AS 7 – Construction Contracts

[Contractor] → [Contractee]

eg: Kaudoi & sons → Customer

Builder

eg: Taj Mahal, Antilla, Burj Khalifa etc.

AS 7 applies

1] Introduction

AS 7 prescribes accounting for construction contracts in the Fin. stats of contractor.

Main objective of this AS is to determine when the contractor should recog revenue, contract cost in the Statement of P/L.

2] Combining & segmenting (separating) construction contracts

eg:

1 Bldg → 100 cr.
1 Swimming Pool → 1 cr
1 Mini theatre → 10 cr
1 O/o Guest House → 150 cr
1 Turf → 5 cr

AK Builder → Student.

A] Separate contracts

When a contract covers a no. of assets the construction of each asset should be treated as a separate contract if:

i) Separate proposals have been submitted for each asset.

ii) Each asset is subject to separate negotiation & the contractor or customer can accept or reject any of the contract.

iii) Cost & Revenue of each asset can be identified separately.

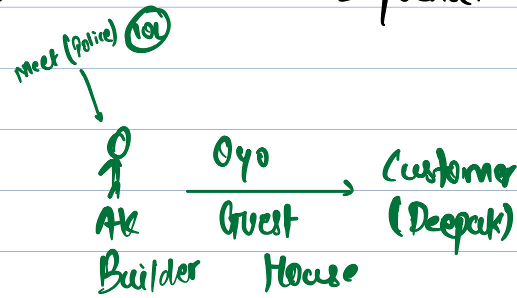
B] **Combined Contracts**

A group of contracts should be treated as a single contract when:

i) the group of contracts are negotiated as a single package.

ii) The contracts are closely interrelated.

iii) contracts are performed concurrently or in a continuous sequence.



3] **Contract Revenue & Contract Cost**

A] **Contract Revenue**

Agreed contract Price xx

(+) Agreed cost escalation

(+) Claims (only those which the customer will accept & can be measured reliably)

(+) Incentive payments (usually rec'd for early completion & will be included only when it is probable that specified target will be met)

(−) Penalties

(+) Any other payments due to variation in the contract.

Q1 & Q2 → Q.B

Q3 (CLOR)

i) Calculation of Contract Revenue ₹

Fixed Price		5cr
(+) Incentive for early completion		0.5cr
(+) labour cost escalation	(1.2cr x 25%) ↱ Allowed upto 30%	0.3cr
(+) Material cost escalation	(0.8cr → 40% ; 0.4cr × 20%)	0.4cr
Total contract Revenue		6.2cr

ii) Contract Revenue	6.2cr
(+) Variation in contract (Additional floor)	1cr
(+) Claims recoverable from customer	0.2cr
Total contract Rev	7.4cr

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8) Contract Costs

It comprises of

i) Cost that relate directly to the specific contract

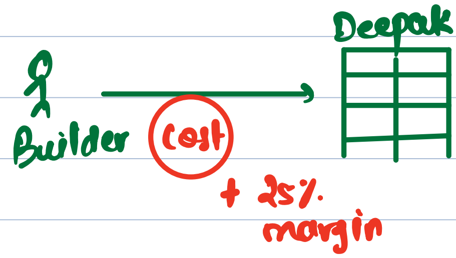
ii) Costs that are attributable to the contract activity & can be allocated to the contract

iii) Other costs that are chargeable to the customer.

eg. Material cost, labour cost, site supervision cost, Depr^n of PPE used in construction, transportation cost, cost of design, technical assistance, Insurance etc.

* Examples of cost that cannot be attributed to the contract (i.e. these cost are excluded from the cost of construction)

eg: Selling cost, Deprn of PPE which was idle or not used in construction, General exps, Admin OHs, Research cost for which reimbursement is not specified in the contract etc.



4] Types of construction contracts

Fixed price contracts

↓

Here contractor agrees to a fixed contract price

↓

Fixed contract price might also be subject to incentives, claims, escalation etc.

Costs plus contracts

↓

Here contractor is reimbursed for all allowances exp / cost plus a fixed percentage of these costs.

5. Percentage completion Method (Also known as stage of completion)

→ Revenue in case of construction contracts is to be recog. in proportion of work completed every year.

