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TEST.

Salamander PLC

Contract ~~costing~~ account as at February 28, 2011

Direct materials issued	75000	Materials c/f	25000
Materials bought on site	195000	Cost to date c/f	486,650
Direct expenses	55000		
Wages paid	150,000		
Head office expenses	10,500		
Plant depreciation (20% of 100,000)	20,000		
Accrued expenses			
Wages	5000		
Direct expenses	1150		
	<u>6,150</u>		
	<u>511,650</u>		<u>511,650</u>
Cost to date b/f	486,650	Value of work certified	545,000
Notional profit:			
Profit taken	35,010		
Profit not taken	23,340		
	<u>58,350</u>		
	<u>545,000</u>		<u>545,000</u>
Material b/f	25,000	Profit b/f	23,340

b. Calculation of work in progress

Cost to date	486,650
Profit taken	<u>35,010</u>
	521,660
Cash received	<u>(490,500)</u>
Work in progress	<u>31,160</u>

### Workings

Cash received 490,500

$$\text{value certified} = \frac{490,500}{0.90} = 545,000$$

Notional profit = 58,350

$$\text{Profit taken} = \frac{2}{3} \times \text{notional profit} \times \frac{\text{cash received}}{\text{value certified}}$$

$$= \frac{2}{3} \times 58,350$$

$$= \frac{2}{3} \times 58,350 \times \frac{490,500}{545,000}$$

$$= \text{₹ } 35,010$$

$$\text{Profit not taken} = (58,350 - 35,010) = \text{₹ } 23,340$$

3.

### Kekemeis LTD

#### Process 1 Account

Particular	Qty	Rate	Amount	Particular	Qty	Rate	Amount
Input: Mat	6000	2	12,000	Normal loss	600	3	1,800
Add: Material			7,000	Output	5000	6.2963	31,481.5
Labour			8,000	Abnormal loss	400	6.2963	2,518.5
DIE			3,000				
OIE			800				
Prod-overhead			5,000				
	6,000		35,800		6000		35,800

Cost per unit (CPU) =  $\frac{\text{Cost} - \text{Scrap}}{\text{Input material unit} - \text{Normal loss units}}$

$$= \frac{35,800 - 1,800}{6000 - 600} = \frac{34,000}{5,400} = \text{₹ } 6.2963$$

### Process II Account

Particulars	Qty	Rate	Amount	Particulars	Qty	Rate	Amount
Process I: input	5000	6-2863	31481-5	Normal loss	500	3	1,500
Add: Materials			18,000	Output	6000	13-9292	83575-2
OIL			10,000				
DIE			4,500				
Other expenses			1,200				
Prod. Overhead			9,000				
Normal gain	1500	13-9292	20893-8				
-	6500		85075		6,500		85075

$$\begin{aligned}
 CPU &= \frac{\text{Cost} - \text{Scrap}}{\text{Input material} - \text{normal loss}} = \frac{64181-5 - 1500}{5000 - 500} \\
 &= \frac{62681-5}{4500} \\
 &= \text{Rs } 13-9292
 \end{aligned}$$

### Process III Account

Particulars	Qty	Rate	Amount	Particulars	Qty	Rate	Amount
Process II: input	6000	13-9292	83,575-2	Normal loss	400	3	1,200
Add: Materials			5000	Output	4000	18-4598	73839-2
OIL			7000	Abnormal loss	1,600	18-4598	29535-68
DIE			2,500				
O/E			500				
Prod. Overhead			6000				
	6000		104575		6000		104575

$$\begin{aligned}
 \text{Cost per unit} &= \frac{\text{Cost} - \text{Scrap}}{\text{Input} - \text{normal loss}} = \frac{104575-2 - 1200}{6000 - 400} \\
 &= \frac{103375-2}{5600} = \text{Rs } 18-4598
 \end{aligned}$$

### Abnormal Gain Account

Particulars	Qty	Rate	Amount	Particulars	Qty	Rate	Amount
Scrap	1500	3	4500	Process II	1500	13.9292	20593-8
P/L			16393-8				
	1500		20893-8		1500		20593-8

### Abnormal Loss Account

Particulars	Qty	Rate	Amount	Particulars	Qty	Rate	Amount
Process I	400	6.2963	31481-5	Scrap	1200	3	3600
Process II	1600	18.4598	29535-68	P/L	800		5747-13
	2000		61017-18		2000		61017-18

#### 41 Features of Contract costing

- a. Contracts are executed at contract site away from executors or contractor's premises
- b. Each contract is treated as a separate unit of cost for the purpose of cost ascertainment.
- c. The payments by the contractee are made to the contractor in installments on the basis of the extent of the work already completed by him and certified as complete by contractee's engineer or architect.
- d. The contract is executed by the contractor for some agreed amount of consideration known as contract price.
- e. Since the work is executed at the contract site, most of the items of cost to be incurred are direct in nature.

