

National Exams May 2012  
**98-Ind-B7, Financial and Managerial Accounting**  
 3 hours duration

1. Answer the questions only in the space provided.
2. You have three hours to complete the exam.
3. Be clear and concise. **Please use point form.**
4. At the end of this question booklet there are two pages of Formula Sheets.
5. There are 22 pages in this booklet, including this cover sheet. **Please ensure you have all 22 pages before commencing the exam.**
6. When done, hand in all pages in this booklet.
7. **UNLESS OTHERWISE REQUESTED, IT WILL BE ASSUMED THAT ALL ANSWERS ARE BASED ON CANADIAN GAAP. If you wish to answer based on IFRS (International Financial Reporting Standards) you must state so in each answer where applicable.**
8. This is a closed book exam. A Casio or Sharp approved calculator is permitted.
9. If you have concerns about the possible interpretation of a questions please state what assumptions you feel you need to make in answering the question. If in the opinion of the marker, the assumptions are reasonable and do not assume away the basic intent of the question, your answer will be marked based on your assumptions.

<u>Question #</u>	<u>Marks</u>	
Question 1	16	
Question 2 or 3	16	
Question 4	10	
Question 5	10	
Question 6	11	
Question 7	11	
Question 8 or 9	12	
Question 10	<u>14</u>	
Total	<u>100</u>	

**Question 1 (16 marks)**

Using the worksheets on the following pages, record each of the following transactions, showing the account name and the amount. Unless otherwise stated, you are to use accrual accounting. If you believe that no entry is required for one or more of the transactions, state this and justify your response by specifying the relevant accounting assumption or principle that supports leaving it off the books of the company.

On the sheets provided record:

**EITHER** the transactions

**OR** the journal entries

Eg.) You paid a supplier \$2,500 for goods received last month.

1. On January 1, 2011, Encom redeemed 10,000 common shares at \$20 per share.
2. On September 1, 2011, Encom paid \$500,000 for a large brewing vat. Encom incurred the following costs:
  - \$1,500 for a building permit
  - \$10,000 for an engineer's reports
  - \$50,000 on adjustments/renovations to their building so the vat could be brought into the building
  - An additional \$125,000 to reinforce the concrete floor to support the vat
  - Transportation costs of \$130,000.
3. On December 1, 2011, ENCOM had a 2 for 1 stock split
4. On December 1, 2011, ENCOM paid \$500,000 to settle a patent infringement lawsuit that had previously been recorded as a contingent liability
5. On December 2, 2011, ENCOM was hit with another, similar patent infringement lawsuit. Your lawyers have indicated that this one was started by a group trying to capitalize on the settle of December 1<sup>st</sup> and that it is frivolous and unlikely to continue
6. During the 2011 ENCOM declares and pays a cash dividend of \$10 per share (there are 250,000 shares outstanding). The declaration date was October 30, 2011, the date of record was November 10, 2011 and the payment date was December 1, 2011.

**Question 1 cont'd** EITHER Record the Transactions OR Record the Journal entries

T#	Assets =	Liabilities	+ Share Capital	+ Revenue	- Expenses	- Dividends
Eg.	Cash / current asset (\$2,500)	Accounts Payable / current liability (\$2,500)				

T#	Assets =	Liabilities	+ Share Capital	+ Revenue	- Expenses	- Dividends

## Question 1 cont'd

EITHER Record the Transactions OR Record the Journal entries

#	<u>Account</u>	<u>DR</u>	<u>CR</u>
Eg.	Accounts Payable	2500	
	Cash		2500

#	<u>Account</u>	<u>DR</u>	<u>CR</u>

DO: EITHER - QUESTION 2

OR - QUESTION 3

**Question 2 (16 marks)**

**DO NOT DO THIS QUESTION IF YOU CHOOSE TO DO QUESTION 3**

FOR Corp. was formed two years ago to manufacture fitness equipment. It has been profitable and is growing rapidly. It currently has 150 shareholders and 90 employees; most of the employees own at least a few shares of FOR Corp.'s shares. The company has received financing from two banks. It will sell additional shares within the next three months and will also seek additional loans and hire new employees to support its continued growth.

