Chapter 2: Income statement :-

1. Net income = Rev − Exp
2. Sales = Rev
3. gross Margin = Rev − cost of sales
   (gross profit)
4. gross profit Margin = $\frac{\text{gross Profit}}{\text{Sales}}$
5. operating profit = gross profit − operating exp

   op.p = EBIT (sometimes)
6. Interest coverage Ratio

   $= \frac{\text{EBIT}}{\text{INT}}$

---

7. Revenue Recognation :-

A- Prorated basis Method.

* Rev = $\frac{\text{cost}}{\text{Years}}$

B. percentage of completion Method

→ $\frac{\text{Exp}}{\text{total cost}}$ = $\boxed{\text{نسبة}}$

→ $\boxed{\text{نسبة}}$ * Sale price = Rev

→ Net income = Rev − Exp.

" Can be measured reliably "

C- completed contract Method

" can Not be measured reliably "

→ IFRS.

	year 1	2	--	last year
Rev	▭	0	—	ما نعترف منه ال Rev
− Exp	▭	0	—	ما نعترف منه cost
N.I	0	0	---	
	صفر	صفر		

* ملاحظة : ال Rev نحسبه بنفس طريقة ال percentage.

* ملاحظة : Exp = Rev بكل السنين ماعدا آخر سنة.

Example :-

	Year 1	2	3	total
Rev	3	2.4	4.6	10
Exp	3	2.4	0.6	6
	0	0	4	4

4.6 → (10 − (3 + 2.4))

0.6 → (6 − (3 + 2.4))

→ GAAP

	Year 1	2	--	last year
Rev	0	0		total Rev
Exp	0	0		total cost
N.I				

* ملاحظة ، يتم التسجيل فقط في آخر سنة بالمشروع

(8) Inventory costing Methods :-

A- specific identification Method.

B- FIFO :-

Sales (العلبة اللي بتنباع * السعر)

− CGS

علبة 1 * سعرها

علبة 2 * سعرها

علبة 3 * سعرها

العلبة من الاول ←

Gross Profit $\boxed{}$

* level of inventory :
(Ending inventory) المخزن
العلبة اللي ضلت * سعرها.

C- LIFO :-

عكس FIFO

((العلبة من الآخر))

D- Weighted average cost Method :-

→ $W.Avg = \dfrac{\text{Total cost of goods avilable for sale}}{\text{Total units avilable for sale}}$

→ CGS = Sales * W.Avg

→ Sales
− CGS
G.P

* Ending inventory
W.Avg * العلبة اللي ضلت

(9) Issues in exp Recognition

A- Doubtful accounts

B- Warranties

C- Dep and Amortization.

↳ ① stright line Method

$Dep = \dfrac{\text{cost} - \text{Residual value}}{\text{useful life}}$

* Residual value (salvage V.) amount that the company expects to receive upon Sale of the assets at the end of its useful life.

② Accelareted Method :-

↳ $S.Line\ rate = \dfrac{1}{\text{useful life}}$

→ $\boxed{} * 2$

conservative	aggresive
↓	↓
LIFO	FIFO
Accelarated dep	stright line

(10) EPS.

Basic EPS

$$= \frac{N.I - \text{Preferred divid}}{\text{Weighted average \# of sh. outst.}}$$

Weighted avg # of sh outstanding

في 3 حالات :-

① الحالة الطبيعية :

$$W.Avg = \#\text{of shares} * \frac{\text{عدد الأشهر الإضافية لنهاية السنة}}{12}$$

② stock dividends :-

$$\#\text{of shares} * (1 + \text{Divid. rate})$$

↓

مجموع عدد الأسهم متداول

في السؤال (ا) من تاريخ (سند)

الي تم فيه توزيع divid.

③ stock split (2:1)

$$\#\text{of shares} * 2$$

↓

مجموع الأسهم من اول السؤال

(ا) من الشهر الي تم فيه ال split.

* ملاحظة :-

$$N.I - \text{Preferred divid} = EACS$$

Diluted EPS

Ⓐ IF converted Method for :-

① "convertiable preferred stock"

$$D.EPS = \frac{N I}{W.Avg + \text{increase in sh.}}$$

* W.Avg → Basic نفس طريقة

* increas in shares :-

= # preferred shares * العدد الي نضرب فيه

② "convertiable Debt"

"security, Bond —"

$$D.EPS = \frac{EACS + \text{After tax intrest on convertiable debt}}{W.Avg + \text{increases in sh.}}$$

* EACS = N.I − P.divi

* After tax ⟹ "increas in earning"

= stock * YTM * (1 − Tax)
"السنة"

