

CHAPTER 3: JOB COSTING

Question 1. Salmon Inc. allocates overhead based upon machine hours. Budgeted manufacturing overhead was \$289,000 and budgeted machine hours were 8,500. Actual manufacturing overhead was \$287,600 and actual machine hours were 8,400. Ending balances before proration are as follows:

Materials inventory	\$200,000
Finished goods inventory	90,000
The cost of goods sold	700,000
Work in process	10,000

- Determine the budgeted manufacturing overhead rate per machine hour.
- Compute the over/underallocated overhead.
- Dispose the under-overallocated amount using proration based on ending balances in Work in Process, Finished Goods and Cost of Goods Sold.
- Prepare the journal entry to dispose of the under/overallocated manufacturing overhead.

Question 2. The following journal entries without dollar data were taken from the accounting records of Crack Company. Crack Company has a job-order costing system and applies overhead to jobs using a budgeted overhead rate.

- | | | |
|-----------------------|-----|-----|
| Work in Process | XXX | |
| MOH Control | XXX | |
| Wages Payable | | XXX |
- | | | |
|---------------------|-----|-----|
| MOH Control | XXX | |
| Raw Materials | | XXX |
- | | | |
|--------------------------------|-----|-----|
| MOH Control | XXX | |
| Accumulated Depreciation | | XXX |
- | | | |
|-----------------------|-----|-----|
| Work in Process | XXX | |
| Raw Materials | | XXX |
- | | | |
|-----------------------|-----|-----|
| Work in Process | XXX | |
| MOH Allocated | | XXX |
- | | | |
|-----------------------|-----|-----|
| Finished Goods | XXX | |
| Work in Process | | XXX |
- | | | |
|------------------------|-----|-----|
| Raw Materials | XXX | |
| Accounts Payable | | XXX |

- Which one is the entry to record the purchase of raw materials:
- The entry to transfer the cost of goods manufactured for the period is:
- The entry to record the allocation of overhead is:
- The entry to record depreciation on manufacturing equipment is:

Question 3. Brightly Company uses a job-order costing system for manufacturing parts of calculators. Summary of the transactions for the month September included:

- Materials purchased, \$50,000.
- Direct materials used, \$43,500 and indirect material used, \$3,500.
- Direct labor incurred, \$26,000, wages will be paid in August.
- Depreciation on the factory building, \$17,000; maintenance expenses, \$2,400; factory utilities expense, \$3,600 and indirect manufacturing labor, \$15,250. Utilities expense was paid in September. Maintenance and wages haven't been paid yet.
- Indirect manufacturing cost allocated 150% of the direct manufacturing labor costs.
- Costs of orders completed, \$106,000.
- Costs of goods sold, \$111,000.

Beginning balances on September 1 are as follows:

Materials inventory	\$ 3,000
Finished goods inventory	8,000
Work in process	1,500

Required:

- Prepare journal entries to summarize September transactions.
- Compute the ending inventories of direct materials, work in process and finished goods
- Prepare a journal entry to write off the difference between allocated and actual overhead directly to cost of goods sold.

Question 4. Faboski Company uses a normal costing system with a single manufacturing overhead cost pool and direct labor hours as the cost allocation base. The following data are available for the year ended December 31, 2002.

Budgeted manufacturing overhead	\$1,125,000
Actual manufacturing overhead	\$1,100,000
Budgeted machine hours	12,500 machine hours
Actual machine hours	13,100 machine hours
Budgeted direct labor hours	1,875 labor hours
Actual direct labor hours	1,750 labor hours

- Determine the budgeted manufacturing overhead rate.
- What is the manufacturing overhead allocated?
- Compute over-or under allocated manufacturing overhead in 2002.
- What is the proper journal entry to write off the over-or under allocated manufacturing overhead to cost of goods sold.

Question 5. Tough Products Company manufactures pipes and applies manufacturing costs to production at a budgeted indirect-cost rate of \$8 per direct labor-hour. The following data are obtained from the accounting records for June 2006:

Direct materials	\$400,000
Direct labor (8,000 hours @ \$11/hour)	\$ 88,000
Indirect labor	\$ 10,000
Plant facility rent	\$ 40,000
Depreciation on plant machinery	\$ 20,000
Sales salaries	\$ 30,000
Administrative expenses	\$ 40,000

- What actual amount of manufacturing overhead costs was incurred during June 2006?
- What amount of manufacturing overhead was allocated to all jobs during June 2006?
- For June 2006, was manufacturing overhead underallocated or overallocated?
- Prepare a journal entry to write off the difference between allocated and actual overhead directly to Cost of Goods Sold.

Question 6. TLM Company has two departments, A and B. Overhead is allocated based on machine-hours in Department A and direct labor costs in Department B. The following additional information is available:

<u>Budgeted Amounts</u>	<u>Department A</u>	<u>Department B</u>
Direct labor cost	\$180,000	\$120,000
Manufacturing overhead	\$125,000	\$180,000
Machine-hours	50,000 mh	40,000 mh

The following information is the actual data for one of the jobs completed during the month:

<u>Actual data for Job no:37</u>	<u>Department A</u>	<u>Department B</u>
Direct materials used	\$ 10,000	\$ 16,000
Direct labor hours	2,000 DLH	1,500 DLH
Machine-hours	7,000 mh	2,200 mh

Direct labor cost is \$20 for Department A and \$18 for Department B

- Compute the budgeted manufacturing overhead rates for Department A and Department B.
- What is the total cost of Job 37?

