

Date :- 31-03-2010

2nd cycle, B-day

Transaction :- the event which ~~exchange~~ links financial change

Characteristics of Transaction :-

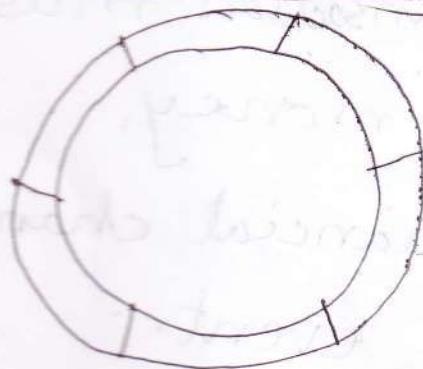
- i) Transaction must be measurable in terms of money.
- ii) Financial change must be brought by the event.
- iii) There must have two accounts per piece in each transaction.
- iv) Transaction must be independent.
- v) Transaction always be visible but this is not necessary.
- vi) Transaction always be historical.
- vii) Every transaction is an event but every event is not ~~is~~ a transaction.

Accounting cycle

The order or sequence in which accounting procedures performed is called accounting cycle.

Five steps are written sequentially :-

- i) Recording
- ii) Classifying
- iii) Summarising
- iv) Preparation of financial statement
- v) Analysis & interpretation



In which apply five steps

- i) Recording in journal
- ii) Classifying in ledger
- iii) Summarising in trial balance
- iv) Preparation final financial statement
- v) Analysis & interpretation

Date - 05-09-2010

2nd, E-day

Account

An account is simply a place where similar transaction which occur during a particular period are summarised and accumulated. $A = C + L$

Classification of Account :-

- i) Personal Account → Mr. X — Rupali Bank
- ii) Real / Asset Account → cash, Furniture
- iii) Nominal Account : Expenses & losses and income & gain

Investment — Asset Account

Debtor — Asset / personal Account

Capital — Personal

Creditor — II Account

Depreciation — Nominal II

Interest received — II II

II paid — II II

Wages — Nominal Nominal

carriage inward — Account

" outward — "

Good will — Asset "

Land, Building — Asset "

* Double Entry system:

Purchased a furniture for cash TK. 1,000

i) Personal Account :- Receiver - DR.
Giver - CR.

ii) Asset :- debit what comes
comes in & credit what goes out

iii) Nominal :- Expenses losses - DR
Income & gain - CR.

Golden Rules

Date - 07-04-2010

3rd cycle, B-day

Golden rules for debit & credit

- Previous page

Modern rules :-

$$A + E = C + L + I$$

A } Increase DR
E } Decrease CR.

C } Decrease DR
L } Increase CR.
I }

* Mr. Habib started business with cash TK. 500000 as his capital.

M/s Habib & co.

Reason

1. Cash Acc — DR. 5000,00

Asset
Increase

Mr. Habib capital Acc — CR. 500000

Giver

2. computer Acc — DR.

3. cash Acc — CR.

2. purchased a computer for cash

TK. 20,000/-

3. Purchased goods for cash TK. 50,000/-



Purchase A/c — Dr. (Nominal)

Cash A/c — Cr.

4. purchased goods from Mr. Ali TK. 3,000/-



purchased A/c — Dr

Mr. Ali's A/c — Cr

5. salary paid tk. 10,000/-



salary A/c — Dr.

Cash A/c — Cr.

6. Interest received tk. 5000/-

Cash A/c — Dr.

Interest — Cr.

7. sold goods to Mr. Roy for cash
TK. 20,000/-



Cash A/c — Dr.

Sales A/c — Cr.

Date - 12-4-10

Journal Ledger & Trial Balance

* Journal means daily resister book.

Journal is the only book of original entry in which transaction first entered chronologically.

functions :-

- i) To Analysis ~~into~~ each transaction into debit and credit, so as to facilitate here transition into ledger
- ii) To arrange transaction chronologically

~~in~~ or order of date

Date	Particulars	L.F	Amount	Amount
2010 Jan 1	Cash A/c --- Dr Mr. Masum Capital Cr (Mr. Masum -----)	-	5000f	5000f
2010 Jan 3	Purchase A/c --- Dr Cash A/c --- Cr (Purchase goods ---)	-	3000f	3000f

① Jan 1, Mr. Masum started business with cash TK. 5000f

② Jan 3, purchased goods for cash TK. 3000f

③ Jan 4, sold goods for cash Tk. 5000f

* Ledger is the book in which transaction are recorded in a classified permanent form.

Cash Account

Date	Particulars	Dr.	Amount	Date	Particulars	Credit	Amount
2010 Jan 1	Mr. Masum capital	-	50,000f	2010 Jan 3	purchase A/c	-	3000f
2010 Jan 4	Sales A/c	-	5000f		Balance	-	7000f
			10,000f				10,000f

Mr. Masum capital A/c

Dr

Balance →

60000f
500 f
<u>5000f</u>

Cr

Cash A/c →

500f
<u>500f</u>

purchase A/c

Dr

cash →

3000f
<u>3000f</u>
<u>3000f</u>

Cr

Balance →

3000f
<u>3000f</u>
<u>3000f</u>

Sales A/c

Dr

Balance →

5000f
<u>5000f</u>
<u>5000f</u>

Cash →

5000f
<u>5000f</u>
<u>5000f</u>

Debit amount > credit amount = Debit balance

credit > debit = credit balance

Trial Balance is the list of both balances Debit & credit extracted from the ledger account.

