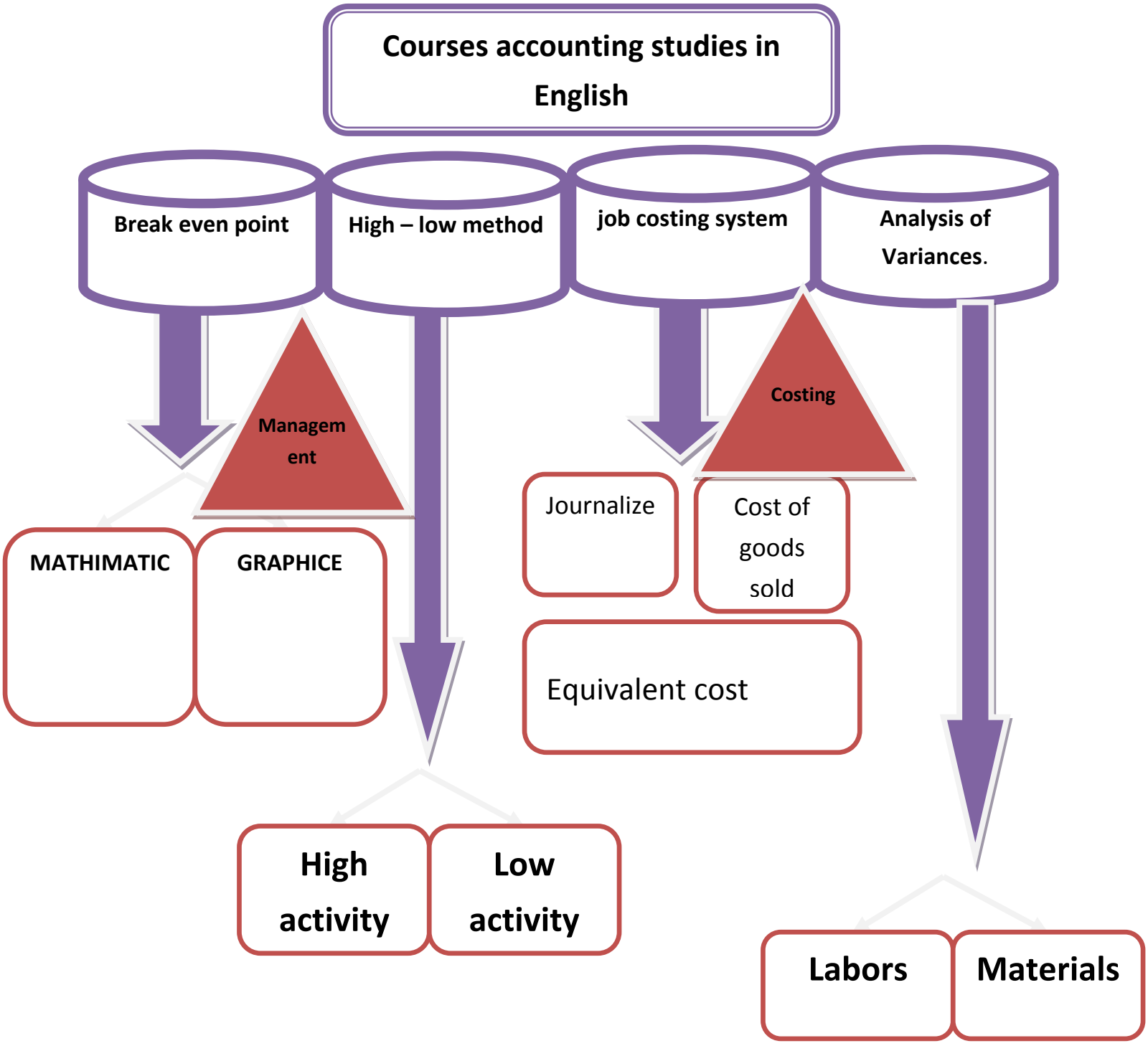