→ Percentage of work completed (i.e. stage of completion) may be determined by following methods:

(a) # $\frac{\text{Actual cost incurred}}{\text{Total Estimated Cost}} \times 100$

eg: Total Estimated cost = 100 cr

Total Revenue : 120 cr

Cost incurred in Yr 1 = 30 cr

% of completion = $\frac{30\text{ cr}}{100\text{ cr}} \times 100$ = 30%

P/L (Yr 1)

Exp			
To contract cost	30 cr	By contract Revenue. (120 cr x 30%)	36 cr
To profit	6 cr		

(b) Surveys of work performed

[eg: Surveyor is appointed, he checks & gives certificate of % of work completed]

(E) Completion of physical proportion of contract work

eg: [1000 sq ft tiling & painting work allocated.
300 sq ft tiling & painting in Yr 1] ⟶ 30% completed.

Imp Note:

1) Actual cost incurred in Current Year is also known as Contract WIP (Work in Progress)

2) Actual cost incurred in Current Year includes : Work certified + work Uncertified.

Eg: Total cost incurred in Yr1 = 30cr
Estimate cost to be incurred in future = 40cr

Total cost 70cr.

Total contract Revenue = 85 cr.

Prepare P/L A/c for Yr 1

WN (1) % of completion = $\frac{\text{Actual cost incurred till Date}}{\text{Total Estimated Cost}} \times 100$

(Actual cost till date (+) Future est cost)

$= \frac{30cr}{70cr} \times 100$

$= \boxed{42.86\%}$

Profit / loss (Yr 1)

To contract cost	30 cr	By contract Rev. (85 cr x 42.86%)	36.43
To profit	6.43		

6. **Loss Making Contracts**

→ As per AS 7, whenever total contract cost is expected to exceed the contract Revenue, then full loss should be recognised immediately

Eg: cost incurred in Yr 1 = 30 cr
Future cost expected to be incurred = 40 cr

Total contract Revenue = 60 cr . Prepare P/L A/c.

Soln:

Profit & loss (Yr 1)

To contract cost	30 cr	By contract Revenue	25.72 cr
To provision for excess loss	$\boxed{5.72}$	By loss	~~4.28 cr~~ 10 cr

WN (1) Is this a loss making contract ? $\boxed{\text{YES}}$

Total contract cost	70 cr
- Total Contract Rev	60 cr
loss	10 cr

(2) % of completion = $\frac{\text{Actual cost incurred}}{\text{Total Estimated Cost}} \times 100$

$= \frac{30\text{ cr}}{70\text{ cr}} \times 100$

$= 42.86\%$

(3) Revenue to be booked = 60cr × 42.86%

$= \boxed{25.72}$

(4) Excess loss & Prov for Yr 1

	Total loss	10 cr
less:	loss already booked	(4.28cr)
	Excess loss to be Booked in Yr 1	5.72cr.

Contract Rev (c.y)	25.72
Contract Cost (c.y)	30
loss (c.y)	4.28
(-) Total loss	(10 cr)
Excess loss	5.72

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7. If final outcome of the contract cannot be measured reliably

(cannot estimate % of completion OR Not sure if contract can be fulfilled or not)

In such cases revenue should be recognised only to the extent of contract cost incurred.

eg: If cost incurred in Yr1 = 4 lakhs

P/L (Yr1)			
To contract cost	4L	By contract Revenue	4L

8. Change in Estimates (till date)

→ % of completion is applied on cumulative basis in each year to reflect the current estimate of revenue & cost.
Any change in estimate of Revenue or cost is to be treated as change in Accounting estimate i.e. do prospective accounting.

