraged to maximise its reported profit.

Division A, which is based in a country called Nearland, manufactures joint-support appliances which incorporate a 'one size fits all people' feature. A different appliance is manufactured for each of knee, ankle, elbow and wrist joints.

Budget information in respect of Division A for the year ended 31 December 2010 is as follows:

Support appliance	**Knee**	**Ankle**	**Elbow**	**Wrist**
Sales units (000's)	20	50	20	60
Selling price per unit ($)	24	15	18	9
Total variable cost of sales ($'000)	200	350	160	240

Each of the four support products uses the same quantity of manufacturing capacity. This gives Division A management the flexibility to alter the product mix as desired. During the year to 31 December 2010 it is estimated that a maximum of 160,000 support products could be manufactured.

The following information relates to Division B which is also part of the SSA group and is based in Distantland:

1. Division B purchases products from various sources, including from other divisions in SSA group, for subsequent resale to customers.
2. The management of Division B has requested two alternative quotations from Division A in respect of the year ended 31 December 2010 as follows:

   Quotation 1 – Purchase of 10,000 ankle supports.
   Quotation 2 – Purchase of 18,000 ankle supports.

The management of the SSA Group has decided that a minimum of 50,000 ankle supports must be reserved for customers in Nearland in order to ensure that customer demand can be satisfied and the product's competitive position is maintained in the Nearland market.

The management of the SSA Group is willing, if necessary, to reduce the budgeted sales quantities of other types of joint support in order to satisfy the requirements of Division B for ankle supports. They wish, however, to minimise the loss of contribution to the Group.

The management of Division B is aware of another joint support product, which is produced in Distantland, that competes with the Division A version of the ankle support and which could be purchased at a local currency price that is equivalent to $9 per support. SSA Group policy is that all divisions are allowed autonomy to set transfer prices and purchase from whatever sources they choose. The management of Division A intends to use market price less 30% as the basis for each of quotations 1 and 2.

Required:

(a) (i) The management of the SSA Group have asked you to advise them regarding the appropriateness of the decision by the management of Division A to use an adjusted market price as the basis for the preparation of each quotation and the implications of the likely sourcing decision by the management of Division B.

Your answer should cite relevant quantitative data and incorporate your recommendation of the prices that should be quoted by Division A for the ankle supports in respect of quotations 1 and 2, that will ensure that the profitability of SSA Group as a whole is not adversely affected by the decision of the management of Division B. (8 marks)

(ii) Advise the management of Divisions A and B regarding the basis of transfer pricing which should be employed in order to ensure that the profit of the SSA Group is maximised. (4 marks)

(b) After considerable internal discussion concerning Quotation 2 by the management of SSA Group, Division A is not prepared to supply 18,000 ankle supports to Division B at any price lower than 30% below market price. All profits in Distantland are subject to taxation at a rate of 20%. Division A pays tax in Nearland at a rate of 40% on all profits.

Advise the management of SSA Group whether the management of Division B should be directed to purchase the ankle supports from Division A, or to purchase a similar product from a local supplier in Distantland. Supporting calculations should be provided. (8 marks)

(20 marks)

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4 Cundy Aquatic Pursuits (CAP) was founded in 1978 by its managing director, Jody Cundy. CAP owns and operates a chain of Aqua Parks in the country of Lizland. Each Aqua Park has a number of large indoor and outdoor swimming pools together with a range of attractions such as water-slides, toboggan runs and surfing rides.

Jody Cundy firmly believes that growth in the number of Aqua Parks is the key to success for CAP, and therefore CAP pursued organic growth which has been financed from retained profits and public share issues. At present, Jody Cundy owns 55% of the ordinary share capital of CAP. Jody has stated on many occasions that 'I always want to control this business'.

The following information is available:

Year ended 30 November	**2006**	**2007**	**2008**	**2009**
Revenue ($m)	330	320	308	280
Operating costs	270	264	256	240
Profit before tax ($m)	60	56	52	40
Number of Aqua Parks	56	58	60	62

Summary Income Statement for year ended 30 November 2009

	$m
Revenue	280
Operating costs	240
Profit before tax	40
Taxation	(10)
Profit after tax	30

Summary Statement of Financial Position at 30 November 2009

	$m
Non-current assets	220
Net current assets	30
	250
9% Redeemable preference shares (2010)	(100)
	150
Financed by:	**$m**
Ordinary shares $1	28
Retained profits	122
	150

Other information:

(1) Jody Cundy considers that it is becoming more and more difficult to earn profits in Lizland and is considering a proposal to expand operations into the country of Robland. CAP would begin construction of forty new Aqua Parks within Robland, on 1 December 2009. Each Aqua Park will require a capital outlay of $3 million.