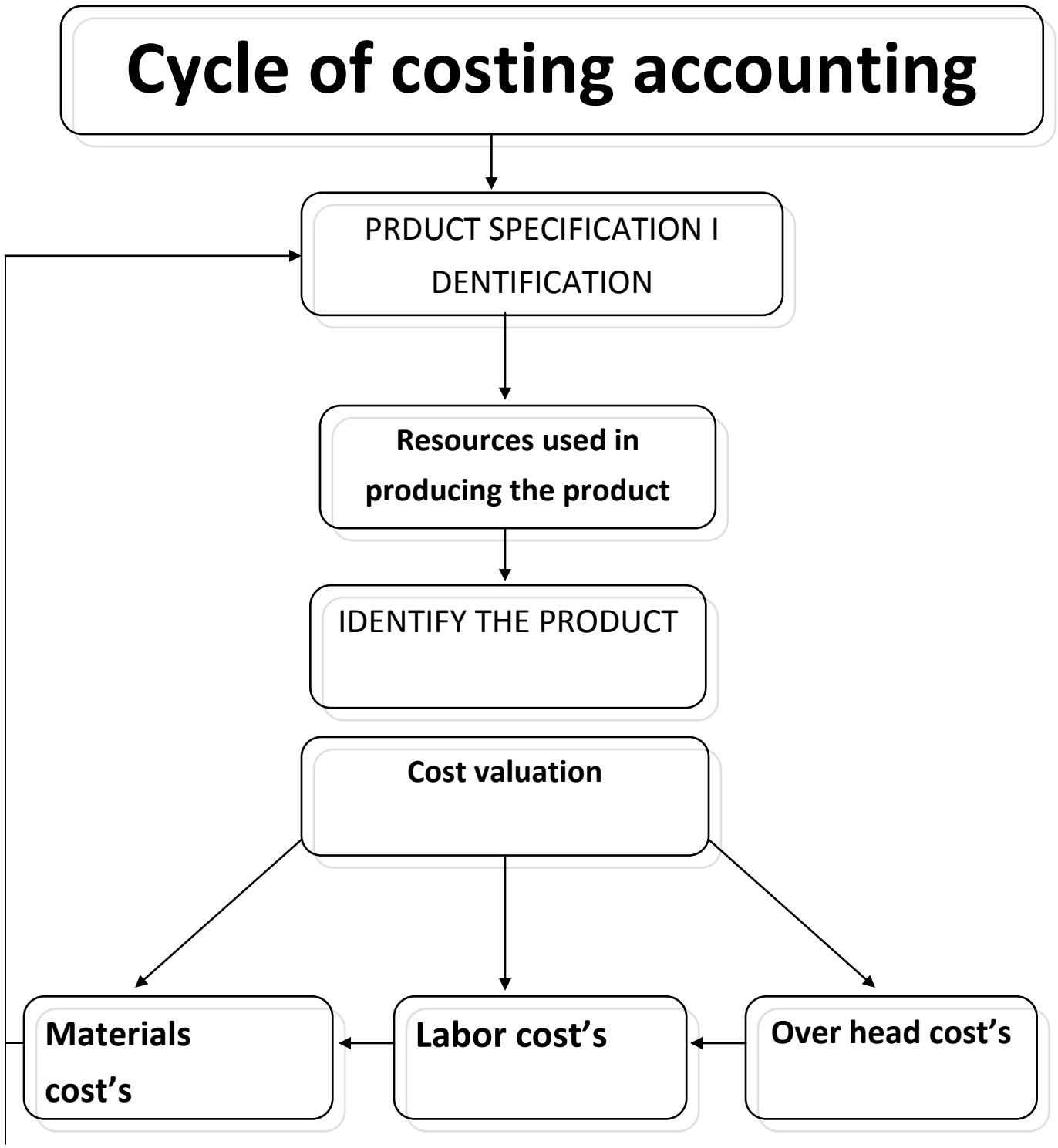

