

SIR ARTHUR LEWIS COMMUNITY COLLEGE
DIVISION OF TECHNICAL EDUCATION AND MANAGEMENT STUDIES

EXAMINATION : December 2012, Final Examination

TUTORS : Mrs. F Beerom-Henry, Ms. M Floyd, Ms. U Joseph

PROGRAMME CODE : 3-BUS-ABA-AD

PROGRAMME TITLE : Applied Arts – Business Administration

COURSE TITLE : Management Accounting

COURSE CODE : ACC 203

DATE : 10th December, 2012

COMMENCEMENT TIME : 9:00 a.m.

DURATON : 2 hrs 15 mins

ROOMS(S) : OTW-R3, CEHI-1R-03, CEHI-1R-02

INVIGILATORS(S) : P. E-Ford, T. Charles
D. P-Alfred, N. Hyacinth
N. Goolaman, L. S-Terrance, G. Severin



#Abi



INSTRUCTIONS

Write ID# only on each page of your answer booklet.

There are two sections in this paper.

Section A - Compulsory

There is one (1) question in this section. Candidates are required to answer this question.

Section B - Optional

There are six (6) questions in this section. Candidates are required to answer any three (3) complete questions from this section.

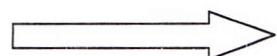
Show all workings clearly. All questions must be answered in answer booklet.

Use of silent electronic calculators is permitted.

Turn cell phones off, remove calculator covers, and place these items in bags at the front of the room.

Borrowing or lending is prohibited.

GO TO NEXT PAGE WHEN INSTRUCTED



SECTION A – Compulsory**Answer this question****Question 1** (20 marks)

Grants Co has planned a cash budget for the third quarter of 2013. The cash balance in July 1, 2013 is expected to be an **overdraft** of \$82 000.

Extracts from the Sales and Purchases Budgets for 2013 are as follows:

Month	Budgeted Sales	Budgeted Purchases
May	\$800 000	\$700 000
June	900 000	600 000
July	750 000	550 000
August	650 000	450 000
September	800 000	500 000

Additional information:

- (I) All sales are on credit and an analysis of the records show that debtors settle according to the following pattern in accordance with credit terms **5/30, n90**:
 - 50% in month of sale
 - 30% in month following sale
 - 20% in second month following sale
- (II) All purchases are on credit and past experience shows that 80% are settled in the month of purchase in order to take advantage of a 10% prompt settlement discount. The balance will be disbursed in the month after purchase. The credit terms of suppliers – **10/30, n60**.
- (III) Wages and salaries are expected to be \$1 800 000 per annum and will be paid monthly as incurred.
- (IV) Fixed operating expenses which accrue evenly throughout the year are estimated to be \$2 400 000 per annum (including depreciation on fixed assets of \$60 000 per month) and will be settled monthly.
- (V) Estimated VAT expected to be settled in August 2013 - \$80 000.
- (VI) The company is expected to receive settlement of an insurance claim of \$50 000 in August 2013.
- (VII) Interest on investment in Sagnet Inc. of \$25 000 is expected in July 2013.
- (VIII) A short-term investment in government bonds of \$80 000 will be liquidated in September 2013.
- (IX) The business has made arrangements with the Development Bank for a loan of \$250 000 with interest of 5% per annum. The loan will be disbursed in two portions:
 - July 1, 2013 - \$150 000
 - November 1, 2013 - \$100 000**Interest will be paid monthly on amounts disbursed.**

Required:

- a) Prepare a Schedule of Expected Cash Collections from Customers for months July – September 2013. **(4 marks)**
- b) Prepare a Schedule of Expected Cash Disbursements to Suppliers for months July – September 2013. **(3 marks)**

- c) Prepare a Cash Budget (with a total column) for the third quarter ending September 30, 2013. **(11 marks)**
- d) Compute the budgeted amount pertaining to **any two (2)** of the following:
- Accounts Receivable at September 30, 2013.
 - Accounts Payable at September 30, 2013.
 - Discount Allowed for months July – September 2013.
 - Discount Received for months July – September 2013. **(2 marks)**

SECTION B - Optional

Answer any three (3) questions

Question 2 (10 marks)

On-The-Move Transport Company has three operating departments (Local Collections and Deliveries, Long Distance Trunk Services and Contract Hire) and two service departments (Engineering Services and Building Maintenance). The service departments provide reciprocal services to each other.

The overheads of the company for the coming year are estimated as follows:

Local Collections	\$300 000
Long Distance	400 000
Contract Hire	200 000
Engineering Services	144 000
Building Services	91 500

Additional information:

	<u>Ave. # of Vehicles Served per year</u>	<u>Est. # of Building Maintenance Orders</u>
Local Collections	180	300
Long Distance	30	210
Contract Hire	20	30
Engineering Services	7	70
Building Services	10	-

- Engineering services overhead is apportioned to other departments on the basis of average number of vehicles serviced for the year.
- Building maintenance overhead is apportioned to other departments on the basis of estimated number of building maintenance orders.
- Benefits-provided ranking between the service departments is in the order listed above.
- Service department cost less than or equal to \$100 is to be considered immaterial.

Required:

Show how the service departments' overhead should be apportioned to the operating departments and the resulting total overheads of the operating department if the company uses the following methods to apportion overhead:

- a) Elimination method **(3 marks)**
- b) Continuous Allotment method **(7 marks)**

Question 3 (10 marks)

After passing through two distinct processes, product RM is the end result. The following cost information is available for the operations for November 2012. There was no work-in-progress inventory either at the beginning or end of the month.