(2) Robland is a country which is 3,200 kilometres from Lizland. A market research study commissioned by Jody Cundy indicated 'reasonable' future prospects for Robland. During recent years Robland has experienced some significant variations in its currency, the 'Rob'.

(3) CAP's price earnings ratio at the end of 2009 was 10 compared to an industry average of 12.

(4) Dividends were paid during the year ended 30 November 2009 as follows:

	$m
Preference	9
Ordinary	14

(5) Net current assets at 30 November 2009 were as follows:

	$m
Inventories	30
Trade and other receivables	5
Bank	10
Trade and other payables	(15)
	30

(6) No provision has been made for redemption of the preference shares which are redeemable at a premium of 10% on 30 November 2010.

(7) Revenue during the year ended 30 November 2005 amounted to $325 million.

Required:

(a) Evaluate the financial performance of CAP. (6 marks)

(b) Discuss the principal financial, economic and social considerations that should be considered by Jody Cundy prior to a decision to proceed with the proposed expansion into Robland. (14 marks)

(20 marks)

5 The 'Care For Dogs Company' (CFD) is a very profitable organisation which was established in 1998. CFD offers accommodation, care and supervision for pet dogs owned by inhabitants of Barkland.

CFD provides temporary accommodation for dogs whose owners are unable to care for them due to holidays, work commitments, illness etc. As part of the service offered to dog owners, CFD collects and returns dogs at the beginning and end of all dog stays.

When CFD was formed, the directors created a mission statement which was 'to provide very high value for money to all of our clients'.

The directors have always attempted to manage CFD in a socially responsible manner. Indeed, they are now considering the creation of a 'Dog Sanctuary' for homeless dogs which would involve an allocation of 20% of the total accommodation available for dogs to the Dog Sanctuary. The Dog Sanctuary would accommodate homeless dogs until such time as a new owner was found for them. CFD would not receive any revenue whatsoever in respect of any homeless dog.

Required:

(a) (i) Discuss the purpose, potential benefits and potential problems of mission statements; (8 marks)

(ii) Advise the directors of CFD regarding the appropriateness of its mission statement. (3 marks)

(b) Explain the term 'critical success factor' and discuss THREE critical success factors for CFD clearly highlighting a key performance indicator for each critical success factor. (6 marks)

(c) Excluding the number of complaints by clients, identify and briefly explain THREE quantitative non-financial performance measures that could be used to assess the 'quality of service' provided by CFD. (3 marks)

(20 marks)

Present Value Table

Present value of 1 i.e. $(1 + r)^{-n}$

Where r = discount rate
n = number of periods until payment

Discount rate (r)

Periods (n)	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	1
2	0·980	0·961	0·943	0·925	0·907	0·890	0·873	0·857	0·842	0·826	2
3	0·971	0·942	0·915	0·889	0·864	0·840	0·816	0·794	0·772	0·751	3
4	0·961	0·924	0·888	0·855	0·823	0·792	0·763	0·735	0·708	0·683	4
5	0·951	0·906	0·863	0·822	0·784	0·747	0·713	0·681	0·650	0·621	5
6	0·942	0·888	0·837	0·790	0·746	0·705	0·666	0·630	0·596	0·564	6
7	0·933	0·871	0·813	0·760	0·711	0·665	0·623	0·583	0·547	0·513	7
8	0·923	0·853	0·789	0·731	0·677	0·627	0·582	0·540	0·502	0·467	8
9	0·941	0·837	0·766	0·703	0·645	0·592	0·544	0·500	0·460	0·424	9
10	0·905	0·820	0·744	0·676	0·614	0·558	0·508	0·463	0·422	0·386	10
11	0·896	0·804	0·722	0·650	0·585	0·527	0·475	0·429	0·388	0·305	11
12	0·887	0·788	0·701	0·625	0·557	0·497	0·444	0·397	0·356	0·319	12
13	0·879	0·773	0·681	0·601	0·530	0·469	0·415	0·368	0·326	0·290	13
14	0·870	0·758	0·661	0·577	0·505	0·442	0·388	0·340	0·299	0·263	14
15	0·861	0·743	0·642	0·555	0·481	0·417	0·362	0·315	0·275	0·239	15