Courses accounting studies in English
Break even point
High – low method
job costing system
Analysis of Variances.
Managem ent
Costing
MATHIMATIC
GRAPHICE
Journalize
Cost of goods sold
Equivalent cost
High activity
Low activity
Labors
Materials

الجزء النظرى

Cycle of costing accounting



- **Costs classification by items**

1- material cost

2- labor costs

3- overhead costs

- **Costs classification by functions**

1- **Manufacturing**
2- **Marketing**
3- **Administrative**
4- **Environmental**

- **Costs classification by its relationship to a cost object**

1- Direct costs

2- indirect costs

Manufacturing cost data

Presented below are in complete manufacturing cost data. Determine the missing amounts for the four different situations :

	Direct material used	Direct labor	Factory overhead	Total manufacturing costs
1	25000	61000	50000	13600
2	81000	75000	140000	296000
3	55000	14400	111000	310000
4	15000	125000	5000	145000

Direct .m +direct .l+ factory. Over = total. Manufacturing cost

المحاضرة الأولى

Break-even point

MATHIMATIC

Terminology

على الطالب معرفة المصطلحات التالية

c.m	contribution margin
v.c	variable cost
f.c	fixed cost
t.p	target profit
c.m.r	contribution margin ratio
s.p.u	sales price unit
b.e.p.u	brek even point unit
b.e.p.p	brek even point pound

MATHIMATIC

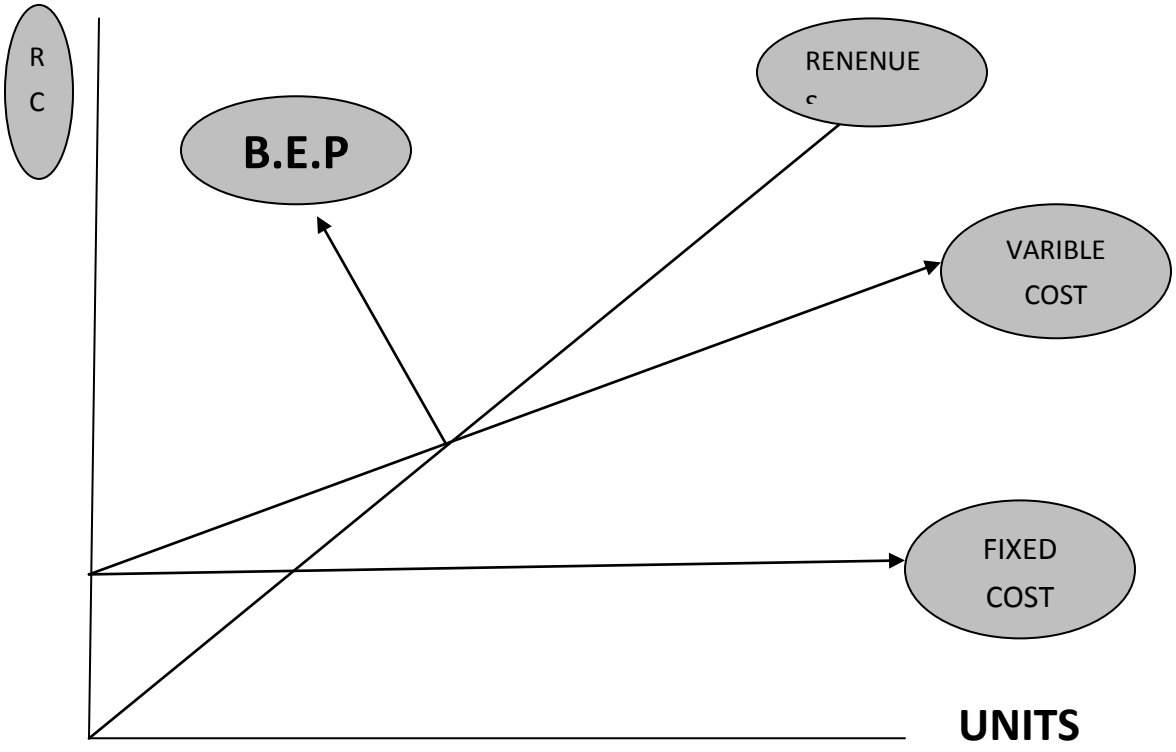
Break even sales = $\frac{\text{total fixed cost}}{\text{Contribution margin}}$

(Sales price unit – variable cost unit)