Trial Balance

Pr particulars	Amount	Cr particulars	Amount
Cash —	7000f	Mr. Masum's capital	5000f
Purchase —	3000f	Sales A/c	5000f
	<u>10,000f</u>		<u>10,000f</u>

Date - 15-04-2010

4th cycle, B-day

$$A+E = C+L+I$$

Dr.

C.R.

A+E	C+L+I
Assets:-	Capital -
Cash - - -	Liabilities:-
Bank	S/creditors - - -
S/Debtors - - -	Loan
opening stock	Bank overdraft
Investment	Mortgage loan
Bills Receivable	<u>Outstanding liabilities</u> :-
Furniture	Salary due
Good will	
Motor car etc	
Expenses	

Expense:-

salary

legal charge

Advertisement

Commission

Discount

Income:-

Sales - - -

Interest & Dividend

Others income:-

Discount - - -

Commission - - -

Dr.		Cr.
A + E		C + L + I
wages*		<u>others:-</u>
Bad Debt		Return out /
Telephone Bills		purchases return
Electrical ..		provision for bad debt.
Interest		Rev Reserve fund
Import duty*		
Rent --		
Insurance		
Depreciation		
Carriage *		
Return in sales		
Return in purchases		
stationary		
lighting		
Interest		
travelling & travelling		
Administrative		
travel		
maintenance		

Adjustment item

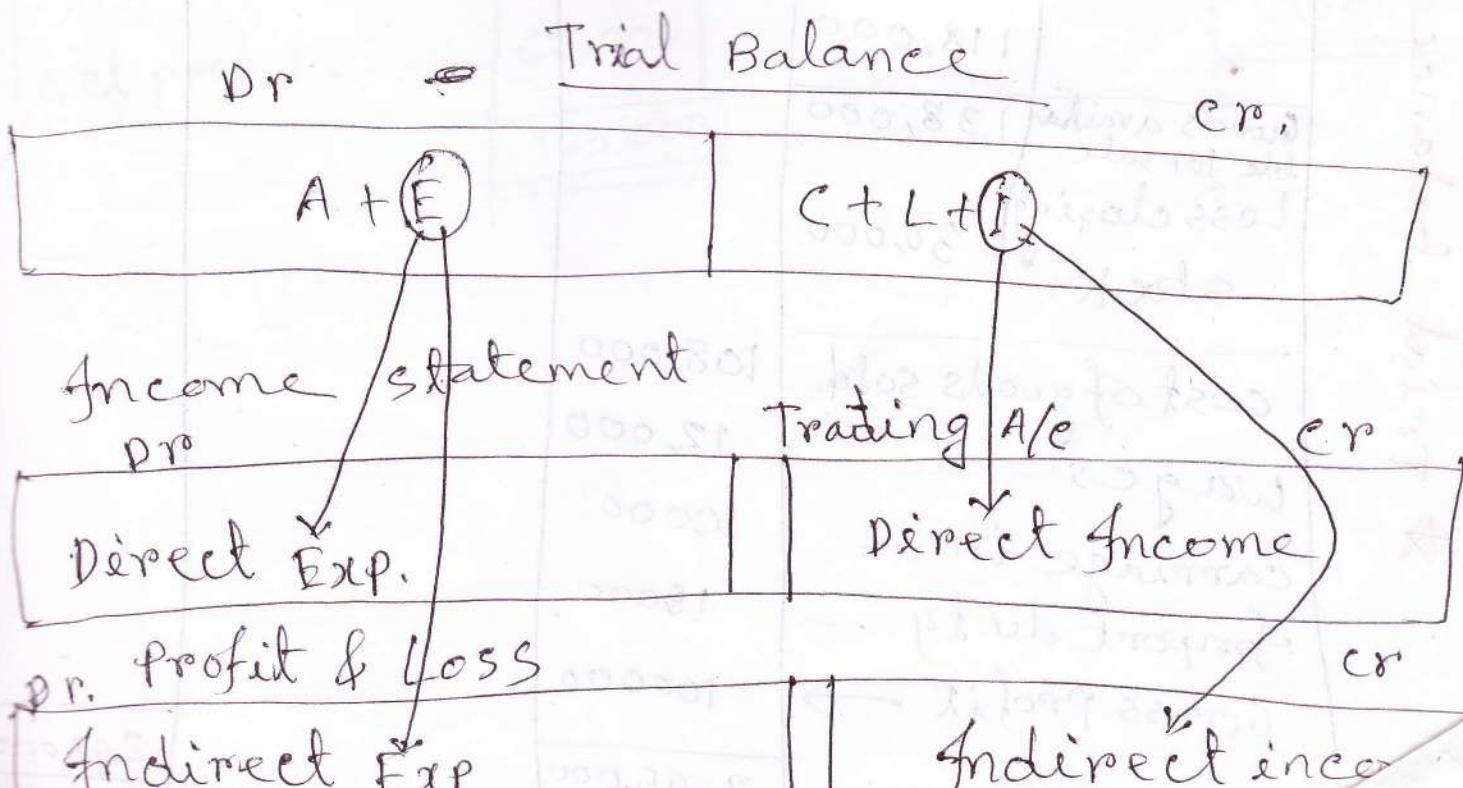
closing stock It is not include
in trial Balance.

