

Name

ID. Number

Department

## PRINCE OF SONGKLA UNIVERSITY

### FACULTY OF ENGINEERING

Final examination : semester 1

Academic Year : 2004

Date : October 11, 2004

Time : 9.00-12.00

Subject : 225-452 Cost Analysis

Room : R 300

#### Instruction

5. Attempt all questions.
6. write answers in this examination paper.
7. All materials are allowed in to the examination room.
8. The points are as follows :

|                    |    |    |    |    |  |
|--------------------|----|----|----|----|--|
| Question No        | 1  | 2  | 3  | 4  |  |
| Full points scored | 35 | 40 | 14 | 35 |  |
| Scored             |    |    |    |    |  |

ทูลจรตในการสอบ โทษจันต่ำค่อปรบตกในรายวชทที่ทูลจรตและ  
พัทการเรยน 1 ภาคการศกษา

Boonrueing Manasurakarn

Instructor

1

Name  
ID. Number  
Department  
1. Materials requisition number 001      Date September 25, 2004  
Job number to be charge 1ABC  
Department Milling

| Description | Quantity | Unit cost |
|-------------|----------|-----------|
|             | (units)  | (baht)    |
| X housing   | 10       | 12,500    |
| Y connector | 10       | 8,000     |

Time ticket number 123      Date September, 2004

Employee Rose      Station 2

Time

| Started | Ended | completed | Rate | Job number  |
|---------|-------|-----------|------|-------------|
| 8.00    | 12.00 | 4.0       | ฿200 | 1ABC        |
| 13.00   | 15.00 | 2.0       | 200  | 3BCF        |
| 15.00   | 17.00 | 2.0       | 200  | maintenance |

Totals

|                        |        |           |         |                 |
|------------------------|--------|-----------|---------|-----------------|
| Time ticket number 214 |        |           | Date    | September, 2004 |
| Employee               | Lychee |           | Station | 6               |
| Time                   |        |           |         |                 |
| Started                | Ended  | completed | Rate    | Job number      |
| 8.00                   | 10.00  | 2.0       | ฿180    | 2BDE            |
| 10.00                  | 12.00  | 2.0       | 180     | 5DAC            |
| 13.00                  | 17.00  | 4.0       | 180     | 1ABC            |
| Totals                 |        |           |         |                 |

The company has estimated its total manufacturing overhead costs will be 400,000 baht for the year and its total direct labor-hours will be 400.

1. Prepare the job cost sheet (of 1ABC).
2. How much is the unit product cost?

(35 points)



2. The following activity took place in CNC department in June, several months into the production of new model of product :

CNC Department

|  | units | Percentage complete |            |
|--|-------|---------------------|------------|
|  |       | materials           | conversion |
| Work in process, June 1,   | 400   | 60%                 | 25%        |
| Units started into production during June                          | 4,000 |                     |            |
| Units completed during June and transferred to the next department | 3,600 | 100%                | 100%       |
| Work in process, June 30   | 600   | 60%                 | 40%        |

Costs in the beginning inventory :

|                 |        |      |
|-----------------|--------|------|
| Materials cost  | 10,000 | baht |
| Conversion cost | 4,000  | baht |

Cost added to production during June :

|                 |         |      |
|-----------------|---------|------|
| Materials cost  | 450,000 | baht |
| Conversion cost | 360,000 | baht |

Compute the cost per equivalent unit using the weight-average method, and Product Report.(40 points)

Note : Analysis step by step.

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3. A company has following data :

January

1. purchase goods 60,000 baht.
2. purchase raw materials 120,000 baht.
3. purchase a copier 300,000 baht.
4. water supply, electric expenses 5,000 baht.
5. company sells all kinds of products 40,000 baht.

February

1. water supply, electric expenses 4,000 baht.
2. company sells all kinds of products 600,000 baht.

VAT is 7%

Compute the VAT of January and February. (14 points)



4. The XYZ corporation manufactures two products, A and B, in a centralized manufacturing facility. The production process requires very little time for either product so consequently work in process inventory is negligible and is not considered in the planning and budget process.

The following direct materials and direct labor costs have been estimated for product A and B are given in table 1.

Table 1

Production Cost Data

Direct materials: 12 pounds of materials No 1 x \$ 2.25 per pound

Direct labor: 4 hours of direct labor x \$ 8.00 per hour

Manufacturing overhead: applied based on direct labor hours

The balance sheet and sales budget are given below:

XYZ Corporation

Balance Sheet

January 1, 2003

Assets

|   |                  |                   |
|---|------------------|-------------------|
| Cash                                      |                  | 200,000           |
| Accounts receivable                       |                  | 1,200,000         |
| Direct materials:                         |                  |                   |
| No 101 180,000 pounds@ \$1.50 per pound = | 270,000          |                   |
| No102 200,000 pounds@ \$ 1.10 per pound = | <u>220,000</u>   | 490,000           |
| Finished goods:                           |                  |                   |
| A; 28,000 <u>units@\$57.00</u> per unit = | 1,596,000        |                   |
| B;20,000 <u>units@\$84.20</u> per unit =  | <u>1,684,000</u> | 3,280,000         |
| Fixed assets:                             |                  |                   |
| Accumulated depreciation                  | 29,600,000       |                   |
| Total asset                               | 7,400,000        | <u>22,200,000</u> |
|   |                  | 27,370,000        |

Liabilities and Equity

|   |                   |
|---|-------------------|
| Accounts payable-direct materials purchases | 800,000           |
| Income taxes payable                        | 400,000           |
| Common stock                                | 16,000,000        |
| Retained earnings                           | <u>10,000,000</u> |
| Total liabilities and equity                | <u>27,370,000</u> |

XYZ Coporation

Sales budget

For the ended December 31, 2003

|         | Budgeted       | Budgeted    | Budgeted          |
|---------|----------------|-------------|-------------------|
| Product | Sales units    | Sales price | Sales Dollars     |
| A       | 110,000        | 140         | 15,400,000        |
| B       | <u>140,000</u> | 100         | <u>14,400,000</u> |
| Total   | 250,000        |             | 29,800,000        |

The rate per direct labor hour of supplier, repairs, indirect labor and other are \$2.0, 0.8, 1.5, and 0.4 respectively.

Estimated direct materials ending inventory for purchase budget : No101 = 90,000 pounds and No 102 = 150,000 pounds.

Required :

1. Prepare the production budget.(7 points)
2. Direct materials budget.(9.5 points)
3. Direct labor budget.(8 points)
4. Manufacturing overhead budget.(10.5 points)

(total 35 points)

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