

# COMM 305 & ACCO 240

## MID TERM EXAMINATION – WINTER 2012

### PLEASE READ THIS PAGE – IT CONTAINS IMPORTANT INFORMATION

- Do not forget to write your class section, name and student ID number on your lined booklet.
- This examination will last Three (3) hours and consists of Four (4) Questions printed on (9) pages including this page. Make sure your copy of the exam is complete before starting.
- You may answer the questions in any order. In front of the booklet place the number associated to the order in which they are done. Your answers may be written in pencil or ink.
- Read the Questions carefully and budget your time carefully. Show details of all work and calculations in order to benefit from part marks, Attempt all Questions.
- This is a closed book examination; no reference to notes, etc. is allowed. However, a silent hand-held four-function calculator and one standard (not electronic) dictionary are permitted.
- When you have finished, submit your lined answer booklet(s) and **keep exam questions**. Please enumerate your exam booklets.
- Answer multiple choice questions in IBM sheet provided and also in your lined answer booklet.

Question	Topic	Marks
Q-1	Multiple Choice	37.5
Q-2	Chapters 3	21.0
Q-3	Chapter 4	20.0
Q-4	Chapter 5	21.5
	TOTAL	100.0

## QUESTION I. 37.5 MARKS

### Multiple Choice Please Select the Best Answer: (1.5 Points each)

1. Managerial accounting:
  - a. Is governed by generally accepted accounting principle
  - b. Emphasizes special-purpose information
  - c. Pertains to the entity as a whole and is highly aggregated
  - d. Is limited to cost data
  
2. Which of the following is not one of the categories in *Standards of Ethical Conduct for Practitioners of Management Accounting and Financial Management*?
  - a. Confidentiality
  - b. Competence
  - c. Integrity
  - d. Independence.
  
3. Variable costs are costs that:
  - a. Vary in total directly and proportionately with changes in the activity level
  - b. Remain the same per unit at every activity level
  - c. Neither of the above
  - d. Both a) and b) above
  
4. Which beginning and ending inventories appear on a cost of goods manufactured schedule?
  - a. Raw materials only
  - b. Raw materials and work in process only
  - c. Raw materials, work in process, and finished goods
  - d. Work in process only
  
5. Into which one of the following accounts would the work of factory employees, that can be physically and directly associated with converting raw materials into finished goods, be categorized?
  - a. Direct labour
  - b. Indirect labour
  - c. Manufacturing overhead
  - d. Indirect materials
  
6. Manufacturing overhead can be categorized as:
  - a. A prime cost and a period cost.
  - b. A conversion cost and a period cost.
  - c. A prime cost and a period cost.
  - d. A conversion cost and a product cost.

7. In High-Low method, what does the slope represent?
- The rate at which the X Independent variable changes as a result of the Y dependent variable
  - The rate at which the Y dependent variable changes as a result of the X independent variable
  - The rate at which the Y dependent variable changes as a result of the fixed cost component
  - The rate at which the X independent variable changes as a result of changes in the Y dependent variable
8. Which of the following more closely describes job-order and process accounting differences?
- Job-order costing is best used when there are more material costs than labour costs involved.
  - Process costing assigns costs to departments while job-order costing assigns costs to jobs.
  - Process costing emphasizes the application of overheads more than job-order costing.
  - Job-order costing emphasizes the application of overheads more than process costing.
9. What is the best way to handle manufacturing overhead costs in order to get the most timely job cost information?
- The company should account for only the direct production costs.
  - The company should apply overhead using an estimated rate throughout the year.
  - The company should add actual manufacturing overhead costs to jobs as soon as the overhead costs are incurred.
  - The company should determine an allocation rate as soon as the actual costs are known, and then apply manufacturing overhead to jobs
10. Which one of the following is *never* part of recording the issuance of raw materials in a job order cost system?
- Debit Work in Process Inventory
  - Debit Finished Goods Inventory
  - Debit Manufacturing Overhead
  - Credit Raw Materials Inventory
11. Which one of the following is part of recording the issuance of raw materials in a job order cost system?
- Credit Work in Process Inventory
  - Credit Finished Goods Inventory
  - Credit Manufacturing Overhead
  - Credit Raw Materials Inventory