9. Calculation of Amt due from customer / Amt due to customer

Eg: Current Year Revenue Accrue	10L	10L
Customer has paid as of now	(7L)	(12L)
Amt due from customer	3L	(2L) Amt due to customer
	Asset side	Liab

Format for calculation

Cost incurred till date	xxx
(+) Recognised profit	xx
(-) Recognised losses	(xx)
(-) Progress Billings	(xx)
(Amt paid by customer (+) Amt Billed But yet to be paid by customer)	
Amt due from customer / Due to customer	xx / (xx)

If Amt is positive (Asset) → Amt due from customer
If Amt is negative (liab) — — " — to — " —

Eg: Contract Revenue = 100 cr
Cost incurred till date = 25 cr
Future cost = 45 cr

Progress payment rec'd = 47 cr
Billing done but payment yet to be rec'd = 5 cr

Prepare P/L A/c for Yr 1 & Calculate Amt due to / from customer

Soln: i) P/L

To contract cost	25cr	By contract Rev	35.71
To profit	10.71		

ii) Calculation of Amt due to / from customer

Cost Incurred till date	25cr
(+) Profit	10.71
(-) losses	-
(-) Progress Billings (47 +5)	(52)
Amt due to customer (Liab)	(16.29)

WN ① Is this a loss making contract → No.

Total contract Rev	100cr
— " — " — Cost	70cr
Profit	30cr

② % of completion = $\frac{\text{Actual cost}}{\text{Total Est Cost}} \times 100$

$= \frac{25cr}{70cr} \times 100$

$= \boxed{35.71\%}$

③ Rev to be Booked : 100cr × 35.71%

$= \boxed{35.71cr}$

Q5

Profit / loss

X1 - X2

To contract cost	81000	By contract Revenue (200000 × 45%)	90000
To profit (B/F)	9000		

X2 - X3

To contract cost	89000	By contract Revenue (200000 (-) 90000) Total, Already Booked in Yr 1	110000
To profit	21000		

Customer A/c

X1 - X2

To contract Revenue	90000	By C/B	79000
		By bal c/d	11000

X2 - X3

To bal b/d	11000	By C/B / bal c/d	121000
To contract Rev.	110000	ICAI	

WN① Is this a loss making contract → No

② Amt due to / from customer

	X1 – X2	X2 - X3
Cost incurred till date	81000	89000
(+) Profit	9000	21000
	90000	110000
(–) Progress Billings	(79000)	
Amt due from customer	11000	
	Asset	

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06 (WOR)

P/L (X1 - X2)

To contract cost	6499000	By contract Rev	56,95,000
To provision for excess loss	3,96,000	By loss	1200000

WN① Is this a loss making contract

Total Contract Rev	85,00,000
Total " cost	(9700000) (64.99L + 32.01L)
Total loss	(1200000)

WN② % of completion = $\frac{6499000}{97,00,000} \times 100 = 67\%$

WN ③ Rev to be booked = 85,00,000 × 67% = 56,95,000

WN ④ Calⁿ of Excess loss & Prov

C.Y Rev	5695000
(-) C.Y Cost	(6499000)
loss	804000
Total loss	(1200000)
Excess loss / Prov	396000

Q8

Profit & loss (Yr 1)

To contract cost	390	By contract Rev	360
To prov for excess loss	20	By loss	50

Profit & loss (Yr 2)

To contract cost (650 (-) 390) Total, Booked in Yr 1)	260	By contract Rev (600 - 360)	240
		By prov for excess loss (Prov is reversed)	20

WN ① Is this a loss making contract → YES

Total Contract Rev = 600

650

Total loss 50

WN 2 % % completion

Yr 1

$\frac{390}{650} \times 100 = 60\%$

Yr 2 till date

100%.

WN 3

Yr 1 Revenue 600 x 60% $\boxed{= 360}$

Q9

P/L for X0-X1

To contract cost (Work certified (+) work uncertified)	605	By Contract Rev	550
		By loss	100
To Prov for excess loss	45		

ii) Amt due to / from customer

Cost incurred till date	=	605
(+) Profit		–
(–) loss		(100)
		505
(–) Progress Billings (400 + 140)		(540)

Amt due to customer (35) (liab)

WN ① Is this a loss making contract → YES

Total contract Rev		1000
Total " cost		(1100)
(500 + 105 + 495)		
	Total loss	100

WN ② % completion = $\frac{\text{Actual cost incurred}}{\text{Total est cost}} \times 100$

(work certified (+) work uncertified)

$= \frac{500 + 105}{1100} \times 100$

$= \boxed{55\%}$

WN ③ Rev to be booked

$1000 \times 55\% = 550$

Q10 → H.W.

