Lanen 3e, Chapter 7: Job Costing Practice Quiz

90. A manufacturing company employs job costing to account for its costs. There are three production departments, and separate departmental overhead application rates are employed because the operations of the departments are so different. All jobs generally pass through all three production departments. Data regarding the hourly direct labor rates, overhead application rates, and three jobs on which work was done during the month appear below. Job 101 and Job 102 were completed during the current month. (CIA Examination adapted)

Production Departments	Direct Labor Rate	Manufacturing overhead application rates
Department 1	$12.00	50% of direct materials
Department 2	$18.00	$8.00 per machine hour
Department 3	$15.00	75% of direct labor cost

	Job 101	Job 102	Job 103
Beginning Work-in-Process	$25,500	$32,400	$ -0-
Direct materials:			
Department 1	$40,000	$26,000	$58,000
Department 2	$ 3,000	$ 5,000	$14,000
Department 3	$ -0-	$ -0-	$ -0-
Direct labor hours:			
Department 1	500	400	300
Department 2	200	250	350
Department 3	1,500	1,800	2,500
Machine hours:			
Department 1	-0-	-0-	-0-
Department 2	1,200	1,500	2,700
Department 3	1,500	1,800	2,500

Required:
(a) Compute the completed costs of Job 101 and Job 102.
(b) Compute the value of the Work-in-Process Inventory at the end of the month.

(a) Job 101: $147,075; Job 102: $144,950
(b) Job 103: $198,125

Feedback:

	Job 101	Job 102	Job 103
Beginning Work-in-process	$25,500	$32,400	$ 0
Materials:			
Department 1	40,000	26,000	58,000
Department 2	3,000	5,000	14,000
Labor:			
Department 1	6,000	4,800	3,600
Department 2	3,600	4,500	6,300
Department 3	22,500	27,000	37,500
Overhead			
Department 1	20,000	13,000	29,000
Department 2	9,600	12,000	21,600
Department 3	16,875	20,250	28,125
Total	$147,075	$144,950	$198,125

AACSB: Analytic
AICPA: FN-Measurement
Bloom's: Application
Difficulty: Medium
Learning Objective: 2
Learning Objective: 3
Topic Area: Computing the Cost of a Job

91. Baby Care Manufacturing Company is a manufacturer of furnishings for infants and children. The company uses job costing and employs a full absorption accounting method for cost accumulation. Baby Care's Work-in-Process Inventory on April 30 consisted of the following jobs:

Job No.	Items	Units	Accumulated Cost
CBS102	Cribs	20,000	$ 900,000
PLP086	Playpens	15,000	420,000
DRS114	Dressers	25,000	250,000
Total			$ 1,570,000

Baby Care applies manufacturing overhead on the basis of direct labor hours. The company's estimated manufacturing overhead for the period ending May 31 totals $4,500,000; the company estimated it would use 600,000 direct labor hours during the month.

At the end of April, the balance in Baby Care's Materials Inventory, which includes both materials and purchased parts, was $668,000. Additions to, and requisitions from, the materials inventory during the month of May included the following:

	Materials	Purchased Parts
Purchased	$242,000	$396,000
Requisitions:		
Job CBS102	51,000	104,000
Job PLP086	3,000	10,800
Job DRS114	124,000	87,000
Job STR077 (10,000 strollers)	62,000	81,000
Job CRG096 (5,000 carriages)	65,000	187,000

During the month of May, Baby Care's factory payroll consisted of the following:

	Hours	Cost
Job CBS102	12,000	$122,400
Job PLP086	4,400	43,200
Job DRS114	19,500	200,500
Job STR077	3,500	30,000
Job CRG096	14,000	138,000
Indirect supervision		57,600
Total		$591,700

Listed below are the jobs that were completed and the units that were sold during the month of May.

Job No.	Items	Quantity Completed
CBS102	Cribs	20,000
PLP086	Playpens	15,000
STR077	Strollers	10,000
CRG096	Carriages	5,000

Required:

(a) Compute the value of Baby Care's Work-in-Process Inventory on May 31.