12. If a company has under-applied overhead at the end of the accounting period, how is it accounted for?
- No entry occurs.
  - It is transferred to finished goods with the other job costs.
  - It is debited to cost of goods sold.
  - It is credited to cost of goods sold.
13. A company incurred more manufacturing overhead than the amount it applied to its jobs during the year. What entry must be made at the end of the year to allocate the remaining overhead if *not* material in amount?
- Debit Cost of Goods Sold and credit Manufacturing Overhead
  - Credit Work in Process Inventory and debit Cost of Goods Sold
  - Debit Manufacturing Overhead and credit Work in Process Inventory
  - Debit Work in Process Inventory and credit Manufacturing Overhead
14. Which one of the following is true concerning immaterial under-applied overhead at year end?
- It is subtracted from Cost of Goods Sold.
  - It is debited to Cost of Goods Sold.
  - It is reported as an inventory account in the balance sheet.
  - It is added to the Manufacturing Overhead account.
15. Which of the following statements about the work in process account is true?
- Both job order cost and process cost systems use only one work in process account.
  - Both job order cost and process cost systems use several work in process accounts.
  - Job order cost systems use several work in process accounts, but process cost systems use only one.
  - Job order cost systems use only one work in process account, but process cost systems use several.
16. A product requires processing in two departments, Department 22 and then Department 23, before it is completed. What happens to costs transferred out of Department 22?
- They are debited to Finished Goods Inventory.
  - They are transferred to Cost of Goods Sold.
  - They are debited to Work in Process—Department 23.
  - They are credited to Manufacturing Overhead.
17. Why is it necessary to calculate equivalent units of production in a department?
- A physical count of units is impossible.
  - A company may transfer numerous batches out during the year.
  - The physical units in the department are always 100% complete.
  - Some units worked on in the department are not fully complete.

18. What situation is created if there are no units in process at the beginning of the period?
- The company must be using a job order cost system.
  - The units to be accounted for will equal the units transferred out plus the units in process at the end of the period.
  - The units started into production will equal the number of units transferred out.
  - Equivalent units of production for materials and conversion costs will be the same.
19. Snapps, Inc. uses a process cost system with a weighted average method. What amount will always be the same as the number of units to be accounted for in a department?
- Number of units started or transferred into the department
  - Number of equivalent units for conversion costs
  - Ending inventory plus the units started or transferred into the department
  - Units in the beginning inventory plus the units started or transferred into the department
20. Harms Company enters materials at beginning of the process. On January 1, there was no beginning work in process, but there were 100 units in ending work in process inventory. To what is the 'number of units completed' equal?
- The same as the number of units started
  - The number of units started less 100
  - The number of units started plus 100
  - The same as the number of equivalent units
21. Which best describes the flow of overhead costs in an activity-based costing system?
- Overhead costs - direct labour cost or hours - products
  - Overhead costs - products
  - Overhead costs - activity cost pools - cost drivers - products
  - Overhead costs - machine hours - products
22. In companies where there is good reason to change from a traditionally-based costing system to an activity-based costing system, management might expect:
- Products or services with high volumes will have higher overhead costs.
  - Products or services with high volumes will have lowered overhead costs.
  - Products or services with low volumes will have lowered overhead costs.
  - Products or services with high volumes are generally costed accurately.
23. When using a single cost driver to allocate overhead costs, the amount of overhead costs that are applied is
- Usually greater for low-volume products than for high-volume products.

- b. Usually greater for high-volume products than for low-volume products.
- c. Usually equal for both low and high-volume products.
- d. Sometimes greater for higher-volume products, and sometimes greater for low-volume products.

24. Each of the following is a limitation of activity-based costing *except* that

- a. It can be expensive to use.
- b. It is more complex than traditional costing.
- c. More cost pools are used.
- d. Some arbitrary allocations continue.

25. What might be a reason to *not* change from a traditionally-based costing system to an activity-based costing system?

- a. Products or services are similar in volume and activity
- b. Support services are spread evenly throughout the company's activities
- c. Overhead is a low component of the overall cost
- d. All of the above are valid reasons.