Q11 (WOR)

Calculation of Revenue, Contract Cost, Profit (Year wise)

P/L Yr 1

To contract cost	2093	By contract Revenue	2340
To profit	247		

P/L (Yr 2)

To contract cost (6068 (-) 2093) till Yr 2, Booked in Yr 1	3975	By contract Revenue (6808 (-) 2340) till Yr 2, Booked in Yr 1)	4468
To profit	493		

P/L (Yr 3)

To contract cost (8200 - 2093 - 3975)	2132	By contract Rev (9200 - 2340 - 4468)	2392
To profit	260		

WN① Is this a loss making contract → No.

WN② % of completion

Particulars	Year 1	till Year 2	till Year 3
$\frac{\text{Actual cost incurred}}{\text{Total est cost}} \times 100$	$\frac{2093}{8050} \times 100$	$\frac{6068}{8200}$	$\frac{8200}{8200} \times 100$
Total Rev - Total Est Profit		(9200 - 1000)	
9000 - 950 = 8050	= 26%	= 74%	= 100%

Note: Here total estimated cost in each year is computed by Total Revenue (-) Total Profit

WN 3 Revenue to be Recognised

Particulars	Year 1	Till Year 2	Till Year 3
Total Revenue (x) % completion	9000 x 26% = 2340	9200 x 74% = 6808	9200 x 100% = 9200

Ak Hai Bhaisahab

Note: Exclusive Note

when computing % of completion (WN 2) & Rev to be recog (WN 3), we will do the calculation till date i.e. cumulatively.

But when we prepare P/L (Year wise) we will record only for that particular year (eg: Rev for Yr 2

= Total Rev till Yr 2 (−) Rev Booked in Yr 1

Q12 i)

P/L

To contract cost	1,34,00,000	By contract Rev	1,20,00,000
To Prov for excess loss	350000	By loss (full)	17,50,000

ii) Calculation of Prov for Excess loss

	C.T. Contract Rev	1,20,00,000
less:	C.T Contract Cost	1,34,00,000
	C.T loss	14,00,000
	(−) Total loss	(17,50,000)
	Prov for Excess loss	3500000

Hint: upar ke P/L mein se auth utha lo.

WN ① Is this a loss making contract → YES

	Total Contract Rev	1,50,00,000
less:	Total Contract Cost	(1,67,50,000)
	Total loss	(17,50,000)

(71L + 36L + 10L + 15L + 2L + 33.5L)

WN (2) % Completion = $\dfrac{\text{Actual cost till date}}{\text{Total Est Cost}} \times 100$

$$= \frac{1,34,00,000}{1,67,50,000} \times 100$$

$$= \boxed{80\%}$$

WN (3) Rev to be booked = 1,50,00,000 × 80%

= 1,20,00,000

Q13 (WOR)

	Yr 1	Yr 2	Yr 3
i) % completion	26%	74%	100%

ii) Statement of Profit Year wise

P/L (Yr 1)

To cost 52.52	To Rev 57.2
To profit 4.68	

P/L (Yr 2)

To cost 99.18 (151.7 (-) 52.52)	To Rev 109.3 (166.5 - 57.2)
To profit 10.12	

P/L (Yr 3)

To cost 53.3 (205 (-) 52.52 (-) 99.18)	To Rev 58.5 (225 (-) 57.2 (-) 109.3)
To profit 5.20	

WN ① Is this a loss making contract → No ?

Contract Rev	220
less: " cost	(202)
Profit	18

WN ② % completion

Particulars	Year 1	till Year 2	till Year 3
$\frac{\text{Actual cost till date}}{\text{Total Est cost}} \times 100$	$\frac{52.52}{202} \times 100$	$\frac{151.7}{205}$ (202+3)	
	= 26%	= 74%	100%

WN ③ Rev to be Recog (till date)

Particulars	Year 1	till Year 2	till Year 3
Total Revenue (x) % comp	220 x 26%	225 x 74%	225 x 100%
	= 57.2	= 166.5	= 225

Read ques

Note: 2.5 unused material cost excluded from Yr 2 cost is NOT to be added in Yr 3 as it is assumed that ₹ 205 already includes it.