Financial statement

① Income statement

↓
Trading Account Profit & loss Account

② Balance sheet



Dr.

Balance sheet

Cr.

Capital + Liabilities		Assets
-----------------------	--	--------

Date - 20-04-2010

4th cycle, E-day

* Trial balance & closing stock 2023 A.M.

Dr Trading Account

Cr

Particulars	Amount	Particulars	Amount
Opening stock 20,000	20,000	Sales - 250,000	
Add: purchases 120,000		Less return in - 5000	
Less return 2000	118,000		245000
Receipts 20000 118,000			
Goods available for sale 138,000			
Less closing stock 30,000			
Cost of goods sold	108,000		
Wages -	12,000		
Carriage in -	10000		
Import duty -	15000		
Gross profit →	100000		

Profit & loss Account

Dr.

Cr.

particulars	Amount	particulars	Amount
Salary - 20,000		Sales - 20000	100000
Less prepaid - 5,000	15000	Gross profit	
Rent — 4,000		Discount — 3000	
Add. due — 1000	5000	Interest — 2000	
Advertisement —	3000		
Insurance — 2000			
* Bad debts - 3000			
Add Reserve for bad debts - 2000	5000		
Depreciation —	10,000		
Interest — 5000			
Net profit — 60,000			105000
	105,000		

Balance sheet

Capital & liability	Amount	Asset	Amount
liabilities	45,000	Cash hand	—
outstanding liabilities	5,000	cash in -	—
capital - 100000		Bank -	—
Add. Net pro - 60,000	150,000	S/D debtors -	—
	160000		
Less drawing	15000		
10,000			
6	200000		
			200000

Date - 22-04-2010

5th cycle, B-day

① Journal } classification

② Ledger } classification

③ Trial Balance } Ledger Balance

④ Final Account / Financial statement

(a) Trading A/c

(b) profit & Loss A/c

(c) Balance sheet

⑤ Analysis

Trial Balance

2008

Dr

Cr

Particulars	Amount	Particulars	Amount
Drawing —	3000F	S/creditor —	13400F
Bank over draft —	4600F	Cash at Bank —	1-
Furniture —	3000F	Capital —	30000F
Building —	20,000F	Return in —	2000F
Insurance —	2400F	Commission —	2000F
Discount receive		Bank overdraft -	4600F
Wages —	5000F	Discount receive	1000F
opening stock —	17000F		
S/debtors —	15000F		
Purchases —	112000F		
Rent —	1000F		
Salary —	9000F		
Carriage in —	1800F		
Cash at Bank —	3000F		
Bad debts —	800F		
Return in —	2000F		

Trading A/c

Dr particulars	Amount	Cr particulars	Amount
Sales 850000		Sales - 850000	
Less opening stock 30000		Less Return - 1000	840000
purchases — 550,000		in	
Less Return out — 5000	540000		

Date: 29-04-10

6th cycle, B-day

Dr

Trading Account (Ended 31st Dec)

Cr

particulars	Amount	particulars
opening stock	15,000	Sales - 80300
purchases - 55500		less return - 1000
Less return - 500	55000	
	70000	
Less closing stock	30500	
cost of sales	39500	
wages —	5500	

Balance sheet

$$(A + E) = (C + D) + I$$

income statement

Profit & Loss A/c
(Ended 31st Dec)

Dr

Credit

Salaries - 35000		Gross Profit	33000
Add. due - 1500	5000	Discount —	500
Rent —	2000	Interest —	500
Insurance - 1000			
Less prepaid - 500	500		
Bad debts 500			
Add. Reservation			
Bad debts 900	1400		
Commission —	500		
Depreciation -			34,000
Furniture - 1000			
Building - 2500	3500		
Net profit —	21,100		
	34,000		

ASSN 2 2022 (Final A/c)

Next B-day &

2008- Trading A/c & Trial Balance

Balance sheet

Capital + Liabilities		Assets	
S/creditors —	18000	Cash at Bank -	50,000
Loan —	10,000	*Debtors - 18000	
* Salaries outstan-	1500	Less Reserve	
debt capital 8800 Capital		of bad debts - 900	17100
Add. net profit - 21,100		Closing stock -	30,500
	10,9100	Investment —	10,000
Less. drawing 3000	106100	Furniture - 10,000	
		Less dep: 7000	3000
		Bulding - 50,000	
		Less dep - 2500	47500
		Goodwill —	15000
		Insurance	
		prepaid -	500
	139600		134600

Cash Book04-05-10
6th cycle, E-day

Dr

Cr

Date	Receipts	Am.	Date	payment	Amount
Feb 1	Sales A/c -	5000/-	Feb 2	salary -	3000/-
Feb 2	Mr X -	2000/-			
				Balance -	4000
					7000
					2000

Types of cash Book

- i) single column cash book - (cash)
- ii) Double " " (cash & Bank)
- iii) Triple " " (cash, Bank & Discount)

Double column
cash Book

Dr.