**QUESTION II. 21 MARKS**

Spivey Company's fiscal year ends on June 30. The following accounts are found in its job-order cost accounting system for the first month of the new fiscal year:

**Raw Materials Inventory**

July 1 Beginning balance	\$19,000	July 31 Requisitions	<b>\$(A)</b>
31 Purchases	90,400		
July 31 Ending balance	<b>(B)</b>		

**Work in Process Inventory**

July 1 Beginning balance	<b>\$(C)</b>	July 31 Jobs completed	<b>\$(F)</b>
31 Direct materials	70,000		
31 Direct labour	<b>(D)</b>		
31 Overhead	<b>(E)</b>		
July 31 Ending balance	<b>(G)</b>		

**Finished Goods Inventory**

July 1 Beginning balance	<b>\$(H)</b>	July 31 Cost of goods sold	<b>\$(J)</b>
31 Completed jobs	<b>(I)</b>		
July 31 Ending balance	<b>(K)</b>		

**Factory Labour**

July 31 Factory wages	<b>\$(L)</b>	July 31 Wages assigned	<b>\$(M)</b>
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**Manufacturing Overhead**

July 31 Indirect materials	\$ 8,900	July 31 Overhead applied	\$104,000
31 Indirect labour	16,000		
31 Other overhead	<b>(N)</b>		

**Other data:**

- On July 1, two jobs were in process: Job No. 4085 and Job No. 4086, with costs of \$19,000 and \$8,200 respectively.
- During July, Job Nos. 4087, 4088, and 4089 were started. On July 31, only Job No. 4089 was unfinished. This job had charges for direct materials of \$2,000 and direct labour of \$1,500, plus manufacturing overhead. Manufacturing overhead was applied at the rate of 130% of direct labour cost.
- On July 1, Job No. 4084, costing \$135,000, was in the finished goods warehouse. On July 31, Job No. 4088, costing \$143,000, was in finished goods.
- Overhead was \$3,000 under-applied in July.

**Instructions**

List the letters (a) through (n) and indicate the amount pertaining to each letter.  
Show computations.

### QUESTION III. 20 MARKS

Toronto Timers Inc.'s costing system uses two cost categories: direct materials and conversion costs. Each of its products must go through the assembly department and the testing department. Direct materials are added at the beginning of production. Conversion costs are allocated evenly throughout production. Data for the assembly department for January 2012 are as follows:

#### **Production Data—Units**

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Work in process, beginning inventory (50% complete in terms of conversion costs)	800 units
Units started during January	1,200 units
Work in process, ending inventory (60% complete in terms of conversion costs)	400 units

#### **Cost Data**

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Work in process, beginning inventory costs		
Direct materials	\$	200,000
Conversion costs		200,000
Direct materials costs added during January		300,000
Conversion costs added during January		720,000

#### **Instructions**

- Determine the cost per equivalent unit for work in process **beginning inventory**. 4 Marks
- Determine the costs of completed and transferred out units during January 2012 and the costs of Work in process ending inventory at January 31, 2012 of the assembly department. (Toronto timers Inc.is using weighted average method). 12 Marks
- If Toronto timers Inc uses FIFO method instead of weighted average method, do you think the average cost per equivalent unit during January 2012 will be different or not and why? (hint, do not prepare any cost report) 4 Marks

### QUESTION IV. 21.5 MARKS

Kitchen Company designs and builds upscale kitchen cabinets for luxury homes. Its budgeted manufacturing overhead costs for 2012 are as follows:

Overhead Cost Pools	Amount
Handling materials	\$ 184,000
Production (cutting, milling, finishing)	500,000
Setting up machines	156,000
Inspecting	160,000
Total budgeted overhead costs	<u>\$1,000,000</u>

For the last three years, Kitchen Company has been charging overhead to products on the basis of material costs. For 2012, material costs are budgeted for \$1,250,000.

