AS 7 – CONSTRUCTION CONTRACTS

Illustration 1

XYZ construction Ltd, a construction company undertakes the construction of an industrial complex. It has separate proposals raised for each unit to be constructed in the industrial complex. Since each unit is subject to separate negotiation, he is able to identify the costs and revenues attributable to each unit. Should XYZ Ltd, treat construction of each unit as a separate construction contract according to AS 7?

Solution

As per AS 7 'Construction Contracts', when a contract covers a number of assets, the construction of each asset should be treated as a separate construction contract when:

a) separate proposals have been submitted for each asset;

b) each asset has been subject to separate negotiation and the contractor and customer have been able to accept or reject that part of the contract relating to each asset; and

c) the costs and revenues of each asset can be identified.

Therefore, XYZ Ltd. is required to treat construction of each unit as a separate construction contract.

Illustration 2

AB contactors enters into a contract on 1st January 20X1 with XY to construct a 5- storied building. Under the contract, AB is required to complete the construction in 3 years (i.e., by 31st December 20X3). The following information is relevant:

Fixed price (agreed) ₹5 crore

Material cost escalation (to the extent of 20% of increase in material cost)

Labour cost escalation (up to 30% of increase in minimum wages)

In case AB is able to complete the construction in less than 2 years and 10 months, it will be entitled for an additional incentive of ₹50 lakh. However, in case the construction is delayed beyond 3 years and 2 months, XY will charge a penalty of ₹20 lakh. At the start of the contract, AB has a reason to believe that construction will be completed in 2 years and 8 months. Assume that the construction was actually completed in 2 years 9 months.

Labour cost was originally estimated to be ₹1.20 crore (based on initial minimum wages). However, the costs have increased by 25% during the construction period.

Material costs have increased by 40% due to short-supply. The total increase in material cost due to the 40% escalation is ₹80 lakh.

You are required to suggest what should be the contract revenue in above case?

Assume that in year 20X2, XY has requested AB to increase the scope of the contract. An additional floor is required to be constructed and there is an increase in contract fee by ₹1 crore.

AB has incurred a cost of ₹20 lakh for getting the local authority approvals which it will be entitled to claim from XY in addition to the increase in the fixed fee.

Also measure the total contract revenue in this case.

Solution

Total Revenue after considering the escalation costs, claims and incentives:

	₹
Fixed Price:	5.00 crore
Incentive for early completion	0.50 crore
Material costs recovery (to the extent of 20%)	0.40 crore
Labour costs recovery (Actual increase is less than 30%)	0.30 crore

[1.20 crore x 25%]	
Total Contract Revenue	6.20 crore
Add: Variation to the contract	1.00 crore
Add: Claims recoverable from XY	0.20 crore
Total Contract Revenue	7.40 crore

Illustration 3 (Percentage completion method)

X Ltd. commenced a construction contract on 01-04-20X1. The fixed contract priceagreed was ₹2,00,000. The company incurred ₹81,000 in 20X1-X2 for 45% work and received ₹79,000 as progress payment from the customer. The cost incurred in 20X2-X3 was ₹89,000 to complete the rest of work. Show the extract of the Profit and Loss Account and Customer's Account for the related years.

Solution

Profit & Loss Account

Year	₹ 000	Year		₹ 000	
20X1-X2	To Construction Costs (for 45% work) To Net profit (for 45% work)	81 9 90	20X1-X2	By Contract Price (45% of Contract Price)	90 90
20X2-X3	To Construction costs (for 55% work) To Net Profit (for 55% work)	89 21 110	20X2-X3	By Contract Price (55% of Contract Price)	110 110

Customer's Account

Year	**₹ 000**	**Year**		**₹ 000**	
20X1-X2	To Contract Price	90 90	20X1-X2	By Bank By Balance c/d	79 11 90
20X2-X3	To Balance b/d To Contract Price	11 110 121	20X2-X3	By Bank	121 121

AS 7 provides that the percentage completion method should not be applied if the outcome of a construction contract cannot be estimated reliably. In such cases:

a) revenue should be recognised only to the extent of contract costs incurred of which recovery is probable; and contract costs should be recognised as an expense in the period in which they are incurred.

b) An expected loss on the construction contract should be recognised as an expense immediately in accordance with paragraph 35.

Illustration 4

PQ & Associates undertakes a construction contract the details of which are provided below:

Total Contract Value	₹40 lakh
Costs incurred to date	₹3 lakh
Estimated future costs of completion	₹30 lakh

Work completed 10%

The work has started some time ago and there is an uncertainty with respect to the outcome of the contract due to expected changes in regulations. PQ is certain that it would be able to recover the costs incurred to date.