2009 due

Date	Particulars	V. No	Cash TK.	Bank TK.	Date	Particulars	V. No	Cash
Feb 1 2010	Balance b/d	-	12,000/-	25000	2010 Feb 3	Purchase	-	5000/-
Feb 3	Sales A/c	-	13000/-	-	Feb 10	Bank A/c	(C)	10,000/-
Feb 10	Cash A/c	(C)	-	10,000/-				
Feb 12	Bank A/c	(C)	5000/-	-	Feb 12	Cash A/c	(C)	-
II 18-	Mr. X A/c	-	5500/-		Feb 15	Salary A/c	-	3000
II 20	Mr. Y A/c	-	(4500)	4500	II 25	Mr. Y S.A/c	-	-
II 28	Interest	-	-	500	II 28	Bank Cheque	-	-
			35500	39000		Balance -	-	17500
			<u>—</u>					242
								35500
								3900

Feb 1 - Balances :- cash TK - 12000/-

Bank TK - 25000/-

Feb 3 - purchased goods for cash TK. 5000/-

Feb 5: sold goods for cash TK. 13000

* Feb 7: purchased goods from Mr. Roy
TK. 6000 (on credit)
↓
due

Feb 10 - cash deposited into bank TK 10000/-

Feb 12 - cash withdrew from Bank TK. 5000/-
for office use.

Feb 15 - salaries paid in cash TK 3000 & by
cheque cheque TK 5000/-

Feb 18 - A cheque received from Mr. X TK. 5500/-

Feb 20 - A cheque received from Mrs. Y TK
4500 and deposited into bank on the same
day.

Feb 25 - A cheque dishonoured by the
bank which was received from Mrs. Y

Feb 27 - A cheque discounted from bank
TK. 5500/- ✓

Feb 28 - Bank interest credited TK. 500/- and
bank charges debited TK. 300/-

8th cycle, B-day

Date:- 03-06-10

Cost Accounting

Cost Accounting may be described as being that the part of the accounting procedure of an enterprise which deals with the task of determining, Reporting, & Analysis & controlling the cost of particular product, jobs, service and department of a company.

Three main objectives of cost Accounting are:-

- i) To determine product cost
- ii) To facilitate planning & control of regular business activities
- iii) To serve information for short run and long run decision.

Classification of cost:-

I. Elements of cost

- (a) Direct cost (i) Direct material
 - (ii) II labour
 - (iii) II Expenses.
- variable

(b) Indirect cost

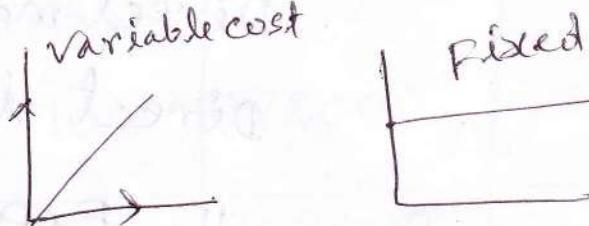
- |
 | Indirect material
- |
 | II labour
- |
 | II Expenses

2. Function wise

- (a) production cost

- (b) Administrative & office expenses

- (c) selling & distribution exp.

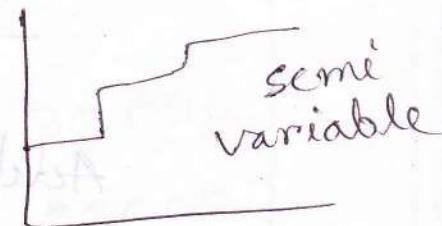


3. Behaviour wise

- (a) Fixed cost

- (b) variable cost

- (c) semi-variable cost



cost Analysis 8th cycle, E-d
cost statement Date: -08-06-

→ Direct materials

Direct labour

Direct expenses

prime cost

Add factory overhead

works cost / production cost

cost of goods finished

Add: Administrative & office exp.

Selling & distribution exp

Total cost

* cost statement 500 units

	Total	Per unit
Direct materials - 1000×500	500000	1000
Direct labour - (500×500)	250,000	500
ii Expenses -----	50,000	100
prime cost -----	800000	
Add factory overhead: 20000		
Fixed variable		
↳ 40000	60000	120

F.O
 factory rent
 " insurance
 " depreciation
 " supervision cost



works cost / Manufacturing cost - 860,000

Add: opening work in process -

Less: closing " " " -

cost of goods finished - 500 | 860,000

Add: opening stock of " goods - 50 | 40,000

cost of goods available for sale - 550 | 900,000

Less: closing stock of finished
goods - 100 | 172,000

cost of sales / cost of goods sold - 450 | 728,000

Add: Administrative & off. exp - 30,000

* selling & Distribution exp. 22,000

Total cost of sales 780,000

	Total	per unit
Total cost of sales 450	780000	1733.33
<u>Profit</u>		
Sales (450x2200)	990,000	2200

* Sales ————— 990,000

Less: cost of goods sold ————— 728,000

Gross profit ————— 262000

Less: Administrative exp —————

— 30,000

Selling exp ————— 52,000

Net profit ————— 210,000

* cost statement which shows the details
cost of a production.

9th cycle, B-day

Date: 10-06-10

* The following data are related to manufacture of a standard product during the month December 2009. Raw materials consumed Tk. 45000. Direct wages Tk. 35000. Factory overhead was 75% of direct wages. Administrative overhead 20% of works cost. Selling overhead were Tk. 2.5 per unit. Profit 20% on total cost of goods sold. Profit 20% on total cost of goods sold. units produced during the month 4000 and units sold 3500.