Required:

1. Explain who relies on the information in financial statements prepared by FOR Corp.

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2. Why is compliance with IFRS and accuracy in accounting important for FOR Corp.?

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Question 2 Cont'd

- 3. A new accountant who tried to prepare FOR Corp.'s financial statements at the end of the current year made several errors. For each of the following items, indicate how the income statement and balance sheet are affected by the error and the nature of the effect.  
(For example, an error might cause revenues and net income on the income statement and retained earnings and assets on the balance sheet to be overstated).  
NOTE: Ignore the effects of income taxes.
- a) The company had sales for cash of \$3,000,000. It also had sales on account of \$1,800,000 that had been collected by the end of the year, and sales on account of \$200,000 that are expected to be collected early the following year. The accountant reported total sales revenue of \$4,800,000.
- b) The company had total inventories of \$600,000 at the end of the year. Of this amount, inventory reported at \$30,000 was obsolete and will have to be scrapped. The balance sheet prepared by the accountant showed total inventories of \$600,000.
- c) The company has a bank loan for which interest expense during the year of \$10,000 will be paid early in January of the next year. The accountant did not record either the interest expense or the related liability.
- d) An insurance policy was listed as an asset of \$6,000 at the beginning of the year. The entire amount of the policy was for the current year and the policy has expired. The accountant took no action to recognize the expiration of the policy

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**Question 3 (16 marks)****DO NOT DO THIS QUESTION IF YOU CHOOSE TO DO QUESTION 2**

Chrome Industries uses a job-order costing system and applies overhead on the basis of direct labour hours. At the beginning of 2006, management estimated that 200,000 direct labour hours would be worked and \$600,000 of overhead costs would be incurred.

During the year, the company actually worked 220,000 direct labour hours and incurred the following manufacturing costs:

Indirect labour	\$140,000
Indirect materials	100,000
Insurance	50,000
Utilities	90,000
Repairs & maintenance	80,000
Depreciation	180,000
Direct materials used in production	540,000
Direct labour	700,000

Required:

1. Calculate the predetermined overhead application rate for 2006.

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2. Determine the amount of manufacturing overhead applied to work in process during 2006.

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**Question 3 cont'd**

3. Determine the amount of underapplied or overapplied overhead for the year.

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4. If goods with a cost of \$1,500,000 were completed and transferred to finished goods during 2006, determine the cost of work in process at the end of the period.

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**Question 4 Cont'd**

- 2. Loyalist Stores wishes to purchase merchandise from your company on account. The amount of the purchases would probably be about \$5,000 per month, and the terms would require Loyalist to make payment in full within 30 days. Would you recommend that your company grant credit to Loyalist under these terms? Explain the reasoning for your response.

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**Question 5 (10 marks)**

Upper V, Inc. has three departments. Data for the most recent year is presented below:

	A	B	C
Sales	\$20,000	\$15,000	\$11,200
Variable expenses	11,400	8,200	2,600
Fixed expenses:			
Unavoidable	2,400	2,000	2,200
Avoidable	9,200	5,800	1,800

Required:

- 1. Compute the operating income of the company

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- 2. Compute the contribution margin and the operating income of each department

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**Question 5 cont'd**

**3. Should any department(s) be eliminated? Which one(s) and why?**

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**Question 6 (11 marks)**

For each of the following items, indicate which section of the cash flow statement, they would appear in:

- Operating Activities
- Investing Activities or
- Financing Activities

Place a check mark in the appropriate column for each transaction. If neither an operating, investing, or financing activity is appropriate, place a check mark in the "none" column.

Assume the indirect method is used for reporting.

<u>Transaction</u>	<u>Activity</u>			
	<u>Operating</u>	<u>Investing</u>	<u>Financing</u>	<u>None</u>
1 Net Income				
2 Collection of Cash Dividend				
3 Payment of Cash Dividend previously declared				
4 Purchase of land in exchange for a long-term note payable				
5 Issuance of shares for cash				
6 Cash settlement of short-term note payable (principle only)				
7 Sale of an operational asset for cash				
8 Purchase of a patent.				
9 Sale of a short-term marketable security for cash				
10 Collection of an Account Receivable				
11 Issuance of a stock dividend				

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**Question 7 (11 marks)**

Harley Company manufactures two styles of mops, Wood and Steel. The following information is available:

	<u>Wood</u>	<u>Steel</u>
Selling price per unit	\$15	\$13
Variable cost per unit	\$6	\$9
Labour hours required	3	2
Labour cost/hr	\$25	\$30
Total fixed costs	\$12,000	

Harley can sell a maximum of 5,000 units of each style of mop. Labour hour capacity for the year is 20,000 hours.

