Management Accounting Pillar

Strategic Level Paper

P3 – Management Accounting – Risk and Control Strategy

22 November 2007 – Thursday 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 the 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.
ALL answers must be written in the answer book. Answers or notes written on the question paper will **not** be submitted for marking.
Answer the ONE compulsory question in Section A on pages 2 to 5. The question requirements are on page 5, which is detachable for ease of reference.
Answer TWO questions only from Section B on pages 8 to 12.
Maths Tables and Formulae are provided on pages 13 to 16. These pages are detachable for ease of reference.
The list of verbs as published in the syllabus is given for reference on the inside back cover of this question paper.
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 which questions you have answered.

P3 – Risk and Control Strategy

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SECTION A – 50 MARKS

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

ANSWER THIS QUESTION

Question One

The NOP Group is one of the world's largest clothing retailers and had a turnover in excess of £2,000 million for the year ended 30 September 2007. The group's clothes are sold in Europe, East Asia, North America and Australia and New Zealand. The clothes are made for NOP by a number of approved contractors in China, Sri Lanka, Thailand and India. The clothes are designed by employees of NOP at the company's headquarters in London, England. The designers base their ideas on what has attracted them when they have attended the previews of the latest styles at the fashion shows presented by the world's leading fashion houses. NOP operates to a four month lead time which runs from the start of the design process through to the first appearance of the new styles in the retail stores.

NOP's clothes are targeted at the mid to high priced sector of the market and are sold under several brand names. NOP tries to match brands to differing customer profiles, and in doing so recognises that its customers' ages are an important factor. Within the 18-25 year customer age group, brands are 'uni-sex'.

NOP operates across four geographic business units, with each managed as a profit centre. The group has differing arrangements for its retail outlets across the world, as shown below:

Business Unit	**Outlet Arrangement**
Europe (UK, France, Italy)	Group owned shops
USA and Canada	Franchise agreements
Asia (Japan, Thailand, China, Singapore)	Joint ventures with department stores
Australia and New Zealand	Joint venture with a distributor

The Group is a signatory to an ethical code of conduct (see extracts in the additional information below) which has been developed for use within the clothing sector, and it produces a separate social and environmental report which it views as complementary to its annual report. As part of its environmental protection policy, NOP has also declared a commitment not to send waste to landfill sites from 2008 onwards and will make arrangements for all company waste to be recycled.

The Group's Treasurer regards NOP as highly exposed to currency risk, and therefore requires that all open positions with an equivalent value in excess of £100,000 are hedged. Responsibility for hedging arrangements lies with the Finance Director of each of NOP's four regional business units. Capital gearing is kept at a low level compared to NOP's competitors, and the market value of debt equalled just 30% of the market value of equity at the balance sheet date of 30th September 2007. The Group Directors' remuneration, as detailed in Note 3 below, is linked to medium term financial targets.

The Group's shares are listed on both the London and the New York stock exchanges. NOP's share price has fallen by 15% over the last six weeks, compared with an average fall of 10% for the general retail sector, and 8% for fashion retailers. A meeting of the Board of Directors has been called to address the problem.

The Group Finance Director thinks that a share price recovery could be stimulated by a well targeted cost cutting exercise. The production and transportation costs being charged by suppliers are considered too high, as they amount to 75% of the cost of goods sold. Initial estimates suggest that there is scope to reduce each of these costs by around 5%. Profit is further eroded by high employee costs, especially in Europe, where they equal 18% of sales, compared to an industry average of 12%. The Group Finance Director believes that increasing the proportion of part-time sales staff could bring employee costs in line with the industry average.

The Group Marketing Director proposes an alternative solution, as he believes that a new advertising campaign would stop the decline in the share price. The campaign would focus on the group's most glamorous product ranges and would use international film stars to promote the clothes. The average gross margin on all clothes sales across the group varies significantly. For some products in the UK and Japan it is 45%, but it is as low as 6% for some products in Thailand and Singapore. The glamour ranges earn an average gross margin of 22% and sales of these ranges account for 15% of group revenue, but it is thought that the advertising campaign could significantly boost global sales of these high mark-up products with no accompanying sales loss elsewhere.