* The company plans to sell 500 units next month, wages rate and material price are expected to increase by 20% and 10% respectively. Factory overhead is applied on the basis of direct wages. Other costs and selling price will remain unchanged. Prepare a statement of cost from the above

Statement of cost, M-December; units: 4000
per unit

	Total	Amount
Direct materials	45,000	11.25
Direct wages	35,000	8.75
Prime cost	80000	
Add: Factory overhead ($35000 \times 75\%$)	26,250	
works cost / cost of goods finished	106,250	26.56
Less: closing stock of goods $(4000 - 3500)$ $= (500 \times 26.56)$	13280	
cost of goods sold - (3500)	92,970	
Add: Administrative overhead $(106250 \times 20\%)$	21250	
Selling overhead (3500×2.50)	8250	
Total cost of goods sold	122970	
profit = <u>$(122970 \times 20\%)$</u>	24594	
sales - (3500)	147569	36.89

Statement of cost

61825

Month - January 2010 units 5000

	Total	Per unit
Direct materials (5000×12.375)	61825	12.375
Wages (5000×10.50)	52500	10.50
Prime cost	114375	
Add: Factory overhead ($52500 \times 75\%$)	39375	
works cost /	153750	
Add: opening stock ($4000 - 3500$) (500×26.50)	13280	
cost of goods sold (3500 units)	162030	
Add: Administrative overhead ($106250 \times 20\%$)	21250	
Selling $\text{W} / (3500 \times 2.50)$	8750	
Total cost of goods sold	197030	
Profit ($122970 \times 20\%$)	5865	
Sales (5500×36.89)	202895	

$$4000 \times 11.25 = 4500$$

$$5000 \times 11.25 = 56250 + 56250 \times 10\% \\ = 61875$$

8.75

1.75

10.50

9th cycle E-day

Date:- 15-06-10

Break-Even Analysis

- ① profit = $P = (S - F - V)$
- ② contribution = $C = (S - V) / (F + P)$
- ③ profit volume ratio = P/V ratio = $\frac{C}{S}$
- ④ Break Even point = $BEP = (\text{Total sales} - \text{Total cost}) / C$
- ⑤ Break Even chart
- ⑥ Margin of safety = $(\text{Total sales} - BE \text{ sales}) / \text{Total sales}$
- ⑦ Angle of incidence
- ⑧ Target sales. = $\frac{(F + P) S}{S - V}$

$$\star \text{BEP in units} = \frac{F(\text{Total})}{S-V(\text{per unit})}$$

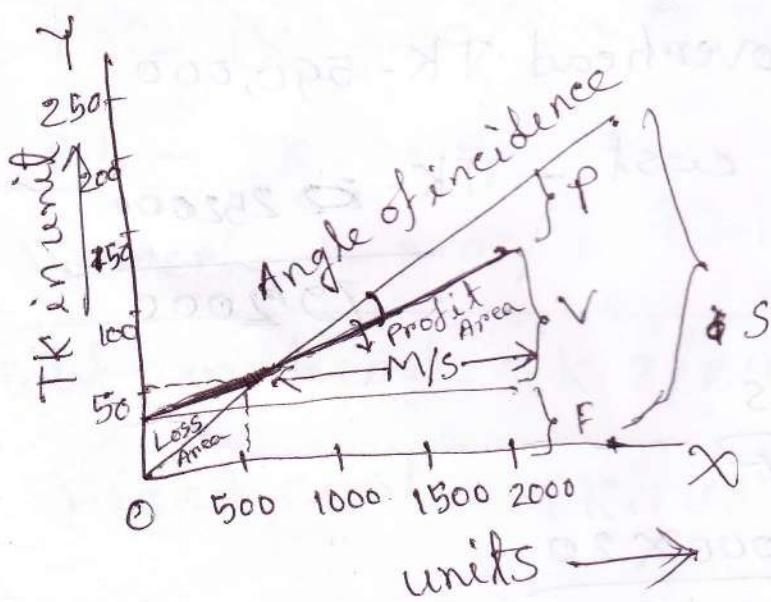
$$F = 20000
S = 100
V = 60$$

$$\star \text{BE sales volume} = \frac{F \times S}{S-V}$$

$$= \frac{F}{C/S}$$

$$= \frac{F}{P/V \text{ ratio}}$$

Break Event chart



$$F = 20000$$

$$S = 2000 \text{ units} @ \text{TK 10}$$

$$V = 60$$

$$S = 2000 \times 100 = 200000$$

$$F = 20000$$

$$V = 12000$$

Ex-10

page no-537

10th cycle, B-day

Date: 17-6-10

Page no-997

P.No-11

★ P. cost = prime cost + variable factory over

cost

P.No-11

Given that,

S = TK. 20 percent

variable manufacturing cost TK 11/unit

"

selling

"

TK 31/u

Fixed factory overhead TK. 540,000

"

selling

cost

-

252000

792000

$$B.E \text{ sales} = \frac{F \times S}{S - V}$$

$$= \frac{792000 \times 20}{20 - 14}$$

=

$$P = 60,000$$

$$S = TK 20$$

$$V = TK 14$$

$$F = TK. 792000$$

$$\text{Target sales} = \frac{F + P}{S - V}$$

$$= \frac{792000 + 60000}{20 - 14}$$

=

$$P/V \text{ ratio} = \frac{C}{S}$$

Problem no-12

P. NO-13,

Selling price - TK 10/unit

Less: Trade discount - 5% = 0.5

Selling price = 9.5

DM - TK 3.00/unit

D.L - TK 2.00/ "