Q16

i) % Completion = $\boxed{56.25\%}$

P/L (Year 1)

To contract cost	4500000	By contract Revenue	4781250
To profit	281250		

WN① Is this a loss making contract → No

Total contract Rev = 85 lakhs

(-) Total contract cost = (80 lakhs)

17L + 16L + 5L + 7L + 35L

5 lakhs Profit

(includes all future cost)

WN② % completion = $\frac{\text{Actual cost incurred}}{\text{Total est cost}}$

17L + 16L + 5L + 7L

$= \frac{45L}{80L} \times 100$

= 56.25%

WN③ Rev to be recog = 85L × 56.25%

= 4781250

Q17 → H.W.

Q18

Note: It is assumed that total cost already include escalation of 5%..
But the total revenue does not include escalation.
∴ Revised total Revenue = 12cr + 5% = 12.6cr

i) % completion : 40%

ii)

P/L

To contract cost	4cr	By contract Rev	5.04
To profit	1.04		

WN ① Is this a loss making contract → No

WN ② % of completion = $\frac{\text{Actual cost}}{\text{Total est cost}} \times 100$

$= \frac{4cr}{10cr} \times 100 = \boxed{40\%}$

WN ③ Rev to be recog = 12.6cr x 40%
= $\boxed{5.04cr}$

Q20 (WOR)

Note: In this ques as only Revenue is asked ∴ we will ignore the data of work certified & also how the payment is rec'd.

Calculation of Revenue Each Year

	Yr 1	Yr 2	Yr 3
	924800	614200	461000
		(1539000 - 924800)	(2000000 - 924800 - 614200)

WN 1 **Is this a loss making contract** → No.

Total Contract Rev	2000000
Total " Cost	1860000 (8.6L + 10L)
Profit	

Imp

WN 2 % of completion

Particulars	Year 1	HU Year 2 (Imp)	HU Year 3
$\frac{\text{Actual cost till date}}{\text{Total Est cost}} \times 100$	$\frac{860000}{1860000} \times 100$ Actual + Est Future 8.6L 10L	$\frac{860000 + 475000}{860000 + 475000 + 400000}$ Actual (+) Future	100%
	= 46.24%	= 76.95%	

WN 3 Rev to be Booked	Year 1	HU Year 2	HU Year 3
Total Rev (x) % comp	2000000 x 46.24% = 924800	2000000 x 76.95% = 15,39,000	2000000 x 100% = 20,00,000

Q21

P/L

To contract cost	21175	By Contract Revenue	20790
To Prov for excess loss	315	By loss	700

ii) Prov for excess loss

Rev (C.Y)	20790
Cost (C.Y)	(21175)
loss	385
(-) Total loss	(700)
Prov for Ex loss	315

CONT Is this a loss making contract →

Total Contract Revenue (35000 + 8%) = 37800

Total Contract Cost 38500

Total loss 700

Total Contract Cost = Actual cost incurred (+) Future est cost

= 17500 + 3815 (-) 140 (+) 17325

= 38500

This already includes 8% cost escalation.

WN 2 % completion $= \dfrac{\text{Actual cost incurred}}{\text{Total Est cost}} \times 100$

$$= \frac{17500 + 3815 (-) 140}{38500} \times 100$$

$$= 55\%$$

WN 3 Rev to be booked $= 37800 \times 55\%$

$$= 20790$$

Q22 (LOR)

P/L (Yr1)

To contract cost	161	By contract Rev	180
To profit	19		

P/L (Yr2)

To contract cost (574 - 161)	413	By contract Rev (644 - 180)	464
To profit	51		

P/L (Yr3)

To contract cost (820 - 161 - 413)	246	By contract Rev (920 - 180 - 464)	276
To profit	30		

WN① Is this a loss making contract → No

WN2 % completion = $\frac{\text{Actual cost incurred till date}}{\text{Total estimated cost}}$

Year 1	Year 2	Year 3
$\frac{161}{805} \times 100$	$\frac{584-10}{805+15} \times 100$	$\frac{820}{820} \times 100$
$= 20\%$	$= \frac{574}{820} \times 100 = 70\%$	$= 100\%$

WN3 Revenue to be booked till date

	Year 1	Year 2	Year 3
Total Revenue × % comp.	900 × 20% = 180	920 × 70% = 644	920 × 100% = 920