* W.Avg → نفس ال Basic

* increase in shares :-

$$\frac{\text{stocks}}{\boxed{*}} * \boxed{\downarrow}$$

الرقم الي بنضرب فيه

كل ↑ نقسم { واجهة السؤال
(ا)

Dulited EPS :-

(B) Treasury stock Method for « options »

$$D.EPS = \frac{N.I - P.divi}{W.Avg + \text{increas in sh.}}$$

* increas in shares :-

1- → # of options * Price (option) = ▭

2- → ▭ / Price (Market) = ▭

3- → # of options − ▭ = increase in shares

مشروط بالقانون

في حال اعطى كالاتي :-

مثال

2300 option each or ▭ option gives its holder the right to buy ▭ 100 stock on price ▭ 14

الحل / → (2300 * 100) = 230000

→ 230000 X price (14)

= 3220,000

→ 3220,000 / Market Price

Antidilitive :-

D.EPS > Basic EPS.

Security is antidilitive and therefore Not included.

(11) Net profit Margin

$= \frac{\text{Net income}}{\text{Rev.}}$

(12) Price / earning Ratio

$= \frac{\text{Price}}{\text{EPS}}$

(13) OCI Per share

$= \frac{\text{OCI}}{\text{\# of shares}}$

(14) comprehinsive EPS

EPS + OCI per share

(15) operating profit Margin

$\frac{\text{operating income}}{\text{Rev}}$

(16) pretax margin

$\frac{\text{earnings befor taxes}}{\text{Rev.}}$

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chapter 4 : Cash flow statment :-

A- Indirect Method :-

Cash flow from operating activites :-

من I.S

N.I

-/+ gain / loss on sale

* اذا كانت gain في ال I.S نطرحها من C.F

* اذا كانت loss في ال I.S نجمعها في C.F

+ Dep

* ~~نطرحها~~ نجمع في C.F

A/R

* زيادة في A/R في B.S نطرحها في C.F

Inventory

* زيادة في Inv. في B.S نطرحها في C.F

prepaid exp

* زيادة في P.Exp في B.S نطرحها في C.F

A/P

* زيادة في A/P في B.S نجمعها في C.F

Salary Payable

* زيادة في S.P في B.S نجمعها في C.F

intrest payable

* زيادة في I/P في B.S نجمعها في C.F

tax payable

* زيادة في T/P في B.S نجمعها في C.F

Accruals

* زيادة في Accruals في B.S نجمعها في C.F

CFO

Direct + indirect :

Cash flow from INvesting activites :-

- Purchases   * cash outflow معناه السالب
+ Sale on equipment   * cash inflow معناه ((+))

Net cash f. from investing activites

* Sale on equipment :-

① Beg equipment (B.S)
+ Purchases (معطى بال Note)
− Historical cost (او مقروء) (X)

End equipment (B.S)

X = ((Historical cost))

② Beg accumelated dep (B.S)
+ Dep (I.S)
− ~~Sales~~ acc. Dep on equipment sold (X)

End accumelated dep (B.S)

X = ((acc. Dep on Eq. sold))

③ BV = Historical cost − acc Dep on Eq sold

−

~~cash recived from sale~~

④ BV + gain on sale of equipment
= cash recived from sale of equipment
((sale of equipm))

الي بدنا نحط
بال C.F.S

Direct + indirect :

Cash flow from Financing activities :-

+ Long term debt (CF [illegible] BS [illegible]) cashoutflow *

− Treasury stocks ([illegible]) cash outflow *

− Divi paid

C.F. F. act. → cash out flow

Divi paid :-

① Beg Retaind earnings (~~B.S~~) (Retaind E. statment

\+ Net income (I.S)

− Divi (X)

End Retaind earnings (~~B.S~~) (Retaind E. statment)

Cash flow statment

cash flow from operating act.

" " " investing "

" " " Financing "

B- Direct Method:-

Cash from operating activities:-

1. Cash recived from customers:

Rev — من I S *

A/R — اذا زادت في BS نطرحها في C.F *

C.R.C

2. Cash paid to suppliers:-

Purchases

A/P — اذا زادت في BS نطرحها في C.F *

C.P.S

Beg inv	((BS))
+ Purchases	x
- CGS	((IS))
End inv.	((BS))

3. Cash paid for employee.

Salaries exp (IS)

Salaries payable — اذا زادت في BS نطرحها في C.F *

CPE

4. Cash paid for other operating exp

op exp (I.S)