V. overhead - 2.00/ "

Total variable cost - TK 7/unit

Fixed cost = TK. 10000

$$BEP = \frac{F}{S-V}$$

$$= \frac{10000}{9.5-7}$$

$$= \frac{10000}{2.5}$$

= 4000 unit

$$\text{Sales} = 9000 + 4000 \times 10\%$$

$$= 9000 + 400$$

$$= 9400$$

Again,

$$C = S-V$$

$$= 9.5-7 = 2.5/\text{unit}$$

$$\textcircled{1} \quad C = P + F$$

$$\Rightarrow P = C - F$$

$$= 4400 \times 2.5 - 10,000$$

=

* Given that

$$M/S = 30\%$$

$$P/V \text{ ratio} = 40\%$$

Sales - TK. 3000 units @ TK 100 per unit

Find that ① BEP

② Profit

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Problem no - 3

	1st year	2nd year
Sales	80,000	90,000
Profit	10,000	14,000

	<u>Sales</u>	<u>Profit</u>
Second year	— 90,000	14,000
1st year	80,000	10,000
change	10,000	4,000

We know,

$$S - V = P + F$$

$$\Rightarrow 10000 - V = 0 + 4000$$

$$\therefore V = 6,000$$

$$P/V \text{ ratio} = \frac{S - V}{S} = \frac{10000 - 6000}{10000}$$

$$= 40\%$$

$$P/V \text{ ratio} = \frac{\text{Change in profit}}{\text{Change in sales}}$$

$$P/V \text{ ratio} = \frac{C}{S}$$

$$\therefore C = P/V \text{ ratio} \times S$$

$$\text{Contribution in 1st year, } C = 40\% \times 80,000$$

$$C = 32000$$

Again,

$$C = F + P$$

$$\Rightarrow F = C - P$$

$$= 32000 - 1000$$

$$\therefore F = 22,000$$

$$S - V = F + P$$

$$\Rightarrow S - F - P = V$$

$$\therefore V = 80000 - (22000 + 10000)$$

$$\therefore V = 48000$$

$$(b) \text{ BE point} = \frac{F}{P/V \text{ ratio}} = \frac{22000}{40\%} = 55000 \text{ Tk}$$
$$= \frac{F \times S}{S - V} = \frac{22000 \times 80000}{80000 - 48000} = \text{Tk. } 55000.$$

$$(c) \text{ sales} = 50000 \text{ Tk}$$

$$P/V \text{ ratio} = 40\%$$

$$C = P/V \text{ ratio} \times S$$

$$= 20,000$$

$$P = C - F$$

$$= 20,000 - 22000$$

$$P = -2000$$

$$\therefore \text{LOSS} = 2000 \text{ Tk.}$$

$$(d) \frac{F+P}{P/V \text{ ratio}} = \frac{22000 + 19000}{40\%}$$

* $P/V \text{ ratio} = \frac{C}{S}$

$\therefore C = P/V \text{ ratio} \times S$

$$= 100 \times 40\%$$

$$= \text{TK. } 40/\text{unit}$$

$\therefore V = S - C$

$$= 100 - 40$$

$$= 60$$

$$M/S = \frac{P}{P/V \text{ ratio}}$$

~~M/S~~
 ~~$P/V \text{ ratio}$~~

$$\Rightarrow P = M/S \times P/V \text{ ratio}$$

$$= 30\% \times 40\%$$

= 12% of sales

$$\text{Profit} = 3000 \times 100 \times 12\%$$

$$= \text{TK. } 36000$$

$$S = F + V + P$$

$$\Rightarrow 3000 \times 100 = F + (3000 \times 60) + 36000$$

$$\therefore F = 300000 - 180000 - 360000$$

$$\therefore F = \text{TK. } 84000$$

process-1

Process costing

Materials	units	Total cost	cost per unit		
Materials -	2000	40,000	20		
Labour -		30,000	15	Process-2	2000
Indirect Mat-		10,000	05		
overhead -		8,000	04		
		88,000	44		

process
-2

Materials	units	Total cost	cost per unit		
process-1	2000	88000	44		
Labour -		32,000	16	process-3	2000
Indirect materials -		10,000	5		
overhead -		10,000	5		
	2000				
		140,000	70		

11/E-day

Date:- 15-07-10

The following cost and production figures are obtained in respect of each process for the month of February.

	process I	process II
units introduced -	1900	-
units transferred to next process -	1700	-
units transferred to finished stock -	-	1700
value of units introduced - TK 10450	-	-
Materials -	-	916
Labour -	6975	4190
Overhead -	2620	2462

The wastage which is 5% normal in each process is sold at TK. 2 per unit.

Prepare the necessary accounts.