Additional Information

1. Extracts from key financial statistics for the preceding two years:

	2005 £million	**2006 £million**
Sales*	2,400	3,120
Gross Profit (excluding joint ventures)	480	625
Distribution costs	72	50
Profit/loss from joint ventures	(350)	180
Net Interest payable	24	22
Dividend yield on year end share price	1·5%	1·5%
UK Share Price (year end)	465 pence	490 pence
Price index for UK retail shares (Base 100 in 1997)	680	782

The current (November 2007) share price is 480 pence
*Sales are split across the regions as follows: Europe 60%; USA & Canada 20%; Asia 12%; Australia and New Zealand 8%

2. The Ethical Code of Conduct covers conditions and terms of employment within NOP and in NOP's suppliers, and includes the following requirements:

- Payment of the legal minimum level of wages (or industry average) whichever is higher;
- No use of forced labour, and freedom for employees to join a trade union and/or engage in collective bargaining;
- Safe and hygienic working conditions;
- A commitment not to use child labour, that is, aged below 15;
- Working hours kept to normal national levels or local industry standards.

The question continues, with its requirements, on page 5, which is detachable for ease of reference

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3. Remuneration of Group Executive Directors

In addition to a fixed, market based salary, plus pension and health scheme benefits, group directors are entitled to performance related pay. The performance related pay usually represents over 50% of each director's annual remuneration and is based upon the following terms:

- A variable bonus is payable if performance meets or exceeds pre-determined annual targets for NOP's profit before tax. Achieving target performance earns the directors a bonus of 55% of their annual salary, and this rises to a maximum of 150% for performance more than 20% above the target level.
- Half of the variable bonus is granted in cash, and the rest is paid in shares, which must be held for a minimum of three years.

4. Remuneration of business unit directors and other senior managers

In common with the executive directors, other senior managers in NOP are paid partly on the basis of performance. Senior staff can earn bonuses paid in shares, which carry no minimum holding period requirement. The bonus rates are dependent upon performance relative to earnings per share growth targets set by the Board of Directors and in recent years have ranged between 50% and 220% of annual salary.

Required:

(a) Discuss the extent to which **each** of the following characteristics of NOP creates potential risks for the company's shareholders:

(i) Branding and marketing strategy;
(ii) Design and procurement strategy;
(iii) Remuneration of senior management and executive directors;
(iv) Corporate Treasury function;
(v) Social and environmental policies.

(30 marks)

(b) Prepare a report to be presented at the board meeting that:

- Explains why the principle of risk ownership at board of director level is a vital form of control, especially in extremely large companies such as NOP;

(5 marks)

- Discusses the relative merits of the Finance Director's and the Marketing Director's proposals. (Your discussion should be from a risk management perspective, and should therefore focus on the risks created by the share price fall and the impact of each proposal on the group's overall risk profile.)

(15 marks)

(Total for Question One = 50 marks)
(Total for Section A = 50 marks)

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SECTION B – 50 MARKS

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

ANSWER *TWO* QUESTIONS ONLY

Question Two

X is a small company based in England. The company had the choice of launching a new product in either England or France but lack of funding meant that it could not do both. The company bases its decisions on Expected Net Present Value (ENPV) and current exchange rates. As a result of this methodology, and the details shown below, it was decided to launch in England (with an ENPV of £28,392) and not France (with an ENPV of £25,560).

England		France	
	Probability		**Probability**
Launch Costs		**Launch Costs**	
£145,000	0·1	£190,000	1·0
£120,000	0·9		
Annual Cash Flows		**Annual Cash Flows**	
£65,000	0·4	£90,000	0·5
£42,000	0·4	£70,000	0·2
£24,000	0·2	£30,000	0·3

The annual cash flows are based on contribution margins of 10% for England and 20% for France where it is expected that sales volumes will be lower. It is thought that the product will sell for four years only.

The monetary values are expressed in the home currency of the company and have been converted (where necessary) at the current exchange rate of €1·47/£1.

The company has discounted the cash flows using a cost of capital of 10% per year.

Required:

(a) It has now been forecast that the Euro is likely to strengthen against sterling by 5% in each of the next four years.

Calculate and briefly comment upon the revised Expected Net Present Value if the product is launched in France.

(5 marks)

(b) Identify the different risks associated with each launch option and discuss how these may be managed by the company.