Break-even point pound = Break-even point unit's × sales price unit

GRAPHICE

Total revenues = total costs



EXAMPEL

COMPUTE BEP (NUMBER OF UNITS (NOT BE LOSSOF PROFIT)

f.c **60000 L.E**

V.C P.U **4 L.E**

PRICE PER UNIT 8 L.E

SOLUTION

MATHIMATIC

$$B.E.P.u = \frac{F.C}{P-VC}$$

$$B.E.P = \frac{60000}{8-4}$$

15000. U

B.E.P.p= B.E.P.u ×s.p= 15000×8= 120000p

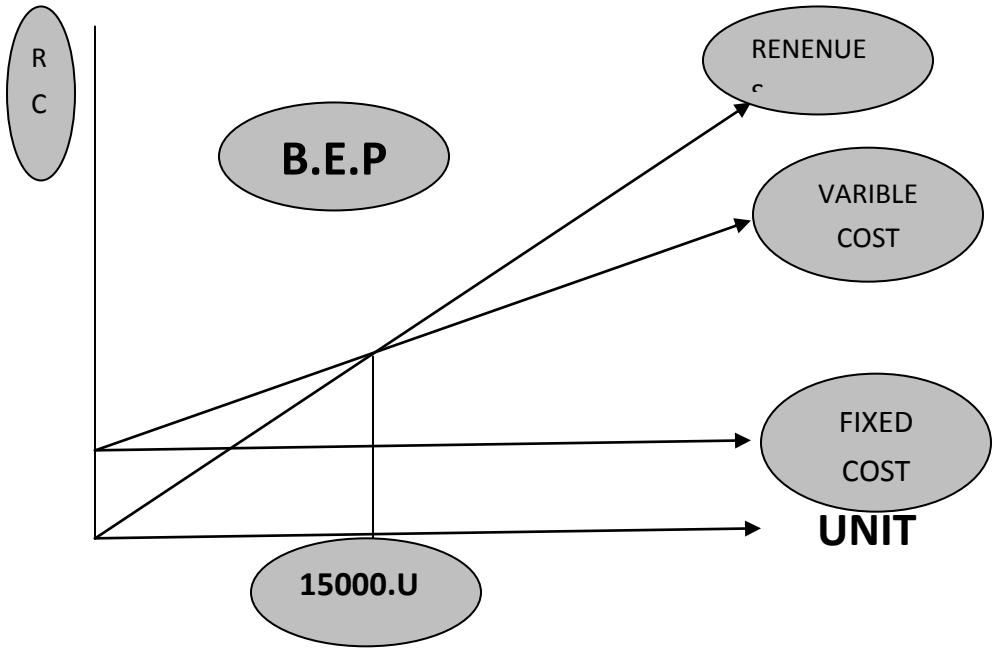
GRAPHICE

R = c

(n) number of units sales ×price unit - f.c ± v.c (n) number of units×v.c.u

N ×p = f.c ± (n × v.c.u)
N × 8 = 60000+(n ×4)
8n = 60000+ 4n
60000= 8n-4n
N= 60000 / 4

15000. U



High – low method

هناك خطوات لاثبات ان التكاليف الثابتة لاتتغير مهما تغير حجم الانتاج

لابد ان نحصل على تكلفة الوحدة المتغيرة اولا

Variable cost per unit =

$$\frac{\text{Change in cost}}{\text{Change in activity}}$$

فرق التكلفتين

فرق المستوين

High activity level

$$X=Y+bc$$

Low activity level

$$X=Y+bc$$

cost	Hours
24700	6450
23600	6050

Required

Using high- low method

Variable cost pre unit = change in cost

Change in activity

24700-23600

6450-6050

1100

400

2.75

High activity level

$$X=Y+bc$$

$$24700= y+(2.75\times6450)$$

$$24700= y+(17737.5)$$

6962.5

Low activity level

$$X=Y+bc$$

$$23600= y+(2.75\times6050)$$

6962.5

$$23600= y+(16637.5)$$

المحاضرة الثالثة

Chapter (2) jop costing system

During February, Cardella Manufacturing works on two jobs : A16 and B17. summary data concerning these jobs are as follows.

Manufacturing costs incurred :

- Purchased $54000 of raw materials on account.
- Factory labor $76000, plus $4000 employer payroll taxes.
- Manufacturing overhead exclusive of indirect materials and indirect labor $59800 .

Assignment of costs :

- Direct materials : jobA16 $27000, job B17 $21000
- Indirect materials : $3000
- direct labor : Job A16 $52000, Job B17 $26000
- indirect labor : $2000
- manufacturing overhead rate : 80% of direct labor costs.
- Job A16 was completed and sold on account for $150000, Job B17 was only partially completed.