Process I A/c

	Quantity	Per unit cost	Total cost		Quantity	Per unit cost
Direct material	1900	-	10450	Process-II -	1760	11
Labour -	-	-	6975	Normal loss	95	2
overhead -	-	-	2620	Abnormal loss -	45	11
	1900		20,045		1900	20.045

units

Input - 1900

Normal loss - 95

$$\frac{1805}{\longrightarrow} 20,045$$

Actual output - ~~1760~~ $\cdot N. \text{ loss } (95 \times 2) 190$

$$\frac{19855}{\longrightarrow} \text{Abnormal loss - 45}$$

$$\text{cost per unit} = \frac{20045}{1805}$$

$$\text{cost per unit} = \frac{19855}{1805}$$

$$= \text{TK. 11}$$

process - II A/C

	Quantity	Per unit cost	TC					
Process I -	1760	-	19360					
Materials -	-	-	916	Normal				
Labour ---	-	-	4190	Loss - unit trans to finished stock -	88	2		176
overhead --	-	-	2462		1700	16		27200
Abnormal gain	28	16	448					
	1788		<u>26928</u>		1788			
			<u>27376</u>					
								27376

input -	units	
1760	—	26928
N. LOSS 5%	88	176
—————	1672	————— 26752

Actual output 1700

$$\text{Abnormal gain} = 28$$

12th cycle, E-day

Date:- ~~25~~ 25-07-10

Standard cost :- Standard cost is the predetermined cost which is computed in advance of production on the basis of specification of all factors affecting standard cost and use of standard cost.

standard cost has been defined

standard cost involves:

- (i) ascertainment and use of standard cost
- (ii) Measurement of Actual cost
- (iii) comparison of standard and actual cost to develop variances
- (iv) Analysis variances & Taking appropriate where necessary.

Variance: The deviation of standard from actual is called variance.

When actual result is better than standard
then it is

or, actual result is less than standard cost
then it is called favourable variance.

Types of variance cost

i) Material variance

ii) Labour

iii) overhead

a) Total variance = Standard cost - Actual cost

$$= (S_t - A)$$

$$= (100 \times 10 - 100 \times 9)$$

$$= 1000 - 900$$

$$= 100 (F)$$

i) price variance = $AQ(S_p - AP)$

ii) usage variance = $S_p (SQ - AQ)$

* When single material
is used

ii) $S_p (SQ - R.S.Q)$

* When more materials
are used

R.S.Q → Price standard quantity

Math: method of Material variance analysis

Q: st. cost of 100 units

St = Materials - 200 lbs @ TK.10

Actual = 225 @ TK 9

* Total variance = (st.cost - A.cost)

$$= 200 \times 10 - 225 \times 9$$

$$= 2000 - 2025$$

$$= 25 (\text{UF})$$

* Price variance = A.Q (SP - AP)

$$= 225 (10 - 9)$$

$$= 225 \times 1 = 225 (\text{F})$$

* Usage variance = SP (SQ - A.Q)

$$= 10 (200 - 225)$$

$$= 10 (-25)$$

$$= 250 (\text{UF})$$

$$\text{T.V} = \text{price var.} + \text{usage var.}$$

$$25 (\text{UF}) = 225 (\text{F}) + 250 (\text{UF})$$

⑩ Mix variance = ① SP (~~R~~ SQ - AQ) ~~A₂₀~~ → Don't differ

<u>S</u>	<u>A</u>
A - 200 lbs	175 lbs
B - 100 lbs	125 lbs
<u>300 lbs</u>	<u>300 lbs</u>

⑪ SP (R.SQ - AQ) → when

difference

<u>S</u>	<u>A</u>
A - 200 lbs	190 lbs
B - 100 "	130 lbs
<u>300 lbs</u>	<u>320 lbs</u>

T · AQ × SQ of each type of material

$$* R.SQ = \frac{\cancel{Total} \cdot AQ \times SQ}{\cancel{Total} \quad Total \cdot SQ}$$

$$A = R.SQ = \frac{320 \times 200}{300} =$$

$$B = R.SQ = \frac{320 \times 100}{300} =$$

* Standard production --- 100 units

Actual ~~(11-02.9) 92.0~~ --- 80 "

Standard materials per unit - 10 lbs

Actual " used --- 880 lbs

Standard price - TK 4.50 per lb

Actual " - TK 4.30 " lb

Solution:

Standard quantity for 80 units

$$= 80 \text{ units} \times 10 \text{ lbs}$$

$$= 800 \text{ units}$$

$$\begin{aligned}\text{Standard cost} &= 800 \text{ units} \times 4.5 \\ &= \text{TK. } 3600\end{aligned}$$

$$\begin{aligned}\text{Actual cost} &= 880 \times 4.3 \\ &= \del{3440} 3784\end{aligned}$$

$$\begin{aligned}\text{Total/Material cost variance} &= \text{st. cost} - \text{A. cost} \\ &= 3600 - \del{3440} 3784 \\ &= \del{160} 184 (\text{UF})\end{aligned}$$

$$\begin{aligned}\text{Price variance} &= \text{Actual quantity} (\text{s.p} - \text{A.p}) \\ &= 880 (4.5 - 4.3) \\ &= 176 (\text{F})\end{aligned}$$

$$\begin{aligned}
 \text{Usage variance} &= SP(SQ - AQ) \\
 &= 4.50(800 - 880) \\
 &= 4.50 \times 80 \\
 &= 360 (\text{UF})
 \end{aligned}$$

* Compute the materials usage variance from the following informations.