(8 marks)

(Total for requirements (a) and (b) = 13 marks)

(c) Company X wishes to raise a £500,000 fixed rate bank loan to fund the product launch and additional capital investments. Company X is able to obtain fixed rate finance at 8·5% or a variable rate loan at LIBOR + 0·5%. Using its bank as an intermediary, Company X has been offered a swap arrangement with HTM, a smaller company that wishes to borrow at a fixed rate. HTM has been quoted a rate of 10·5% for a fixed rate loan or LIBOR + 1·1% for a floating rate loan. The bank charge for arranging a swap is 0·2% of the principal, and it is assumed that the net benefits will be shared equally between Company X and HTM.

Required:

(i) Briefly discuss the potential benefits and hazards of interest rate swaps as a tool for managing interest rate risk.

(6 marks)

(ii) Show the transactions involved, the bank charges and the interest terms payable if X and HTM agree to the swap.

(6 marks)

(Total for requirement (c) = 12 marks)

(Total for Question Two = 25 marks)

Section B continues on the next page

TURN OVER

Question Three

VWS is a company manufacturing and selling a wide range of industrial products to a large number of businesses throughout the country. VWS is a significant local employer, with 2,500 people working out of several locations around the region, all linked by a networked computer system.

VWS purchases numerous components from 750 local and regional suppliers, receiving these components into a central warehouse. The company carries about 10,000 different inventory items, placing 25,000 orders with its suppliers each year.

The Accounts Payable Department of VWS has six staff who process all supplier invoices through the company's computer system and make payment to suppliers by cheque or electronic remittance.

Required:

(a) Discuss the purposes and value of an internal control system for Accounts Payable to a company like VWS.

(10 marks)

(b) Identify the information systems controls that should be in place for Accounts Payable in a company like VWS.

(10 marks)

(c) Explain the risk of fraud in a computerised Accounts Payable system for a company like VWS and how that risk can be mitigated.

(5 marks)

(Total for Question Three = 25 marks)

Question Four

EWC is a large company in an unregulated sector of the telecommunications industry. It has ambitious plans for sales growth and increased profitability. In support of these goals, senior management has established a flat management structure. Budget targets place employees under considerable pressure but success in achieving and surpassing sales and profitability targets is rewarded by bonuses and share options. Employees who do not achieve their targets do not remain with the company for long.

Performance targets exist for expanding EWC's customer base, sales value and profitability per customer, and geographic and product-based expansion. EWC zealously pursues cost reduction with continual efforts to drive down suppliers' prices. The company aims to eliminate any wasteful practices in management and administration. EWC considers any expenditure that does not lead directly to sales growth to be wasteful and the company minimises its corporate policies and procedures. As a result, EWC has tended to overlook unscrupulous practices in its employees' dealings with customers, competitors and suppliers in the pursuit of its goals. The company is unlisted and reports its profits to shareholders once per year.

Required:

(a) Identify the major types of risk facing EWC that arise from its style of management. Give reasons to support your answer.

(10 marks)

(b) Explain the significance of the control environment in EWC.

(5 marks)

(c) From the perspective of a newly appointed non-executive director, evaluate the financial, non-financial quantitative, and qualitative controls in EWC in the context of EWC's goals and the risks facing EWC.

(10 marks)

(Total for Question Four = 25 marks)

Section B continues on the next page

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Question Five

Required:

"Effective internal control, internal audit, audit committee and corporate governance are all inter-related".

Discuss this statement with reference to:

(a) How internal audit should contribute to the effectiveness of internal control;

(7 marks)

(b) How an audit committee should contribute to the effectiveness of internal audit;

(9 marks)

(c) The role of an audit committee in promoting good corporate governance.

(9 marks)

(Total for Question Five = 25 marks)

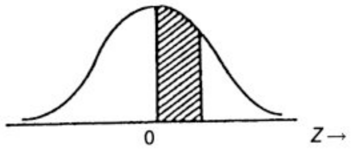
(Total for Section B = 50 marks)

End of question paper

Maths Tables and Formulae are on pages 13 to 16

AREA UNDER THE NORMAL CURVE

This table gives the area under the normal curve between the mean and a point Z standard deviations above the mean. The corresponding area for deviations below the mean can be found by symmetry.



