

**UNIVERSITY OF BOLTON**  
**RAS AL KHAIMAH CAMPUS**  
**SCHOOL of BUSINESS & CREATIVE**  
**TECHNOLOGIES**  
  
**ACCOUNTANCY PATHWAY**  
  
**SEMESTER 1 EXAMINATIONS 2010/2011**  
  
**MANAGEMENT ACCOUNTING APPLICATIONS**  
  
**MODULE NO: ACC 2501**

Date: Wednesday 19<sup>th</sup> January 2011

Time: 2:00pm – 5:00pm

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**INSTRUCTIONS TO CANDIDATES:**

There are 6 questions on this paper.

Answer 4 questions. (TWO from Section A and TWO 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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 Module No. ACC2501

## **SECTION A – ANSWER TWO QUESTIONS**

### **1. VINA plc**

Vina 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 2011:

(i) Sales	A	B	C
Quantity	21,000	16,000	8,000
Price/ Unit	£20	£10	£30
(ii) Material Usage			
(£/ unit)			
Wood	5	2	8
Bought in components	4	2	5
Packing	3	1	2
(iii) Labour Cost £/ Unit	2	1	3
(iv) Overhead £/ Unit			
Variable	3	1	2
Fixed	1	1	1
(v) Stocks			
Finished Goods (units)			
1 February	8,000	5,000	6,000
28 February	11,000	4,000	4,000
Raw Materials	Wood	Bought in Components	Packing
	£	£	£
1 February	33,000	32,800	22,500
28 February	45,000	42,400	12,200

### **REQUIRED**

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

(20 Marks)

(ii) Identify and appraise the key assumptions that inform the budget setting process and discuss how these may be incorrect.

(5 Marks)

**TOTAL 25 MARKS**

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 School of Business & Creative Technologies  
 Accountancy Pathway  
 Semester 1 Examination 2010/2011  
 Management Accounting Applications  
 Module No. ACC2501

**2. PAINTRITE plc**

Paintrite plc are faced with the problem of replacing a high quality spray painting machine which will be of critical importance for future commercial success and maintaining the company's reputation. Three possible alternatives have been identified:

- A Quadspray, manufactured in the UK
- An Autospray, produced by a Swedish company
- A Spraywell-2010, made in Korea

Each alternative would cost £180,000 to purchase and have an effective working life of 6 years, but the net incremental cash inflows of each are estimated to be as follows:

(£,000s)	Quadspray	Autospray	Spraywell-2010
YEAR 1	20,000	80,000	60,000
YEAR 2	40,000	60,000	60,000
YEAR 3	60,000	60,000	60,000
YEAR 4	60,000	20,000	60,000
YEAR 5	60,000	10,000	40,000
YEAR 6	68,000	10,000	20,000

**REQUIRED**

Assuming the company has a cost of capital of 15% 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.

**25 MARKS**

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 School of Business & Creative Technologies  
 Accountancy Pathway  
 Semester 1 Examination 2010/2011  
 Management Accounting Applications  
 Module No. ACC2501

### 3. CEM plc

CEM plc provides management development courses on a commercial basis. The company plan to run an intensive two-day workshop on 'Staff Recruitment & Selection' and is currently reviewing the price to be charged. Direct Costs per course are estimated as follows:-

	£
Direct Labour	200
Direct Material	32
Direct Expenses	8
	<u>240</u>

The fixed element of these costs – and Direct Labour in particular – has been calculated on the basis of:-

$$\frac{\text{Budgeted annual cost}}{\text{Budgeted number of students}}$$

Overheads which are specifically linked to a course are absorbed at the rate of 25% and company policy is to charge a profit mark-up of 2/3 of full cost on all courses to cover general overheads, plus a satisfactory profit.

CEM's Director of Courses is concerned that adopting the company's normal policy will result in a price charge which fails to maximise profit from provision of the workshop and has undertaken some market research to support this view. The research suggests the following possible combinations of price and demand:-

Demand (number of students)	240	320	420	460	540	580	620	640
Charge per student per course (£)	600	580	520	500	480	460	420	400

The variable cost per student per course will be £48 for all volumes up to and including 540. Above this level the variable cost per student per course will reduce to £40. Fixed costs specific to running this workshop will be £6,000 for all volumes up to and including 540, above which volume the amount will be £10,000

### REQUIRED

- (i) Determine the price per student per course based on the normal pricing policy of 'full cost plus 2/3'. Comment on the unit cost which has been used to set this price and explain the difference between profit margin and profit mark-up. (7 marks)
- (ii) From the schedule of price/demand combinations revealed by the Director of Courses' market research, calculate the price per student which should be set to maximise contribution to overall profit from this workshop. (12 marks)
- (iii) What other factors do you think should affect the adoption (or not) of the price arrived at in (ii) above? (6 marks)

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Module No. ACC2501

**TOTAL 25 MARKS**

**SECTION B - ANSWER TWO QUESTIONS**

4. Where interdivisional movement of goods and services occur between two or more subsidiaries of the same company, the transfer price may be determined by a number of factors – primarily whether or not there exists an external ‘market’ price. If there is no such ‘market’ price alternative solutions may have to be sought.

**REQUIRED**

Identify and appraise the key features of different solutions to the transfer price decision-making process, both when there exists an external market for the product/service under review and also when there is no such market.

(25 marks)

5. As a business organisation develops in terms of size and complexity, there may be merit in structuring the organisation into subordinate divisions. You are required to identify and appraise the benefits and disadvantages of divisionalisation within an organisation ( you may wish to refer to specific examples to illustrate your discussion).

(25 marks)

6. Financial control within an organisation may be attempted by the use of reporting systems which compare actual performance with budget targets. You are required to identify and appraise the potential problems that may be encountered with this approach and how these be avoided.

(25 marks)

**END OF QUESTIONS**

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