Question 7. Forever Corporation uses a job-order costing system. Summary of the transactions during 2002 as follows:

- Materials purchased, \$100,000.
- Direct materials used, \$75,000 and indirect material used, \$12,500.
- Manufacturing overhead incurred, \$ 21,500.
- Direct labor incurred, 1,000 direct labor hours at \$75 per hour and indirect manufacturing labor was \$4,250, wages will be paid in 2003
- Manufacturing overhead allocated \$ 19 per direct labor hour.
- Costs of goods manufactured, \$200,000.
- Costs of goods sold, \$185,000.

Prepare journal entries to summarize transactions in 2002.

Question 8. The following T accounts are for Stanford Company:

<u>Material Inventory</u>		<u>Work in Process</u>		<u>Finished Goods Inventory</u>	
(Beg.)	24,000 (2)	(Beg.)	62,000	(Beg.)	? (8)
7,000		11,000	(7)	18,000	
(1) 19,000		(2) 15,000		(7) 62,000	
		(4) 18,000		(End.)	
		(6) 31,000		15,000	
<u>MOH Control</u>		<u>MOH Allocated</u>		<u>Cost of Goods Sold</u>	
(2) 9,000			31,000	(8) ?	
(3) 16,000			(6)		
(4) 8,000					
(5) 5,000					
<u>Wages Payable</u>		<u>Accounts Payable</u>		<u>Accumulated Depreciation</u>	
	26,000 (4)		19,000 (1)		82,000
			5,000		(Beg.)
			(5)		16,000 (3)

- How much is the indirect labor cost?
- The cost of goods manufactured is:
- The cost of goods sold (before adjustment for under- or overallocated overhead) is:
- The cost of direct materials used is:
- The ending Work in Process account balance would be:
- How much is the under- or overallocated overhead?

Question 9. Flex Company has two departments, X and Y. Overhead is applied based on direct-labor cost in Department X and machine hours in Department Y. The following additional information is available:

<u>Budgeted Amounts</u>	<u>Department X</u>	<u>Department Y</u>
Direct-labor cost	\$180,000	\$165,000
Machine hours	51,000	40,000
Factory overhead	\$225,000	\$180,000

Actual data for Job #10 are as follows:

	<u>Department X</u>	<u>Department Y</u>
Direct materials requisitioned	\$10,000	\$16,000
Direct-labor cost	\$11,000	\$14,000
Machine hours	5,000	3,000

Required:

- What is the total overhead cost of Job 10?
- If Job 10 consists of 50 units of product, what is the unit cost of this job?

Question 10. Golding Company uses a predetermined overhead rate to allocate overhead. Overhead is allocated on the basis of direct labor hours in department 1 and on the basis of machine hours in department 2. At the beginning of the year, the following estimates are provided:

	Department One	Department Two
Direct Labor Hours	100,000	20,000
Machine Hours	10,000	30,000
Direct Labor Cost	\$ 750,000	\$ 160,000
Overhead Cost	\$ 250,000	\$ 162,000

Actual Costs reported for all jobs during the year are as follows:

	Department One	Department Two
Direct Labor Hours	98,000	21,000
Machine Hours	11,000	32,000
Direct Labor Cost	\$ 748,000	\$ 168,000
Overhead Cost	\$ 247,500	\$ 175,000

The accounting Records of the company show the following data for Job 60:

	Department One	Department Two
Direct Labor Hours	125	50
Machine Hours	10	205
Direct Material Cost	\$ 1,580	\$ 2,650
Direct Labor Cost	\$ 937	\$ 400

- Compute the predetermined overhead rate for each department.
- Compute the total cost of Job 60.
- If there are 50 units in Job 60, what is the unit cost?

Question 11. Crocus Corporation uses direct labor-hours in calculating its predetermined overhead rate. At the beginning of the year, manufacturing overhead for the year was estimated to be \$250,860. At the end of the year, actual direct labor-hours for the year were 20,800 hours, the actual manufacturing overhead for the year was \$245,860, and manufacturing overhead for the year was under applied by \$10,820.

- Compute the predetermined overhead rate.
- Compute estimated (budgeted) direct labor hours.

Question 12. Kampas Company uses a normal costing system with a single manufacturing overhead cost pool and machine hours as the cost allocation base. The following data are available for the year ended December 31, 2007.

Budgeted manufacturing overhead	\$125,000
Actual manufacturing overhead	\$110,000
Budgeted machine hours	1,500 machine hours
Actual machine hours	1,250 machine hours
Budgeted direct labor hours	850 labor hours
Actual direct labor hours	870 labor hours

- Determine the budgeted manufacturing overhead rate.
- What is the manufacturing overhead allocated?
- Compute over-or under allocated manufacturing overhead in 2007.
- If actually 400 machine hours and 120 direct labor hours are used by Job 102. Compute the MOH allocated to Job 102.

Question 13. Tarrell Company uses a budgeted overhead rate based on direct labor hours to allocate manufacturing overhead to jobs. At the beginning of the year the company estimated its total manufacturing overhead cost at \$400,000 and its direct labor-hours at 100,000 hours. The actual overhead cost incurred during the year was \$350,000 and the actual direct labor hours incurred on jobs during the year was 90,000 hours.

- Determine the budgeted manufacturing overhead rate.
- What is the manufacturing overhead allocated?
- Compute over-or under allocated manufacturing overhead.
- What is the proper journal entry to write off the over-or under allocated manufacturing overhead to cost of goods sold.