Ben Chen, the owner-manager, recently directed his accountant, John Kandy, to implement the activity-based costing system he has repeatedly proposed. At Ben's request, John and the production foreman identify the following cost drivers and their usage for the 2012 budgeted overhead cost pools:

Activity Cost Pools	Activity Cost Drivers	Expected Use of Cost Drivers
Handling materials	Number of moves	8,000
Production (cutting, milling, finishing)	Direct labour hours	100,000
Setting up machines	Number of set-ups	1,200
Inspecting	Number of inspections	5,000

Sara Sosa, the sales manager, has received an order for 50 kitchen cabinet arrangements from Bitty Builders, a housing development contractor. At Sara's request, John prepares cost estimates for producing components for 50 cabinet arrangements so Sara can submit a contract price per kitchen arrangement to Bitty Builders. He accumulates the following data for the production of 50 kitchen cabinet arrangements:

Direct materials	\$180,000
Direct labour	\$200,000
Machine hours	15,000
Direct labour hours	12,000
Number of material moves	800
Number of machine set-ups	100
Number of inspections	450

#### Instructions

- Compute the predetermined overhead rate using traditional costing with material costs as the basis.
- What is the manufacturing cost per complete kitchen cabinet arrangement under traditional costing?
- What is the manufacturing cost per kitchen cabinet arrangement under the proposed activity-based costing? (Prepare all of the necessary schedules.)
- Which of the two costing systems is preferable in pricing decisions and why?

**QUESTION I 37.5 MARKS**

- |     |   |
|-----|---|
| 1.  | B |
| 2.  | D |
| 3.  | D |
| 4.  | B |
| 5.  | A |
| 6.  | D |
| 7.  | B |
| 8.  | B |
| 9.  | B |
| 10. | B |
| 11. | D |
| 12. | C |
| 13. | A |
| 14. | B |
| 15. | D |
| 16. | C |
| 17. | D |
| 18. | B |
| 19. | D |
| 20. | B |
| 21. | C |
| 22. | B |
| 23. | B |
| 24. | C |
| 25. | D |

QUESTION II 21. MARKS

- (a) \$78,900 (\$70,000 + \$8,900). **1.5 MARKS**
- (b) \$30,500 [(\$19,000 + \$90,400) – \$78,900 (See (a))]. **1.5 MARKS**
- (c) \$27,200 (Given in other data – \$19,000 + \$8,200). **1.5 MARK**
- (d) \$80,000 (\$104,000 manufacturing overhead applied ÷ 130%).  
**1.5 MARKS**
- (e) \$104,000 (Manufacturing overhead applied). **1.5 MARK**
- (f) \$275,750 [\$27,200 + \$70,000 + \$80,000 + \$104,000 – \$5,450 (See (g))].  
**1.5 MARKS**
- (g) \$5,450 [\$2,000 + \$1,500 + (\$1,500 × 130%)]. **1.5 MARKS**
- (h) \$135,000 (Given in other data). **1.5 MARKS**
- (i) \$275,750 (Same as (f)). **1.5 MARKS**
- (j) \$267,750 [\$135,000 + \$275,750 – \$143,000 (Given in other data)].  
**1.5 MARKS**
- (k) \$143,000 (Given in other data). **1.5 MARKS**
- (l) \$96,000 [\$80,000 (See (d)) + \$16,000]. **1.5 MARKS**
- (m) \$96,000 (Same as (l)). **1.5 MARKS**
- (n) \$82,100 [\$104,000 + \$3,000 (Given in other data) – \$8,900 – \$16,000]. **1.5 MARKS**

**QUESTION III 20. MARKS**

(a) Unit cost for beginning work in process inventory:

Direct material cost per unit:

Total material cost	\$200,000
÷ Equivalent units (800 × 100%)	<u>800</u>
	<u>\$250.00</u>

Conversion cost per unit:

Total conversion cost	\$200,000
÷ Equivalent units (800 × 50%)	<u>400</u>
	<u>\$500.00</u>

Total unit cost for beginning inventory	<u>\$750.00</u>
	<b>2 MARKS</b>

<u>Quantities</u>	<u>Physical Units</u> (Step 1)	<u>Equivalent Units</u>	
		<u>Materials</u> (Step 2)	<u>Conversion Costs</u>
<b>Units to be accounted for</b>			
Work in process, January 1 50% Con	800		
Started into production	<u>1,200</u>		
Total units	<u>2,000</u>		
<b>Units accounted for</b>			
Transferred out	1,600	1,600	1,600
Work in process, January 31 60% cov	<u>400</u>	<u>400</u>	<u>240</u>
Total equivalent units	<u>2,000</u>	<u>2,000</u>	<u>1,840</u>
		<b>2 MARKS</b>	<b>2 MARKS</b>

