



Performance Pillar

P2 – Performance Management

Thursday 30 August 2012

**Instructions to candidates**

You are allowed three hours to answer this question paper.
You are allowed 20 minutes reading time <b>before the examination begins</b> during which you should read the question paper and, if you wish, make annotations on the question paper. However, you will <b>not</b> be allowed, <b>under any circumstances</b> , 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 <b>not</b> be submitted for marking.
You should show all workings as marks are available for the method you use.
ALL QUESTIONS ARE COMPULSORY.
Section A comprises 5 questions and is on pages 2 to 5.
Section B comprises 2 questions and is on pages 6 to 9.
Maths tables and formulae are provided on pages 11 to 14.
The list of verbs as published in the syllabus is given for reference on page 15.
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.

**P2 – Performance Management**

TURN OVER

## SECTION A – 50 MARKS

[You are advised to spend no longer than 18 minutes on each question in this section.]

ANSWER ALL FIVE QUESTIONS IN THIS SECTION. EACH QUESTION IS WORTH 10 MARKS. YOU SHOULD SHOW YOUR WORKINGS AS MARKS ARE AVAILABLE FOR THE METHOD YOU USE.

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### Question One

A company is developing a new product. During its expected life it is forecast that 6,400 units of the product will be sold for \$70 per unit.

The direct material and other non-labour related costs are expected to be \$45 per unit throughout the life of the product.

Production is expected to be in batches of 100 units throughout the life of the product. The direct labour cost is expected to reduce due to the effects of learning throughout the life of the product. The total direct labour cost of the first batch of 100 units is expected to be \$6,000 and an 80% learning effect is expected to occur.

Fixed costs specific to this product are expected to be \$60,000 in total for the life of the product.

Note: The value of the learning index for an 80% learning curve is -0.3219

*Required:*

- (a) **Calculate** the total direct labour cost of the first:
- (i) 800 units
  - (ii) 1,600 units
  - (iii) 3,200 units
  - (iv) 6,400 units
- (4 marks)*
- (b) **Apply** the results from part (a) to **advise** the company management of the approximate break-even level of sales of the product.
- (3 marks)*
- (c) **Explain** the effect on the break-even level of sales if the rate of learning was 90%. (No calculations are required.)
- (3 marks)*

*(Total for Question One = 10 marks)*

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## Question Two

CX is a passenger transport company which is seeking to improve its profits. It operates a number of bus routes within a 10 mile radius of a city centre. It operates a fleet of 100 buses, each of which has a capacity of 50 persons, throughout the day, seven days per week. The frequency of buses on each of its routes varies from a minimum of one to a maximum of four per hour during the day and evening.

The passengers who use the buses are a mix of adults and children. Some routes are busier than others and, at certain times, some passengers have to stand on the bus as there are insufficient seats available.

The directors of CX are considering how best to measure the performance of each of the routes that they operate and it has been suggested that they should use a Balanced Scorecard approach.

*Required:*

- (a) **Explain** how the Balanced Scorecard could be used by CX to improve its profits. *(4 marks)*
- (b) **Explain** TWO performance measures, each from a different perspective of the Balanced Scorecard, that CX could use to measure the performance of its routes. (You must state the perspective to which each of your measures relates.) *(6 marks)*

*(Total for Question Two = 10 marks)*

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## Question Three

*Required:*

- (a) **Explain** the links between budgets, standard costs and flexible budgeting. *(6 marks)*
- (b) **Discuss** the importance of your answer to (a) for management control. *(4 marks)*

*(Total for Question Three = 10 marks)*

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*Section A continues on the next page*

#### Question Four

A company manufactures a single product. The selling price, production cost and contribution per unit for this product for 2013 have been predicted as follows:

		<i>\$ per unit</i>
Selling price		90.00
Direct materials (components)	30.00	
Direct labour	35.00	
Variable overhead	<u>10.00</u>	<u>75.00</u>
Contribution		<u>15.00</u>

The company has forecast that demand for the product during 2013 will be 24,000 units. However to satisfy this level of demand, production of 35,294 units will be required because:

- 15% of the items delivered to customers (4,235 units) will be rejected as faulty and will require free replacement. The cost of delivering the replacement item is \$5 per unit;
- 20% of the items manufactured (7,059 units) will be discovered to be faulty before they are despatched to customers.