Required:

1. What is the contribution margin per unit for each style of mop?

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2. What is the contribution margin per hour for each style of mop?

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**Question 7 cont'd**

3. How many of each style of mop would Harley have to produce to maximize income?  
What would the maximum income level be?

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DO: EITHER - QUESTION 8OR - QUESTION 9

Question 8 (12 marks)

DO NOT DO THIS QUESTION IF YOU CHOOSE TO DO QUESTION 9

The inventory records of Glide Corporation reflected the following information for the month of August 2011

Date	Transaction	Number of Units	Unit cost
Aug 1	Beginning Inventory	400	\$5
3	Purchase	400	\$5
5	Sale	600	
7	Sale	100	
11	Purchase	1,000	\$7
17	Sale	700	
19	Purchase	1,000	\$7
21	Sale	600	
28	Sale	600	
29	Purchase	1,200	\$9
30	Ending Inventory		

Determine the amount of the ending Inventory and Cost of Goods Sold for the month, under each of the following methods assuming the periodic inventory system.

	Method	Inventory	Cost of Goods Sold
a.	Weighted-average	\$	\$
b.	FIFO	\$	\$
c.	LIFO	\$	\$

**Question 9 (12 marks)****DO NOT DO THIS QUESTION IF YOU CHOOSE TO DO QUESTION 8**

Black, Inc. produces three products using a joint process which requires \$115,000 in joint costs. The products A, B and C can be sold at split-off or processed further and then sold. The production level for each product is 8,000 units. The following unit information is also available:

Separable Processing Sales Value Product	Costs after Split-off	Sales Value	
		at Split-off	at Completion
A	\$11	\$5	\$19
B	7	3	9
C	6	2	7

Required:

1. Which products should be processed further?

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2. Processing each product further will have what effect on profits?

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**Question 10 (14 marks)**

The Electra Company is considering the replacement of a machine that is presently used in the production of its product. The following data are available:

	<u>Old Machine</u>	<u>Replacement Machine</u>
Original cost	\$200,000	\$120,000
Useful life in years	15	7
Current age in years	8	0
Book value	\$ 90,000	-
Disposal value now	\$ 56,000	-
Disposal value in 7 years	0	0
Annual cash operating costs	\$ 24,000	\$ 18,000

Required: Ignoring income taxes and the time value of money, prepare a cost comparison of all relevant items for the next seven years. Indicate the best alternative for Electra Company.

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3.

**2008 Formula/information Sheet**

Ratio	Formula
A/R turnover	$\frac{\text{Net credit sales}}{\text{Average net accounts receivable}}$
Avg. days to sell inventory	$\frac{365}{\text{Inventory turnover}}$
Avg. collection period	$\frac{365}{\text{A/R turnover}}$
Current ratio	$\frac{\text{Current assets}}{\text{Current liabilities}}$
Debt/Equity ratio	$\frac{\text{Total liabilities}}{\text{Shareholders' equity}}$
Dividend yield	$\frac{\text{Dividends per share}}{\text{Market price per share}}$
Earnings per share	$\frac{\text{Net income} + \text{Dividends}}{\text{Average \# of common shares outstanding}}$
Financial leverage	$\frac{\text{Average total assets}}{\text{Average shareholders' equity}}$
Fixed asset turnover	$\frac{\text{Net sales}}{\text{Average net capital assets}}$
Gross profit percentage	$\frac{\text{Gross profit}}{\text{Net sales}}$
Inventory turnover	$\frac{\text{Cost of goods sold}}{\text{Average inventory}}$
Price/earnings ratio	$\frac{\text{Current market price per share}}{\text{Earnings per share}}$
Profit margin	$\frac{\text{Income (Before Extraordinary items)}}{\text{Net sales revenue}}$
Quality of Income	$\frac{\text{Cash flow from Operating Activities}}{\text{Net Income}}$
Quick Ratio (Acid Test)	$\frac{\text{Quick Assets (Cash and near-cash assets)}}{\text{Current Liabilities}}$
Return on equity	$\frac{\text{Net income}}{\text{Average shareholders' equity}}$
Return on assets	$\frac{\text{Net income} + \text{Interest expense}}{\text{Average total assets}}$
Times interest earned	$\frac{\text{Net income} + \text{Interest expense} + \text{Income tax expense}}{\text{Interest expense}}$
Total asset turnover	$\frac{\text{Net sales}}{\text{Average total assets}}$
Working capital	Current assets – Current liabilities