Solution

In the given case, revenue and costs can only be recognised to the extent of the costs incurred and those which are expected to be recovered. Therefore, the profit & loss statement would appear as under:

Contract Revenue	₹3 lakh
Contract Costs	₹3 lakh
Contract Profit	Nil

When the uncertainties that prevented the outcome of the contract being estimated reliably cease to exist, revenue and expenses associated with the construction contract should be recognised by the percentage completion method.

Illustration 5 (Stage of completion for a loss-making contract)

Show Profit & Loss A/c (Extract) in books of a contractor in respect of the following data for Year 1.

Information for Year 1	₹ 000
Contract price (Fixed)	600
Cost incurred to date	390
Estimated cost to complete	260

Assume that the contract period is 2 years. The contract is 100% completed by Year 2. Actual costs incurred is the same as total estimated costs to complete (Cost incurred to date plus estimated cost to complete).

Solution

Amount INR ₹ 000

	Year (1)	Total up to Yr2 (2)	Year 2 (2) – (1)
A. Cost incurred to date	(390)	(650)	(260)
B. Estimate of cost to completion	(260)	-	-
C. Estimated total cost	(650)	650	650
D. Degree of completion (A/C)	60%	100%	40%
E. Revenue Recognised			
(60% of 600)	360		
(100% of 600)		600	240
Total foreseeable loss (650 – 600)	50		
Less: Loss for current year (E – A)	(30)		
Expected loss to be recognised immediately	(20)		
Reversal of Loss provision in Year 2			20

Profit & Loss A/c (Year 1)

	₹	₹	
To Construction costs	390	By Contract Price	360
To Provision for loss	20	By Net Loss	50
	410		410

Profit & Loss A/c (Year 2)

	₹		₹
To Construction costs	260	By Contract Price By Reversal of Provision for loss	240 20
	260		260

Illustration 6 (MTP Nov '21)

A firm of contractors obtained a contract for construction of bridges across river Revathi. The following details are available in the records kept for the year ended 31st March, 20X1.

	(₹ in lakhs)
Total Contract Price	1,000
Work Certified for the cost incurred	500
Work yet not Certified for the cost incurred	105
Estimated further Cost to Completion	495
Progress Payment Received	400
To be Received	140

The firm seeks your advice and assistance in the presentation of accounts keeping in view the requirements of AS 7 issued by your institute. **(5 Marks)**

Solution

(a)		**(₹in lakhs)**
	Amount of foreseeable loss:	
	Total cost of construction (500 + 105 + 495)	1,100
	Less: Total contract price	(1,000)
	Total foreseeable loss to be recognized as expense	100

According AS 7, when it is probable that total contract costs will exceed total contract revenue, the expected loss should be recognized as an expense immediately.

(b)		**(₹in lakhs)**
	Contract work-in-progress i.e. cost incurred to date are ₹ 605 lakhs	
	Work certified	500
	Work not certified	105
		605

This is 55% (605/1,100 x100) of total costs of construction.

(c) Proportion of total contract value recognized as revenue:

55% of ₹ 1,000 lakhs = ₹ 550 lakhs

(d) Gross Amount due from/to customers profits = (Contract costs + Recognized – Recognized Losses) – (Progress payments received + Progress payments to be received)

= (605 + Nil– 100) – (400 + 140) ₹ in lakhs

= [505 – 540] ₹ in lakhs

Amount due to customers = ₹ 35 lakhs

The amount of ₹ 35 lakhs will be shown in the balance sheet as liability.

(e) The relevant disclosures under AS 7 are given below:

	₹ in lakhs

Contract revenue	550
Contract expenses	605
Recognised profits less recognised losses	(100)
Progress billings ₹ (400 + 140)	540
Retentions (billed but not received from contractee)	140
Gross amount due to customers	35

Method of revenue recognition (use of percentage completion method)

Method of determining state of completion (based on proportionate cost

Illustration 7 (MTP Sep'22) (RTP Nov'19, Nov'22, May '23, Nov '23) (Past Exam May'19)

On 1st December, 20X1, Vishwakarma Construction Co. Ltd. undertook a contract to construct a building for ₹ 85 lakhs. On 31st March, 20X2, the company found that it had already spent ₹ 64,99,000 on the construction. Prudent estimate of additional cost for completion was ₹ 32,01,000. What amount should be recognized in the statement of profit and loss for the year ended 31st March, 20X2 as per provisions of Accounting Standard 7 (Revised)? **(5 Marks)**

Solution

	₹
Cost incurred till 31st March, 20X2	64,99,000
Prudent estimate of additional cost for completion	32,01,000
Total cost of construction	97,00,000
Less: Contract price	(85,00,000)
Total foreseeable loss	12,00,000

According to AS 7, the amount of ₹ 12,00,000 is required to be recognised as an expense.

Contract work in progress = $\frac{₹\ 64,99,000 \times 100}{97,00,000}$ = 67%

Proportion of total contract value recognised as turnover: = 67% of ₹ 85,00,000 = ₹ 56,95,000.