In addition, before production commences, 10% of the components that the company purchases are damaged while in storage.

As a consequence of all of the above, total quality costs for the year amount to \$985,885.

The company is now considering the following proposal:

1. Spending \$30,000 per annum on a quality inspector which would reduce the percentage of faulty items delivered to customers to 13%; and
2. Spending \$500,000 per annum on training courses for the production workers which management believes will reduce and sustain the level of faulty production to 10%.

*Required:*

- (a) **Prepare** a statement that shows the quality costs that the company would expect to incur if it accepted the above proposal. Your answer should clearly show the costs analysed using the four recognised quality cost headings. *(7 marks)*
- (b) **Recommend** with reasons, whether or not the company should accept the proposal. *(3 marks)*

*(Total for Question Four = 10 marks)*

### Question Five

A company has carried out extensive product research and as a result has just launched a new innovative product unlike anything else that is currently available on the market. The company has launched this product using a market skimming pricing policy.

The market in which it operates is highly competitive and historically success has been achieved by being the first to market with new products. Only a small number of companies have survived in the market and those that remain are constantly aiming to develop new products either by improving those already in the market or by extensive product research.

*Required:*

**Explain**, with reasons, the changes that the company may need to make to the unit selling price of the product as it moves through each of the four stages of its product life cycle.

*(Total for Question Five = 10 marks)*

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*(Total for Section A = 50 marks)*

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*End of Section A*

*Section B starts on page 6*

TURN OVER

## SECTION B – 50 MARKS

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

ANSWER *BOTH* QUESTIONS IN THIS SECTION. EACH QUESTION IS WORTH 25 MARKS. YOU SHOULD SHOW YOUR WORKINGS AS MARKS ARE AVAILABLE FOR THE METHOD YOU USE.

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### Question Six

CDF is a manufacturing company within the DF group. CDF has been asked to provide a quotation for a contract for a new customer and is aware that this could lead to further orders. As a consequence, CDF will produce the quotation by using relevant costing instead of its usual method of full cost plus pricing.

The following information has been obtained in relation to the contract:

#### Material D

40 tonnes of material D would be required. This material is in regular use by CDF and has a current purchase price of \$38 per tonne. Currently, there are 5 tonnes in inventory which cost \$35 per tonne. The resale value of the material in inventory is \$24 per tonne.

#### Components

4,000 components would be required. These could be bought externally for \$15 each or alternatively they could be supplied by RDF, another company within the DF manufacturing group. The variable cost of the component if it were manufactured by RDF would be \$8 per unit, and RDF adds 30% to its variable cost to contribute to its fixed costs plus a further 20% to this total cost in order to set its internal transfer price. RDF has sufficient capacity to produce 2,500 components without affecting its ability to satisfy its own external customers. However in order to make the extra 1,500 components required by CDF, RDF would have to forgo other external sales of \$50,000 which have a contribution to sales ratio of 40%.

#### Labour hours

850 direct labour hours would be required. All direct labour within CDF is paid on an hourly basis with no guaranteed wage agreement. The grade of labour required is currently paid \$10 per hour, but department W is already working at 100% capacity. Possible ways of overcoming this problem are:

- Use workers in department Z, because it has sufficient capacity. These workers are paid \$15 per hour.
- Arrange for sub-contract workers to undertake some of the other work that is performed in department W. The sub-contract workers would cost \$13 per hour.

#### Specialist machine

The contract would require a specialist machine. The machine could be hired for \$15,000 or it could be bought for \$50,000. At the end of the contract if the machine were bought, it could be sold for \$30,000. Alternatively it could be modified at a cost of \$5,000 and then used on other contracts instead of buying another essential machine that would cost \$45,000.