**The Assumptions Underlying Financial Statements**

Separate-Entity	Each business must be accounted for as an individual organization, separate and apart from its owners, all other persons, and other entities.
Unit-of-Measure	Each business entity accounts for and reports its financial results primarily in terms of the national monetary unit.
Continuity (or Going-Concern)	A business is assumed to be able to continue to operate for at least one year beyond the current balance sheet date.
Periodicity	The long life of a company can be reported in shorter periods, usually no longer than one year.

**The Qualitative Characteristics of Financial Statements**

Relevance	Financial information is relevant if it can influence users' decisions by helping them assess the impact of past activities and/or predict future events.
Reliability	Financial information is reliable when it is verifiable, unbiased, and accurate.
Comparability	Financial information is comparable when it enables users to identify similarities and differences between two sets of financial reports produced by two different companies.
Consistency	Financial information is consistent when it is prepared using the same accounting methods and principles over time.

**The Constraints Affecting Financial Statements**

Materiality	Material amounts are amounts that are significant enough to influence a user's decision. Immaterial amounts need not conform to GAAP.
Cost-Benefit	Financial information should be produced only if the perceived benefits of increased decision usefulness exceed the expected costs of providing the information.

**Key Generally Accepted Accounting Principles**

Historical cost	An asset should be recorded at its historical, cash-equivalent cost as at the date of acquisition.
Conservatism	Special care should be taken to avoid (1) overstating assets and revenues, and (2) understating liabilities and expenses.
Revenue recognition	Revenue should only be recognized when <i>all</i> of the following three criteria have been met: <ol style="list-style-type: none"> <li>1. The earnings process is complete or nearly complete, meaning that the company has provided all or substantially all of the goods or services promised to the customer.</li> <li>2. An exchange transaction takes place at a measurable amount, meaning that the customer provides cash or a promise to pay cash in an amount that is measurable at the time of the exchange.</li> <li>3. Collection is reasonably assured, meaning that there is a significant likelihood of collecting the amount due from the customer.</li> </ol>
Matching	Expenses should be recorded in the period during which the related resources were consumed to earn revenues, regardless of when cash is paid.

**The Cost of Goods Sold (CGS) Equation**

Beginning Inventory + Purchases = Cost of Goods Available for Sale  
 Cost of Goods Available for Sale - Ending Inventory = CGS

**Capital Asset Amortization Formulas**

Straight-line	$\frac{\text{Net Book Value} - \text{Residual value}}{\text{Estimated remaining useful life}}$
Units-of-Production	$\frac{(\text{Cost} - \text{Residual value}) \times \text{Units produced}}{\text{Estimated total production units}}$
Declining-balance	$\frac{(\text{Cost} - \text{Accumulated amortization}) \times (2)}{(\text{Estimated useful life})}$

**GAAP Criteria for Accounting for Contingent Liabilities**

	Likely that loss will occur	Likelihood is not determinable	Not Likely that loss will occur
Loss subject to reasonable estimate	Accrue	Disclose	Do not accrue or disclose
Loss not subject to reasonable estimate	Disclose	Disclose	Do not accrue or disclose

**Expanded Accounting Equation:**

Assets = Liabilities + Share Capital + Revenue - Expenses - Dividends

or

Assets = Liabilities + Share Capital + Revenue + (Expenses) + (Dividends)