(n)	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	1
2	0·812	0·797	0·783	0·769	0·756	0·743	0·731	0·718	0·706	0·694	2
3	0·731	0·712	0·693	0·675	0·658	0·641	0·624	0·609	0·593	0·579	3
4	0·659	0·636	0·613	0·592	0·572	0·552	0·534	0·516	0·499	0·482	4
5	0·593	0·567	0·543	0·519	0·497	0·476	0·456	0·437	0·419	0·402	5
6	0·535	0·507	0·480	0·456	0·432	0·410	0·390	0·370	0·352	0·335	6
7	0·482	0·452	0·425	0·400	0·376	0·354	0·333	0·314	0·296	0·279	7
8	0·434	0·404	0·376	0·351	0·327	0·305	0·285	0·266	0·249	0·233	8
9	0·391	0·361	0·333	0·308	0·284	0·263	0·243	0·225	0·209	0·194	9
10	0·352	0·322	0·295	0·270	0·247	0·227	0·208	0·191	0·176	0·162	10
11	0·317	0·287	0·261	0·237	0·215	0·195	0·178	0·162	0·148	0·135	11
12	0·286	0·257	0·231	0·208	0·187	0·168	0·152	0·137	0·124	0·112	12
13	0·258	0·229	0·204	0·182	0·163	0·145	0·130	0·116	0·104	0·093	13
14	0·232	0·205	0·181	0·160	0·141	0·125	0·111	0·099	0·088	0·078	14
15	0·209	0·183	0·160	0·140	0·123	0·108	0·095	0·084	0·074	0·065	15

Annuity Table

Present value of an annuity of 1 i.e. $\frac{1-(1+r)^{-n}}{r}$

Where r = discount rate
n = number of periods

Discount rate (r)

Periods (n)	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	1
2	1·970	1·942	1·913	1·886	1·859	1·833	1·808	1·783	1·759	1·736	2
3	2·941	2·884	2·829	2·775	2·723	2·673	2·624	2·577	2·531	2·487	3
4	3·902	3·808	3·717	3·630	3·546	3·465	3·387	3·312	3·240	3·170	4
5	4·853	4·713	4·580	4·452	4·329	4·212	4·100	3·993	3·890	3·791	5
6	5·795	5·601	5·417	5·242	5·076	4·917	4·767	4·623	4·486	4·355	6
7	6·728	6·472	6·230	6·002	5·786	5·582	5·389	5·206	5·033	4·868	7
8	7·652	7·325	7·020	6·733	6·463	6·210	5·971	5·747	5·535	5·335	8
9	8·566	8·162	7·786	7·435	7·108	6·802	6·515	6·247	5·995	5·759	9
10	9·471	8·983	8·530	8·111	7·722	7·360	7·024	6·710	6·418	6·145	10
11	10·37	9·787	9·253	8·760	8·306	7·887	7·499	7·139	6·805	6·495	11
12	11·26	10·58	9·954	9·385	8·863	8·384	7·943	7·536	7·161	6·814	12
13	12·13	11·35	10·63	9·986	9·394	8·853	8·358	7·904	7·487	7·103	13
14	13·00	12·11	11·30	10·56	9·899	9·295	8·745	8·244	7·786	7·367	14
15	13·87	12·85	11·94	11·12	10·38	9·712	9·108	8·559	8·061	7·606	15

(n)	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	1
2	1·713	1·690	1·668	1·647	1·626	1·605	1·585	1·566	1·547	1·528	2
3	2·444	2·402	2·361	2·322	2·283	2·246	2·210	2·174	2·140	2·106	3
4	3·102	3·037	2·974	2·914	2·855	2·798	2·743	2·690	2·639	2·589	4
5	3·696	3·605	3·517	3·433	3·352	3·274	3·199	3·127	3·058	2·991	5
6	4·231	4·111	3·998	3·889	3·784	3·685	3·589	3·498	3·410	3·326	6
7	4·712	4·564	4·423	4·288	4·160	4·039	3·922	3·812	3·706	3·605	7
8	5·146	4·968	4·799	4·639	4·487	4·344	4·207	4·078	3·954	3·837	8
9	5·537	5·328	5·132	4·946	4·772	4·607	4·451	4·303	4·163	4·031	9
10	5·889	5·650	5·426	5·216	5·019	4·833	4·659	4·494	4·339	4·192	10
11	6·207	5·938	5·687	5·453	5·234	5·029	4·836	4·656	4·486	4·327	11
12	6·492	6·194	5·918	5·660	5·421	5·197	4·988	4·793	4·611	4·439	12
13	6·750	6·424	6·122	5·842	5·583	5·342	5·118	4·910	4·715	4·533	13
14	6·982	6·628	6·302	6·002	5·724	5·468	5·229	5·008	4·802	4·611	14
15	7·191	6·811	6·462	6·142	5·847	5·575	5·324	5·092	4·876	4·675	15

End of Question Paper