The operating costs of the machine are payable by CDF whether it hires or buys the machine. These costs would total \$12,000 in respect of the new contract.

#### Supervisor

The contract would be supervised by an existing manager who is paid an annual salary of \$50,000 and has sufficient capacity to carry out this supervision. The manager would receive a bonus of \$500 for the additional work.

**Development time**

15 hours of development time at a cost of \$3,000 have already been worked in determining the resource requirements of the contract.

**Fixed overhead absorption rate**

CDF uses an absorption rate of \$20 per direct labour hour to recover its general fixed overhead costs. This includes \$5 per hour for depreciation.

*Required:*

- (a) **Calculate** the relevant cost of the contract to CDF. You must present your answer in a schedule that clearly shows the relevant cost value for each of the items identified above. You should also explain each relevant cost value you have included in your schedule and why any values you have excluded are not relevant.

Ignore taxation and the time value of money.

*(19 marks)*

- (b) **Discuss** TWO problems that can arise as a result of setting prices using relevant costing.

*(6 marks)*

*(Total for Question Six = 25 marks)*

*Section B continues on page 8*

TURN OVER

## Question Seven

HJ and KL are two companies that operate in the same industry sector. Details for the two companies for the year ended 31 December 2011 are as follows:

	<b>HJ</b>	<b>KL</b>
	<i>\$000</i>	<i>\$000</i>
Revenue	1,600	990
Cost of sales:		
Variable production costs	400	400
Fixed production costs (including depreciation see Note 3)	<u>800</u>	<u>390</u>
	<u>1,200</u>	<u>790</u>
Gross profit	400	200
Administration costs (fixed)	<u>120</u>	<u>80</u>
Operating profit	<u>280</u>	<u>120</u>
Non-current assets:		
Cost	2,000	1,800
Depreciation (see below)	<u>400</u>	<u>1,230</u>
	1,600	570
Net current assets	<u>200</u>	<u>150</u>
Capital employed	<u>1,800</u>	<u>720</u>
<b>Performance measures</b>		
Return on Capital Employed (ROCE)	15.56%	16.67%
Operating profit margin	17.50%	12.12%
Asset turnover	0.89	1.38

### Notes

1. Assume that the non-current assets of both companies are all used in their manufacturing processes.
2. The two companies use different depreciation policies: HJ depreciates its non-current assets using straight-line depreciation at the rate of 20% of cost with no residual value; whereas KL uses the reducing balance method of depreciation at the rate of 25% per annum.
3. Included in the fixed costs of the year ended 31 December 2011 is depreciation of \$400,000 for HJ and \$190,000 for KL.
4. Each company purchased all of its non-current assets in the month the company was formed. Neither company has purchased or disposed of any non-current assets since their original purchase.

HJ has undertaken a benchmarking exercise. The Managing Director (MD) of HJ has been asked to explain the company's results compared to those of KL. The MD says the differences are because of HJ's depreciation policy and the age of the company's assets.

*Required:*

- (a) **Calculate** the THREE revised performance ratios of HJ after adjusting its results to align the age of its assets and its depreciation policy with that of KL.

*(9 marks)*

- (b) **Calculate**, for KL only, the break-even sales value in 2013 assuming that there are no changes to its cost and selling price structure or to its mix of sales, there are no purchases or disposals of non-current assets and that the existing depreciation policy continues to be applied.

*(4 marks)*

The directors of KL are now considering replacing its non-current assets with new equipment that will be fully operational from 1 January 2013. The manufacturer of the new equipment has offered to accept the company's old equipment as a trade in at its net book value at 31 December 2012 of \$427,500. If this offer is not accepted KL does not expect to be able to dispose of the old equipment for ANY value at any time in the future.

The new equipment:

- Has a cost of \$1.2million before any trade in value is deducted;
- Increases the fixed production cost (excluding depreciation) by 30% per annum;
- Reduces the variable production cost per unit by 20%;
- Has a life of five years, a residual value after five years of \$285,000 and is to be depreciated using the same depreciation method that is currently being used for the existing equipment;

Assume that

- There is no change to the unit selling price or demand for KL's product;
- KL's cost of capital for this type of investment is 10% per annum.