Instruction :

1- Journalize the February transactions.
2- What was the amount of under-or overapplied manufacturing overhead?

1-		
Raw materials inventory	54000	
Accounts Payable		54000
(Purchase raw material on account)		

2-		
Factory Labor	80000	
Factory Wages Payable		76000
Employer Payroll Taxes Payable		4000
(To record overhead costs)		

3-		
Manufacturing overhead	59800	
Accounts Payable, Accumulated Depreciation , and Prepaid Insurance		59800
(To record overhead costs)		

4-		
Work in Process Inventory	48000	
Manufacturing Overhead	3000	
Raw Material Inventory		51000
(To assign factory labor to production)		

5-		
Work in Process Inventory	78000	
Manufacturing Overhead	2000	
Factory Labor		80000
(To assign factory labor to production)		

6-		
Work in Process Inventory	62400	
Manufacturing Overhead		62400
To assign overhead to jobs(80% × $78000)		

7-		
Finished Goods Inventory	120600	
Work in Process Inventory		120600
(To record completion of job A16:direct materials $27000,direct labor $52000, and manufacturing overhead$41600)		

8-		
Accounts Receivable	150000	
Sales		150000
(To record sale of Job A16)		

Cost of Goods Sold	120600	
Finished Goods Inventory		120600
(To record cost of sale for Job A16)		

Manufacturing overhead

Debit		Credit	
59800	Account payable, accumulate	62400	Work in process inventory
3000	Raw materials inventory		
2000	Factory labor		
		2400	balance
64800		64800	
2400	Balance		

المحاضرة الرابعة

sheets bates company

Job no	Manufacturing costs Of 30 June	Manufacturing costs Of 31 July
101	L.E4200	------
102	3240	------
103	900	L.E2000
104	2250	4000
105	------	6000
106	------	3700

During July, jobs no.103 and 104 wear complete, and jobs no. 101,102and 104 were delivered to customers .job no 105 are still in process at July 31. From this information.

Required

Commute the following

1-the work in process inventory at June 30

2-the finished goods inventory at June 30

3- the work in process inventory at July 31

4- the finished goods inventory at July 31

5-the cost of goods sold during July.

The answer

A) THE WORK IN PROCESS INVENTORY AT JUNE 30.

Debit			Credi
Job No.101	4200	completed Job No.101	4200
Job No.102	3240	completed Job No.102	3240
Job No.103	900		
Job No.104	2250		
		Bal. June 30,	3150
	10590		10590

B) The finished goods inventory at June 30.

Debit			Credi
Job No.101	4200		
Job No.102	3240	Bal Jun 30,	7440
	7440		7440

C) The work in process inventory at July 31

Debit		Credi	
Beg. Bal. Jun 30,	3150	completed Job No.103	2000
Job No.103	1100	completed Job No.104	4000
Job No.104	1750		
Job No.105	6000		
Job No.106	3700	Bal. July 31,	9700
	15700		15700

D) The finished goods inventory at July 31.

Debit		Credi	
Beg. Bal July 1,	7440	Sold Job No.101	4200
Job No.103	2000	Sold Job No.102	3240
Job No.104	4000	Sold Job No.104	4000
		Bal July 31,	2000
	13440		13440

E) cost of goods sold

Debit		Credi	
Sold Job No.101	4200		
Sold Job No.102	3240		
Sold Job No.104	4000		
		Bal July 31,	11440
	11440		11440

المحاضرة الخامسة

	March	April
Direct matrials costs	978460	1168310
Direct labor costs	2562260	3041940
Manufacturing overhead applied	**3438640**	**3571030**
total manufacturing	6979360	7781280
Unit in beginning work in process	**7000**	**4800**
Units transferred to finished goods	**18500**	**23000**
Units in ending work in process	**4800**	**6400**

Beginning work in process was 30 percent

Complete in march and 60 percent complete in april

Ending work in process was 60 percent in march and 35 percent complete in april .

Instruction

a-for each of the tow months , calculate the equivalent units production.

b-based on equivlent units of production , did total manufacturing costs per unit increase or decrase between march and april .

c-did the direct matrials cost per equivalent unit increase or decrase between march and april.