$Z = \frac{(x-\mu)}{\sigma}$	0.00	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09
0.0	.0000	.0040	.0080	.0120	.0159	.0199	.0239	.0279	.0319	.0359
0.1	.0398	.0438	.0478	.0517	.0557	.0596	.0636	.0675	.0714	.0753
0.2	.0793	.0832	.0871	.0910	.0948	.0987	.1026	.1064	.1103	.1141
0.3	.1179	.1217	.1255	.1293	.1331	.1368	.1406	.1443	.1480	.1517
0.4	.1554	.1591	.1628	.1664	.1700	.1736	.1772	.1808	.1844	.1879
0.5	.1915	.1950	.1985	.2019	.2054	.2088	.2123	.2157	.2190	.2224
0.6	.2257	.2291	.2324	.2357	.2389	.2422	.2454	.2486	.2518	.2549
0.7	.2580	.2611	.2642	.2673	.2704	.2734	.2764	.2794	.2823	.2852
0.8	.2881	.2910	.2939	.2967	.2995	.3023	.3051	.3078	.3106	.3133
0.9	.3159	.3186	.3212	.3238	.3264	.3289	.3315	.3340	.3365	.3389
1.0	.3413	.3438	.3461	.3485	.3508	.3531	.3554	.3577	.3599	.3621
1.1	.3643	.3665	.3686	.3708	.3729	.3749	.3770	.3790	.3810	.3830
1.2	.3849	.3869	.3888	.3907	.3925	.3944	.3962	.3980	.3997	.4015
1.3	.4032	.4049	.4066	.4082	.4099	.4115	.4131	.4147	.4162	.4177
1.4	.4192	.4207	.4222	.4236	.4251	.4265	.4279	.4292	.4306	.4319
1.5	.4332	.4345	.4357	.4370	.4382	.4394	.4406	.4418	.4430	.4441
1.6	.4452	.4463	.4474	.4485	.4495	.4505	.4515	.4525	.4535	.4545
1.7	.4554	.4564	.4573	.4582	.4591	.4599	.4608	.4616	.4625	.4633
1.8	.4641	.4649	.4656	.4664	.4671	.4678	.4686	.4693	.4699	.4706
1.9	.4713	.4719	.4726	.4732	.4738	.4744	.4750	.4756	.4762	.4767
2.0	.4772	.4778	.4783	.4788	.4793	.4798	.4803	.4808	.4812	.4817
2.1	.4821	.4826	.4830	.4834	.4838	.4842	.4846	.4850	.4854	.4857
2.2	.4861	.4865	.4868	.4871	.4875	.4878	.4881	.4884	.4887	.4890
2.3	.4893	.4896	.4898	.4901	.4904	.4906	.4909	.4911	.4913	.4916
2.4	.4918	.4920	.4922	.4925	.4927	.4929	.4931	.4932	.4934	.4936
2.5	.4938	.4940	.4941	.4943	.4945	.4946	.4948	.4949	.4951	.4952
2.6	.4953	.4955	.4956	.4957	.4959	.4960	.4961	.4962	.4963	.4964
2.7	.4965	.4966	.4967	.4968	.4969	.4970	.4971	.4972	.4973	.4974
2.8	.4974	.4975	.4976	.4977	.4977	.4978	.4979	.4980	.4980	.4981
2.9	.4981	.4982	.4983	.4983	.4984	.4984	.4985	.4985	.4986	.4986
3.0	**.49865**	.4987	.4987	.4988	.4988	.4989	.4989	.4989	,4990	,4990
3.1	**.49903**	.4991	.4991	.4991	.4992	.4992	.4992	.4992	.4993	.4993
3.2	**.49931**	.4993	.4994	.4994	.4994	.4994	.4994	.4995	.4995	.4995
3.3	**.49952**	.4995	.4995	.4996	.4996	.4996	.4996	.4996	.4996	.4997
3.4	**.49966**	.4997	.4997	.4997	.4997	.4997	.4997	.4997	.4997	.4998
3.5	**.49977**									

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	Interest rates (*r*)									
(*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
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	0705	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	Interest rates (*r*)									
(*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
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	7.793	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:

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

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

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

Growing Perpetuity
Present value of £1 per annum, receivable or payable, commencing in one year, growing in perpetuity at a constant rate of *g*% per annum, discounted at *r*% per annum:

$$\text{PV} = \frac{1}{r-g}$$

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

Management Accounting Pillar

Strategic Level Paper

P3 – Management Accounting - Risk and Control Strategy

November 2007

Thursday Morning Session