Costs	Materials	Conversion Costs	Total
Unit costs (Step 3)			
BWIP	200,000	200,000	\$ 400,000
Costs in January	<u>\$ 300,000</u>	<u>\$720,000</u>	<u>\$1,020,000</u>
Equivalent units	(a) <u>\$500,000</u>	<u>\$920,000</u>	<u>\$1,420,000</u>
Unit costs (a) ÷ (b)	(b) <u>2,000</u>	<u>1,840</u>	
	<u>\$250</u>	<u>\$500</u>	<u>\$750</u>
	2,5 MARKS	2.5 MARKS	

**Cost Reconciliation Schedule (Step 4)**

Costs accounted for		
Transferred out (1,600 × \$750) 1.5 MARKS		\$1,200,000
Work in process, January 31		
Materials (400 × \$250)		\$100,000
Conversion costs (240 × 500) 1.5 MARKS		<u>120,000</u>
Total costs		<u>\$1,420,000</u>

(C) The answer will not be different because the cost per equivalent unit at January 1 (LAST PERIOD) \$750 is the same as the cost per equivalent unit during January 2012 \$750. 4 MARKS

### QUESTION IV 21.5. MARKS

(a) Predetermined overhead rate using direct labour hours:

$$\$1,000,000 \div 1,250,000 \text{ material costs} = \$0.80 \text{ per material costs } \mathbf{2 \text{ MARKS}}$$

(b) Manufacturing cost per complete kitchen cabinet arrangement under traditional costing **(4 MARKS)**

Direct materials <b>1 MARK</b> .....	\$ 180,000
Direct labour <b>1 MARK</b> .....	200,000
Overhead (\$180,000 × \$0.80) <b>1 MARK</b> .....	<u>144,000</u>
Total cost of 50 Kitchen cabinets .....	<u><u>\$524,000</u></u>
Cost per stair (\$524,000 ÷ 50) <b>1 MARK</b> .....	<u><u>\$10,480</u></u>

(c) Manufacturing cost per complete kitchen cabinet arrangement under activity-based costing: **(11.5 MARKS)**

Determine activity-based overhead rates: (1 MARK EACH)

Handling materials:  $\$184,000 \div 8,000 = \$23$  per move

Production:  $\$500,000 \div 100,000 = \$5$  per direct labour hour

Setting-up:  $\$156,000 \div 1,200 = \$130$  per set-up

Inspecting:  $\$160,000 \div 5,000 = \$32$  per inspection

Assign overhead to the order (1 MARK EACH)

Handling materials (\$23 × 800 moves)	18,400
Production (\$5 × 12,000 direct labour hrs)	60,000
Setting-up (\$130 × 100 set-ups)	13,000
Inspecting (\$32 × 450 inspections)	<u>14,400</u>
Total overhead applied to this order	<u><u>\$105,800</u></u>

Total manufacturing cost per kitchen cabinet under ABC:

Direct materials <b>.75 MARK</b> .....	\$ 180,000
Direct labour <b>.75 MARK</b> .....	200,000
Overhead <b>.75 MARK</b> .....	<u>105.800</u>
Total cost of 50 Kitchen Cabinets .....	<u><u>\$ 485,800</u></u>

Total cost per Kitchen Cabinet ( $\$485,800 \div 50$ ) **1.25 MARK**..... **\$9,716**

(d) **4 MARKS**

Activity-based costing is the preferred costing system for setting prices because the FOH costs are more accurately reflected. The greater accuracy is a result of differentiate between unit based level **(1.5 MARKS)** such as production (cutting) and non-unit based batch level **(1.5 MARKS)** such as handling, setting-up, and inspection for multiple, more relevant activity cost drivers under ABC than the single cost driver used with the traditional unit volume-based system. **(1 MARKS)**