(b) Compute the value of Baby Care's Cost of Goods Manufactured for May.

(a) Job DRS114: $807,750
(b) $2,471,650

Feedback: overhead rate: $4,500,000/600,000 hrs = $7.50/hr
(a) WIP 5/31: Job DRS114: $250,000 beginning bal + $124,000 materials + $87,000 purchased parts + $200,500 labor + (19,500 × $7.50 overhead) = $807,750
(b) COGM: $1,267,400 CBS102 + $510,000 PLP086 + $199,250 STR077 + $495,000 CRG096 = $2,471,650
CBS102: $900,000 + 51,000 + 104,000 + 122,400 + (12,000 × 7.50) = $1,267,400
PLP086: $420,000 + 3,000 + 10,800 + 43,200 + (4,400 × 7.50) = $510,000
STR077: $-0- + 62,000 + 81,000 + 30,000 + (3,500 × 7.50) = $199,250
CRG096: $-0- + 65,000 + 187,000 + 138,000 + (14,000 × 7.50) = $495,000

AACSB: Analytic
AICPA: FN-Measurement
Bloom's: Application
Difficulty: Hard
Learning Objective: 2
Learning Objective: 3
Topic Area: Manufacturing Overhead

94. Danner Corporation applies overhead based upon machine-hours. Budgeted factory overhead was $375,000 and budgeted machine-hours were 12,500. Actual factory overhead was $387,920 and actual machine-hours were 13,150.

Required:

a. Compute the overhead application rate.

b. Compute the amount of overhead applied to production.

c. Determine the amount of over- or underapplied overhead.

(a) $30 per machine hour
(b) $394,500
(c) $6,580 overapplied

Feedback:
(a) rate = $375,000/12,500 hrs = $30/hr
(b) 13,150 × $30 = $394,500
(c) $387,920 actual - 394,500 applied = $6,580 overapplied

AACSB: Analytic
AICPA: FN-Measurement
Bloom's: Application
Difficulty: Medium
Learning Objective: 3
Topic Area: Manufacturing Overhead

95. The following selected data were taken from the books of the Bixby Box Company. The company uses job costing to account for manufacturing costs. The data relate to June operations.
A) Materials and supplies were requisitioned from the stores clerk as follows:
Job 405, material X, $7,000.
Job 406, material X, $3,000; material Y, $6,000.
Job 407, material X, $7,000; material Y, $3,200.
For general factory use: materials A, B, and C, $2,300.
B) Time tickets for the month were chargeable as follows:

Job 405	$11,000	300 hrs
Job 406	14,000	360 hrs
Job 407	8,000	190 hrs
Indirect labor	3,700	

C) Other information:
Beginning work-in-process, June 1, $-0-
Factory paychecks for $36,700 were issued during the month.
Various factory overhead charges of $19,400 were incurred on account.
Depreciation of factory equipment for the month was $5,400.
Factory overhead was applied to jobs at the rate of $35.00 per direct labor hour.
Job orders completed during the month: Job 405 and Job 406.
Selling and administrative costs were $2,100.
Factory overhead is closed out only at the end of the year.
Required:
(a) Determine the ending work-in-process balance on June 30.
(b) Determine the cost of goods manufactured for June.
(c) Is factory overhead over- or underapplied for June? What is the monthly value?

(a) $24,850
(b) $64,100
(c) $1,050 underapplied

Feedback: (a) Job 407: $7,000 + 3,200 + 8,000 + (190 × $35) = $24,850
(b) Jobs 405 & 406: $28,500 + 35,600 = $64,100
Job 405: $7,000 + 11,000 + (300 × $35) = $28,500
Job 406: $3,000 + 6,000 + 14,000 + (360 × $35) = $35,600
(c) Actual OH: $2,300 + 3,700 + 19,400 + 5,400 = $30,800; Applied: (300 + 360 + 190) × 35 = $29,750; $30,800 - 29,750 = $1,050 underapplied

AACSB: Analytic
AICPA: FN-Measurement
Bloom's: Application
Difficulty: Medium
Learning Objective: 2
Topic Area: Computing the Cost of a Job