March

a-for each of the tow months , calculate the equivalent units production.

	MA مواد	LA اجور	OH تكاليف اخرى	total manuf
-Units transfrred of finished goods	18500	18500	18500	18500
ending work in process (4800×60)	2880	2880	2880	2880
total equivlent units	21380	21380	21380	21380

b-based on equivlent units of production , did total manufacturing costs per unit increase or decrase between march and april.

***Total manufacturing costs ÷ total equivlent unit**

= 6979360 ÷21380= 326.44

***Total Direct matrials costs ÷ total equivlent unit matrials costs**

= 978460÷21380= 45.77

Total Direct labor costs ÷ total equivlent units

= 2562260÷21380= 119.84

*Total overhead÷ total equivlent units

= 3438640÷21380= 160.83

*total manufacturing costs per units

45.77+119.84+160.83= 326.44

April

a- for each of the tow months , calculate the equivalent units production.

	MA مواد	LA اجور	OH تكاليف اخرى	total manuf	
-Units transfrred of finished goods	23000	23000	23000	23000	
ending work in process (6400×35)	2240	2240	2240	2240	
total equivlent units	25240	25240	25240	25240	

b-based on equivlent units of production , did total manufacturing costs per unit increase or decrase between march and april.

***Total manufacturing costs ÷ total equivlent unit**

= 7781280 ÷21380= 308.29

***Total Direct matrials costs ÷ total equivlent unit matrials costs**

= 1168310÷25240= 46.29

Total Direct labor costs ÷ total equivlent units

= 3041940÷25240= 120.52

*Total overhead÷ total equivlent units

= 3571030÷25240= 141.48

*total manufacturing costs per units

46.29+120.52+141.48= 308.29

المحاضرة السادسة

Logee company produces the product through tow processing department are involed in the dishwasher,s manufacture . the tub assembled in one department , and a scond one department assembled and instalis the motor .there is no beginning or ending work in ether department during march, the company incurred the following costs in manufcture of **4000** dishwasheres .

	tub department	motor department
Direct materials **Direct labor** **Manufacturing over**	150000 12000 18000	96000 18000 6000

Required

Compute the following per unit costs for the march :

1- A tub assmbly transferred to the motor department
2- Assembling a motor and instlling it
3- Acompleted dishwasher .
4- Materals used of assemling a tube **and** direct labor cost of assemling and installing a motor

1- A tub assmbly transferred to the motor department

M+L+O÷COST MANUF

150000+12000+18000÷4000= 45

2- Assembling a motor and instlling it

M+L+O÷COST MANUF

96000+18000+6000÷4000= 30

3- Acompleted dishwasher

45+30 =75

4- Materals used of assemling a tube

M÷C.MANUF

150000÷4000= 37.5

5- direct l cost of assemling and installing a motor

L÷C.MANUF = 18000÷4000= 4.5

150000÷4000= 37.5

المحاضرة السابعة

Chapter (4) standard cost for cost contrlling

Analysis of Variances.

أهم المصطلحات التي يجب على الطالب معرفتها

St.q	**standard quantity**
St.p	**standard price**
Act.q	**actual quantity**
Act.p	**actual price**

Materials cost Variances.

Mat .p.var= act.q× (st.p- act.p)

Mat.q. var = st.p×(st.q-act.q)

Example1

Top corpration reported the following information with respect to the matriales required to manufacture amalgam florostats during the current month :

Standard price per gram of materials	L.E 1.25
Standard quantity of materials per amalgam	4grams
Actual materials purchased and used production	**2800 grams**
Actual amalgam florostats produced during the month	**520 units**
Actual cost of materials purchased	**L.E3920**
Normal monthly output	**550 units**

Instruction

a- determine matrials price variance

b- determine matrials quantity variance

Given

St.q	**2080 (520×4gram)**
St.p	**1.25**
Act.q	**2800**
Act.p	**3920÷2800= 1.4**

Variances price

Mat .p.var= act.q× (act.p- st.p)

2800×(1.4- 1.25)= 420unfor

Variances quantity

Mat.q. var = st.p×(act.q - st.q)

1.25×(2800- 2080)= 900

Actual quantity	**Actual quantity**	**Standard quantity**
Actual price	**Standard price**	**Standard price**