*Required:*

(c)

- (i) **Recommend**, based on Net Present Value, whether or not KL should replace its existing non-current assets.

Ignore taxation and inflation.

*(6 marks)*

- (ii) **Discuss** the effect on the break-even sales value in 2013 of investing in the new equipment. Your answer should be supported by appropriate calculations.

*(6 marks)*

*(Total for Question Seven = 25 marks)*

*(Total for Section B = 50 marks)*

*End of question paper*

*Maths tables and formulae are on pages 11 to 14*

## PRESENT VALUE TABLE

Present value of 1 unit of currency, 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 unit of currency 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

### PROBABILITY

$A \cup B = \mathbf{A \text{ or } B}$ .       $A \cap B = \mathbf{A \text{ and } B}$  (overlap).  
 $P(B | A)$  = probability of  $B$ , **given**  $A$ .

#### Rules of Addition

If  $A$  and  $B$  are mutually exclusive:       $P(A \cup B) = P(A) + P(B)$   
If  $A$  and  $B$  are not mutually exclusive:       $P(A \cup B) = P(A) + P(B) - P(A \cap B)$

#### Rules of Multiplication

If  $A$  and  $B$  are *independent*:       $P(A \cap B) = P(A) * P(B)$   
If  $A$  and  $B$  are **not independent**:       $P(A \cap B) = P(A) * P(B | A)$

$$E(X) = \sum (\text{probability} * \text{payoff})$$

### DESCRIPTIVE STATISTICS

Arithmetic Mean

$$\bar{x} = \frac{\sum x}{n} \quad \bar{x} = \frac{\sum fx}{\sum f} \quad (\text{frequency distribution})$$

Standard Deviation

$$SD = \sqrt{\frac{\sum (x - \bar{x})^2}{n}} \quad SD = \sqrt{\frac{\sum fx^2}{\sum f} - \bar{x}^2} \quad (\text{frequency distribution})$$

### INDEX NUMBERS

Price relative =  $100 * P_1/P_0$       Quantity relative =  $100 * Q_1/Q_0$

Price: 
$$\frac{\sum w * \left(\frac{P_1}{P_0}\right)}{\sum w} * 100$$

Quantity: 
$$\frac{\sum w * \left(\frac{Q_1}{Q_0}\right)}{\sum w} * 100$$

### TIME SERIES

Additive Model

$$\text{Series} = \text{Trend} + \text{Seasonal} + \text{Random}$$

Multiplicative Model

$$\text{Series} = \text{Trend} * \text{Seasonal} * \text{Random}$$

## FINANCIAL MATHEMATICS

### Compound Interest (Values and Sums)

Future Value  $S$ , of a sum of  $X$ , invested for  $n$  periods, compounded at  $r\%$  interest

$$S = X[1 + r]^n$$

### 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:

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

## LEARNING CURVE

$$Y_x = aX^b$$

where:

$Y_x$  = the cumulative average time per unit to produce  $X$  units;

$a$  = the time required to produce the first unit of output;

$X$  = the cumulative number of units;

$b$  = the index of learning.

The exponent  $b$  is defined as the log of the learning curve improvement rate divided by log 2.

## INVENTORY MANAGEMENT

Economic Order Quantity

$$EOQ = \sqrt{\frac{2C_o D}{C_h}}$$

where:  $C_o$  = cost of placing an order  
 $C_h$  = cost of holding one unit in inventory for one year  
 $D$  = annual demand

## 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
<b>Level 1 - KNOWLEDGE</b> 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
<b>Level 2 - COMPREHENSION</b> 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
<b>Level 3 - APPLICATION</b> 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
<b>Level 4 - ANALYSIS</b> 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
<b>Level 5 - EVALUATION</b> 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

*Performance Pillar*

*Management Level Paper*

*P2 – Performance Management*

*September 2012*