	Standard cost per unit	Actual
	std. cost per unit	
Material A — 2 pieces @ TK 1 = 2		2050 pieces
" B — 3 " @ TK 2 = 6		2980 "
units completed	1000	

④ Standard quantity for 1000 units,

$$\text{Material A} = 2 \times 1000 = 2000 \text{ units}$$

$$\text{Material B} = 3 \times 1000 = 3000 \text{ units}$$

Material usage variance = $S.P (S.Q - A.Q)$

$$\text{Material A} = 1 (2000 - 2050) = 50 (\text{UF})$$

$$\text{Material B} = 2 (3000 - 2980) = 40 (\text{F})$$

$$10 (\text{UF})$$

13/~~E~~ day

02-08-10

Standard

Materials A 120Kgs @ TK 5

B 80Kgs @ TK 10

200Kgs

Actual

112 Kgs @ TK 5

88 " @ TK 10

212 Kgs

calculate Mix variance

Mix variance = SP(SQ - AQ)

Materials A = 5(120 - 112) = 5 × 8 = 40(F)

B = 10(80 - 88) = 10 × 8 = 80(UF)

40(UF)

R.S Mix A = $\frac{212 \times 120}{200}$ = 127 Kgs

B = $\frac{212 \times 80}{200}$ = 85 Kgs

212

Mix variance = SP(SQ - RSQ)

Materials A = 5(120 - 127) = 5 × 7 = 35(UF)

B = 10(80 - 85) = 10 × 5 = 50(UF)

85(UF)

(U)F = (SQS - SQA) $\frac{1}{2}$ × (RSD)²

(U)UF = (RSQ - SQS) $\frac{1}{2}$ × (RSD)²

13 th cycle, 8 day

Date : 27-07-10

* yield variance / output variance

Material A

Standard

$$120 \text{ kg} @ 5 = 600$$

$$\begin{array}{r} 80 \text{ kg} @ 10 = 800 \\ \hline 200 \text{ kg} \end{array}$$

Less: loss 60 kg

$$\begin{array}{r} 140 \text{ kgs} \\ \hline \end{array}$$

Actual

$$112 \text{ kg} @ 5 = 560$$

$$\begin{array}{r} 88 \text{ kg} @ 10 = 580 \\ \hline 200 \text{ kg} \end{array}$$

$$\begin{array}{r} 50 \\ \hline 150 \text{ kg} \end{array}$$

TK. 1440

$$\text{Standard cost per unit} = \frac{1400}{140}$$

$$= \text{TK. } 10$$

yield variance = S. cost per unit (S. yield - A. yield)

$$= 10(140 - 150)$$

$$= 10 \times 10$$

$$= 100 (\text{F})$$

19th cycle, B-day

Date: - 09-08-2010

Nominal Account → Profit & loss Account

Personal & ~~Asset~~ → Balance sheet.

Asset → profit & loss Account.

① Process costing

② Break even Analysis

③ cost statement

Date :- 06-09-10

Dr Triple column cash Book Cr.

Date	Particulars	No	Dis count	Cash A/C	Bank A/C	Date	Particulars	No	Dis- count	Cash A/C	Bank A/C
2010 Mar-1	Balance b/d	-	-	8500	-	2010 Mar 1	Balance b/d	-	-	-	1500
11-2	Sales -	-	-	18500		M-2	Purchase A/c			7500	
11-4	Mr. X's A/c	-	500	4500		M-6	Bank A/c	(C)			10,000
11-6	Cash A/c	(C)	-	-	10,000	M-6					
11-15	Mr. X's A/c	-	-	-	5000						
11-20	Mr. Ali's A/c	-	500	4500	-	M-10	Purchase A/c -				4,000
11-30	Interest	-	-	-	200	M-12	Mr. Y's A/c	-	200	3000	
M-31	Cash A/c	(C)	-	-	12000	M-22	Employee's A/c			13000	
						30	Bank charges A/c				100
						31	Bank A/c (C)	-	12000		
				1000						500	
					36000					21600	
										36000	
									200		27200

March-1 - Balances; cash TK. 8500
Bank — 1500 (cr)

Mar-2 - cash sales TK. 18500 and cash purchase
TK-7500

Mar-4 cash received from Mr. X TK 4500
in ful settlement of his account TK. 500.

Mar-6 cash deposited into bank TK. 10,000

Mar-10 cash purchases ~~of~~ 500 of goods TK
4000 paid by cheque.

Mar-12 paid cash TK. 3000 to Mr. Y and
discount received TK. 200

Mar-15 Mr. X directly deposited into
bank TK. 5000

Mar-20 cheque received from Mr. Ali
4500 and allowed his discount T

Mar-22 Advance to employee TK. 3000

M-30 Bank interest credited TK. 200 and charges debited TK. 100.

M-31 out of cash balance except TK. 300 remaining amount deposited into bank.

Date:- 20-7-10

* Standard costing

Normal loss A/c

Process-I	95	2	110	cash -	95	2	190	
Process-II	88	2	176	cash -	60	2	120	
				Abnormal gain	28	2	56	
	183		366		183		366	

Abnormal loss A/c

process-I	45	11	495	cash	45	2	90	
				Profit & loss A/c	-	-	405	
	45		495		45		495	

Abnormal gain A/c

Normal loss	28	2	56	process-II	28	16	94	
Profit & loss A/c	-	-	392					
			998					

Finished stock A/c

process-JF	1700	16	27,200	Balance-	1700	16	27,200
	1700		27200		1700		27200