Prepaid exp (B.S) — اذا زادت في BS نجمع في C.F *

Accruals (B.S — اذا زادت في BS نطرحها في C.F *

C-P o.o. exp

⑤ Intrest exp:-

موجب → intrest exp (I.S)

intrest payable (B.S — * اذا زادت في BS نطرحها في C.F

⑥ Cash paid for taxes :-

موجب → income tax exp (I.S

Tax payable (B.S) — * اذا زادت في BS نطرحها في C.F

cash flow statment

cash flow from operating act

" " " investing "

" " " financing "

chapter 5, Ratios:-

Activity Ratios:-

* Inventory turnover = $\frac{CGS}{\text{Average Inventory}}$

* Average inv. = $\frac{1^{\text{st}}\ \text{INV} + 2^{\text{nd}}\ \text{INV}}{2}$

* Days of inventory on Hand (DOH) "average age of inv." = $\frac{\text{Days ((365))}}{\text{inventory turnover}}$

* Recivables turnover = $\frac{\text{Rev}}{\text{average Recivables}}$

* Days of sales outstanding (DSO) "average collection period" = $\frac{\text{Days ((365))}}{\text{Recivables turnover}}$

* purchases = CGS + End inv. − Beg inv.

* payable turnover = $\frac{\text{Purchases}}{\text{Average trade payable (A/P)}}$

* # of days of payable = $\frac{\text{Days ((365))}}{\text{Payable turnover}}$

* Working capital = C.A + C.L

* Working capital turnover = $\frac{\text{Rev}}{\text{average W.capital}}$

Activity R.

* Fixed assets turnover = $\frac{\text{Rev}}{\text{Average Net Fixed assets}}$

* Total assets turnover = $\frac{\text{Rev}}{\text{Average total assets}}$

Liquidity Ratios:-

* Current Ratio = $\frac{\text{C. Assets}}{\text{C. Liability}}$

* Quick Ratio = $\frac{\text{C.A} - \text{Inv}}{\text{C.L}}$ «CA = Cash + short term marketable sec.»

* Cash Ratio = $\frac{\text{Cash} + \text{M.securites}}{\text{C.L}}$

مهم كتير

* Defensive interval Ratio = $\frac{\text{Cash} + \text{Rev} + \text{sh. term M.Sec}}{\text{C.L}}$

* Cash conversion cycle. = DOH + DSO − # of days of payable
«Net operating cycle»

Solvency Ratios :-

* Debt to asset Ratio = $\frac{\text{Total debt}}{\text{Total assets}}$

* Debt to capital Ratio = $\frac{\text{Total debt}}{\text{Total debt + Total sh.h equity}}$

* Debt to equity Ratio = $\frac{\text{Total debt}}{\text{Total shholder equity}}$

* Financial leverage Ratio = $\frac{\text{Average total assets}}{\text{average Total equity}}$

* Interest coverage Ratio = $\frac{\text{EBIT}}{\text{Intrest Payment}}$

* Fixed charge coverage = $\frac{\text{EBIT + Leases Payment}}{\text{interest payment + lease payment}}$

profitability Ratios :-

* gross profit =

* gross profit Margin = $\frac{\text{gross profit}}{\text{Rev}}$

* operating profit Margin = $\frac{\text{operating income}}{\text{Rev}}$

* Pretax margin = $\frac{\text{EBT ((after tax))}}{\text{Rev}}$

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* Total assets = (Equity + Debt)
* Assets to equity = $\frac{\text{total Assets}}{\text{Equity}}$

* Net profit Margin = $\frac{N.I}{Rev}$

profit Margin = $\frac{\text{Sales} - CGS}{\text{Sales}}$

* Operating ROA = $\frac{\text{Operating income}}{\text{Average total assets}}$

* ROA = $\frac{N.I}{\text{Average total assets}}$

* Return on ~~total~~ capital = $\frac{EBIT}{\text{short term debt and equity}}$

* ROE = $\frac{N.I}{\text{Average total equity}}$ / ROE = ROA * F. leverage

~~ROE = Net Profit Margin * Tas~~

* Return on common equity = $\frac{N.I - \text{Prefered divid}}{\text{Average common equity}}$

* EBIT include non-operating items such as divid recived and gain / loss on investment securities.

ROE → $\frac{N.I}{\text{average total equity}}$

→ ROA * leverage

→ Net profit Margin * total assets turnover * leverage.

→ Tax burden * intrest burden * EBIT Margin * total assets turnover * leverage.

317 P

Valuation Ratios ((Market))

$$P/E = \frac{\text{Price Per share}}{\text{Earnings Per share}}.$$

((price to earning Ratio))

$$P/CF = \frac{\text{Price Per share}}{\text{Cash flow Per share}}$$

320 P