#### Terminologies used in Contract costing

- a. Estimated profit: This is when the estimated cost of contract is deducted from the contract price.
- b. Retention fund: This is the amount agreed to be retained on every progress payment as guarantee against any bad work which is released to the contractor after a specified period.
- c. Cost-to-date: This is the addition of all cost incurred to date on the contract.
- d. Notional profit or loss: This is the difference between the value of work retained and the cost of work certified.
- e. Progress payment: This is the money paid for the work to be continued.

#### ii Objectives of Service Costing

- a. It is used for computing the related operating cost. Service costing can be used to add up operating cost that are related.
- b. To help the concern to take appropriate decision for reducing

the service cost' this means that it is easier for decisions to be made to help reduce the service cost'

- c. To decide the definite policy either to use own source or hire from outside for providing services especially in case of transport costing: with the use of service costing, appropriate policies can be made to provide better services.
- d. To collect actual cost under different heads: Service costing makes it easier to gather actual cost under the different heads.
- e. To fix up the rate to be charged for providing service to customers: With service costing, a specific rate can be charged to customers, just to when providing services to prevent loss from happening or making the business look more organized.

iii Explain 4 methods of cost estimation

- a Engineering method: This is used when there is engineering analysis of technological relationship between input and output e.g. work sampling, methods study etc. This method is commonly used for estimating of repetitive processes with clearly defined input-output relationships.
- b. High low method: This is the object method of segregating the mixed cost into fixed and variable cost. It uses historical information from several reporting periods to estimate costs. The steps are:
  - i. Pick the highest and least activity level among observed data.
  - ii. Calculate the difference between the two activity levels.
  - iii. Pick the corresponding cost of the highest and lowest activity levels.
  - iv. Calculate the differences between the costs of highest and lowest activity levels.
  - v. Divide the cost difference by the difference in activity levels i.e. divide  $d$  by  $b$ .

- vi Use "c" which is the variable cost per unit to determine total cost or fixed cost using cost formula:

$$TC = Fc + VG$$

which can be expressed as  $Y = a + bx$ .

$Y$  = Total cost

$a$  = Fixed cost

$b$  = variable cost per unit

$x$  = unit of output

- c' Graphical or Scattergraph method: Graphical method uses all observations in arriving at the cost estimate. It is used by plotting the observations against activity level on graph and a line of best-fit is drawn diagonally across the observed graph by equally dividing them into equal part by the line.

The interception of the line of best fit on y-axis is the fixed cost ( $a$ ) while the gradient or slope of the line is the variable cost ( $b$ ).

- d. Least square or Linear Regression method: The application

of linear equation formula:  $y = a + bx$  is used to derive the regression equations.  $y$  stands for total or mixed cost,  $a$  stands for constant factor or total fixed cost,  $b$  stands for variable cost and  $x$  stands for activity level or independent variable.  $a$  and  $b$  can be derived from  $\sum y = na + b\sum x$  or  $\sum xy = a\sum x + b\sum x^2$

	Rs	Rs
2- Petrol $\left[ \frac{50 \times 2 \times 2 \times 8}{8} \right] \times 50$	10,000	
Repairs (120 x 8)	960	
Depreciation on lorry $\left[ \frac{20,000 - 2,000}{10,000} \times 5,000 \right]$	900	
Depreciation on tyres $\left[ \frac{2,000}{20,000} \times 5,000 \right]$	500	12,360
Running cost		
Drivers wages	200	
Garage bills (5 x 10 x 8)	400	
Insurance $\left[ \frac{2,000 \times 8}{52} \right]$	307.7	
Vehicle license $\left[ \frac{5,200 \times 8}{52} \right]$	800	
Other overhead cost $\left[ \frac{7,800 \times 48}{52} \right]$	600	