

UNIVERSITY OF BOLTON
SCHOOL OF BUSINESS AND CREATIVE
TECHNOLOGIES
ACCOUNTANCY PATHWAY
SEMESTER 1 EXAMINATIONS 2009/2010
MANAGEMENT ACCOUNTING APPLICATIONS
MODULE NO: ACC2501

Date: Wednesday 20th January 2010

Time: 10:00 – 13:00

INSTRUCTIONS TO CANDIDATES:

There are **SIX** questions on this paper.

Answer **FOUR** questions.

Answer **ANY TWO** questions from Section A.

Answer **ANY TWO** questions from Section B.

All questions carry equal marks.

Silent calculators may be used

Present Value Discount tables will be provided.

No books or materials may be referred to in the examination.

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Section A – Answer ANY TWO questions

1. VARISITY plc

Varsity plc manufactures three products (A, B and C) from the same basic components.

You are provided with the following information relating to projections for February 2010:

(i) Sales	A	B	C
Quantity	21,000	16,000	8,000
Price/ Unit	£15	£6	£28
(ii) Material Usage (£/ unit)			
Wood	4	1	10
Bought in components	3	2	6
Packing	2	1	2
(iii) Labour Cost £/ Unit	3	1	5
(iv) Overhead £/ Unit			
Variable	2	1	2
Fixed	1	1	1
(v) Stocks			
Finished Goods (units)			
1 February	7,000	4,000	6,000
28 February	10,000	3,000	3,000
Raw Materials	Wood	Bought in Components	Packing
	£	£	£
1 February	32,000	31,800	21,500
28 February	44,000	41,400	11,200

Required:

Prepare budgets for sales, production (units), materials usage, purchases and production cost for the month of February

TOTAL 25 MARKS

**Section A continued over
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2. EXTRONICS plc

Extronics plc are faced with the problem of replacing an extrusion machine. Two possible alternatives have been identified:

- A Quadextrude, manufactured in the UK
- An Autoextrude, produced by a German company

Each alternative would cost £90,000 to purchase, but the incremental cash inflows are estimated as follows:

(£,000s)	Quadextrude	Autoextrude
YEAR 1	10,000	40,000
YEAR 2	20,000	30,000
YEAR 3	30,000	30,000
YEAR 4	30,000	10,000
YEAR 5	30,000	5,000
YEAR 6	34,000	5,000

Required:

Assuming the company has a cost of capital of 10% and there is no anticipated residual value after 6 years, calculate the following for each project alternative:

- 1) Payback period
- 2) Net present Value
- 3) Accounting Rate of Return
- 4) Internal Rate of Return

Advise the company which alternative to adopt, with reasons.

TOTAL 25 MARKS

**Section A continued over
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Section A continued

3. PRESTIGE CAR DEALERS plc

The manager of Prestige Car Dealers is seeking to improve financial performance in her showroom. Prestige Cars sell new expensive cars to wealthy individuals and companies. Although they did take some cars in part exchange, they found a buyer for the second-hand car before finalising the new car sale. New cars were effectively being sold for cash.

During the last month, 9 cars were sold at List Price (average £30,000 less 10% discount).

A statement of the latest month's financial performance showed the following:

	£
Sales	243,000
Cost of Sales	198,000
	<hr/>
Gross Profit	45,000
Expenses:	
Salaries	14,500
Rent & Rates	4,650
Heating & Lighting	800
Telephone	370
Miscellaneous expenses	280
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Profit before interest and tax	24,400

Two proposals are being considered as possible ways to improve performance:

- Sell cars at List Price less 15% (instead of 10%). It was thought that this would increase car sales from 9 to 13 per month.
- Increase the hours of business from 50 hours per week to 68 per week by staying open later in the evening and opening on Saturday and Sunday afternoons. This was thought likely to increase car sales from 9 to 11 cars per month. Total salaries would increase by £4,800. The remaining variable costs would increase in proportion to the increased hours of business.

The fixed monthly expenses are:

Rent & rates	£4,650
Heating & Lighting	£50
Telephone	£20
Miscellaneous	£130

**Question 3 continued over
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Question 3 continued

Required:

- (i) Evaluate the two proposals – which of the two (if either) would you recommend?
- (ii) If the (separate, but related) Prestige Car Dealers service and repair garage operation which has variable costs of 60% of its sales revenue was able to increase its sales revenue by:
- £12,000 in the next year for proposal (a) or
 - £6,000 in the next year for proposal (b)

How, if at all, does this affect the proposals (no change in fixed costs)?

TOTAL 25 MARKS

Section B – Answer ANY TWO questions

4. If a company is planning to introduce a system of budgetary control, what are the key features required for success. Discuss the problems that may be encountered and how these may be overcome.

TOTAL 25 MARKS

5. Identify and discuss the benefits and disadvantages of divisionalisation within an organisation – how should the transfer and goods and services between divisions be handled?

TOTAL 25 MARKS

6. Identify and discuss the implications for the Management Accounting function within an organisation that is seeking to introduce modern production management strategies.

TOTAL 25 MARKS

END OF QUESTIONS

TABLE OF PRESENT VALUE FACTORS

Present values of $1/(1+r)^n$

discount rates (r)

<i>period (n)</i>	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

discount rates (r)

<i>period (n)</i>	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	0.074	0.065
16	0.188	0.163	0.141	0.123	0.107	0.093	0.081	0.071	0.062	0.054
17	0.167	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