	PROCESS 1	PROCESS 2
	\$	\$
Materials (900 units)	15 600	
(500 units)		4 000
Direct wages	5 000	6 000
Production O/Hs	4 690	4 720

Units transferred	800	1 200
Value of scrap per unit (\$)	2	4
Normal loss on input	10%	20%

Required:

- a) Prepare the Process accounts for period. (7 marks)
- b) Prepare the Abnormal loss and/or abnormal gain account(s) (3 marks)

Question 4 (10 marks)

The following information pertains to the operations of Paul's Manufacturers for the year to December 31, 2011.

I. Direct Material purchased	\$ 20 000
II. Direct Labour	10 000
III. Direct expenses	5 000
IV. Closing inventory of Raw materials	9 000
V. Closing inventory of Work-in-progress	17 000
VI. Direct labour Accrued	500
VII. Cost of goods manufactured	300 000
VIII. Opening inventory of Raw Materials	1 000
IX. Opening inventory of Work-in-progress	21 500
X. Cost of goods transferred to trading account	165 000
XI. Unrealized profits at 31/12/2010	9 000
XII. Unrealized profits at 31/12/2011	8 000
XIII. Net income on trading	110 000

Use the information above to provide answers to the following. **Write all answers in Answer Booklet and show all workings.**

- a) Prime Cost is \$ _____. (2 marks)
- b) Manufacturing Overhead is \$ _____. (4 marks)
- c) Unrealized profits recorded in the Profit and Loss Account would be _____. (½ mark)
- d) Unrealized profits on the Balance Sheet at year end would be \$ _____. (½ mark)
- e) Overall Net Income / (Loss) is \$ _____. (3 marks)

Question 5 (10 marks)

Green Fingers Co. makes small plant stands that sell for \$25 each. The company's annual level of production and sales is 120 000 plant stands. In addition to \$430 500 of fixed manufacturing overhead and \$159 050 of fixed administrative expenses, the following per unit costs have been determined for each plant stand:

Direct materials	\$ 6.00
Direct labour	3.00
Variable Manufacturing Overhead	0.80
Variable Selling Expenses	<u>2.20</u>
Total	<u>\$12.00</u>

Required:

- Calculate the unit contribution margin and the contribution margin ratio for a plant stand. (2 marks)
- Determine the breakeven point in number of plant stands or sales dollars. (1 mark)
- Determine Green Fingers' margin of safety ratio. (1 mark)
- How many plant stands must the company sell to earn \$996 450 net income? (3 marks)
- How many plant stands must be sold to break even if Green Fingers' fixed manufacturing costs increase by \$7 865? (*Refer to original data*) (3 marks)

Question 6 (10 marks)

A) An auto parts supplier sells Hardy-brand batteries to car dealers and auto mechanics. The annual demand is approximately 1 200 batteries. The supplier pays \$28 for each battery and estimates that the annual holding cost is 30 percent of the battery's value. It costs approximately \$20 to place an order (managerial and clerical costs). The supplier currently orders 100 batteries per month.

Required:

- Calculate the economic order quantity (EOQ). (3 mark)
 - Is the dealer presently optimizing his stock administration cost? Explain. (2 mark)
- B) A beverage company produces and sells its own line of soft drinks called Splash Soda. The company values the inventory of the Splash Soda cans on the basis of the **average cost (AVCO) perpetual system**. For this beverage company, one unit is equal to one case of soda as this company only sells its inventory on a wholesale basis. Details of the sales and purchases of the Splash Soda line are given below.

On January 1, 2011, the inventory of Splash Soft Drinks on hand comprised 7 cases with a total value of \$96.60.

Purchases			Sales	
Date	Quantity	Unit Price	Date	Quantity
Jan 10	20	\$14.00	Feb 28	15
Apr 04	10	14.00	May 08	6
Jun 02	12	14.30	Jul 20	14
Sep 22	20	15.10	Oct 11	18
Nov 09	14	15.20	Dec 03	20

Required

- a) Identify two (2) key features of the perpetual inventory system. (1 marks)
- b) Calculate the value of ending inventory. (3 marks)
- c) Calculate the cost of goods sold. (1 marks)

Question 7 (10 marks)

- A) Rebecca Allen, the president of **Allen Mechanical**, has asked you for information about the cost behaviour of manufacturing support costs. Specifically, she wants to know how much support cost is fixed and how much is variable. The following data are the only records available:

Month	Machine Hours	Support Costs
May	900	\$ 9 200
June	1 300	12 800
July	1 100	8 300
August	1 200	10 000
September	1 700	11 200

Required:

Determine the cost function for support cost using the high-low method.

(4 marks)

- B) **Furniture R' Us** when operating at full capacity can produce 2 000 dining room sets per year. The following are its annual cost data at full capacity which need to be classified.

<u>Cost Item</u>	<u>Amount</u>
Raw materials (glue, nails, etc)	\$ 6 000
Carpenters wages	118 000
Advertising	50 000
Factory supervisor wages	40 000
Property taxes, factory building	3 500
Salesmen commission	80 000
Insurance, factory	2 500
Depreciation – Office Equipment	4 000
- Machinery	10 000
Lease cost, factory building	12 000
General office supplies	3 000
Raw materials (Wood, Glass, Upholstery, etc)	94 000
Electricity, factory	20 000

Required:

Draw up and complete a table similar to the illustration below on your **answer booklet**. Total each column at the end.

(6 marks)

Cost Item	Cost Behaviour		Period Cost	Product Cost	
	Variable	Fixed		Direct	Indirect
	\$	\$		\$	\$
Total					

END OF EXAMINATION