The amount of expected loss will be split as under:

Particulars	Workings	Amount
Expected Loss 97,00,000–85,00,000	12,00,000	
Contract revenue	67% of 85,00,000	56,95,000
Contract cost	Given	64,99,000
Actual loss	56,95,000– 64,99,000	8,04,000
Amount of provision required [As per Para 35]	12,00,000–8,04,000	3,96,000

Illustration 8

It is argued that profit on construction contracts should not be recognized until the contract is completed. Please explain whether you believe that this suggestion would improve the quality of financial reporting for long-term construction contracts.

Solution:

Usually, construction contracts are long term nature i.e., the contracts are entered in one accounting period, however, the work performed will flow into more than one accounting year. If the profit on construction contracts is not recognised over the construction period, then the costs incurred during the earlier years of the contract would be recognised without any corresponding revenue. This will result in losses for initial years followed high profits in future years.

The current treatment under AS 7 results in matching of revenue and associated costs as they are recognised during the same period. Also, the current accounting incorporates the prudence concept as any foreseeable losses are accounted for immediately.

Therefore, AS 7 results in a fair representation of the underlying financial substance of the transaction.

Illustration 9

A contractor has entered into a contract with a municipal body for construction of a flyover. As per the contract terms, the contractor will receive an additional ₹ 2 Crore as incentive if the construction of the flyover were to be finished within a period of two years from the start of the contract. The contractor wants to recognize this revenue since in the past he has been able to meet similar targets very easily.

Explain whether the contractor's view-point is correct?

Solution:

The contractor's view is not entirely correct in considering the variation as a part of contract revenue. There is an argument that he has been able to complete similar contracts within stipulated time. However, each contract needs to be assessed in isolation with respect to the specific challenges associated with the timing and uncertainty in completion.

Accordingly, the contractor needs to validate the assumptions with respect to the specific contract. Only after that assessment is done, the incentive of ₹ 2 crore may be included within the contract revenue.

Illustration 10 (RTP May'20)

A construction contractor has a fixed price contract for ₹ 9,000 lakhs to build a bridge in 3 years time frame. A summary of some of the financial data is as under:

(Amount ₹ in lakhs)

	Year 1	**Year 2**	**Year 3**
Initial Amount for revenue agreed in contract	9,000	9,000	9,000
Variation in Revenue (+)	-	200	200
Contracts costs incurred up to the reporting date	2,093	6,168*	8,100**
Estimated profit for whole contract	950	1,000	1,000

*Includes ₹ 100 lakhs for standard materials stored at the site to be used in year 3 to complete the work.

**Excludes ₹ 100 lakhs for standard material brought forward from year 2.

The variation in cost and revenue in year 2 has been approved by customer.

Compute year wise amount of revenue, expenses, contract cost to complete and profit or loss to be recognized in the Statement of Profit and Loss as per AS-7 (revised).

Solution:

The amounts of revenue, expenses and profit recognized in the statement of profit and loss in three years are computed below:

(Amount in ₹ lakhs)

	Up to the reporting date	**Recognized in previous years**	**Recognized in current year**
Year 1			
Revenue (9,000 x 26%)	2,340	-	2,340
Expenses (8,050 x 26%)	2,093	-	2,093
Profit	247	-	247
Year 2			

Revenue (9,200 x 74%)	6,808	2,340	4,468
Expenses (8,200 x 74%)	6,068	2,093	3,975
Profit	740	247	493
Year 3			
Revenue (9,200 x 100%)	9,200	6,808	2,392
Expenses (8,200 x 100%)	8,200	6,068	2,132
Profit	1,000	740	260

Working Note:

	Year 1	Year 2	Year 3
Revenue after considering variations	9,000	9,200	9,200
Less: Estimated profit for whole contract	950	1,000	1,000
Estimated total cost of the contract (A)	8,050	8,200	8,200
Actual cost incurred upto the reporting date (B)	2,093	6,068 (6,168-100)	8,200 (8,100+100)
Degree of completion (B/A)	26%	74%	100%

Illustration 11 (MTP Mar 21, Oct 20, April 22, Oct '23)

Akar Ltd. Signed on 01/04/X1, a construction contract for ₹ 1,50,00,000. Following particulars are extracted in respect of contract, for the year ended 31/03/X2.

- Materials used ₹ 71,00,000
- Labour charges paid ₹ 36,00,000
- Hire charges of plant ₹ 10,00,000
- Other contract cost incurred ₹ 15,00,000
- Labour charges of ₹ 2,00,000 are still outstanding on 31.3.X2.
- It is estimated that by spending further ₹ 33,50,000 the work can be completed in all respect.

You are required to compute profit/loss for the year to be taken to Profit & Loss Account and any provision for foreseeable loss to be recognized as per AS 7. **(5 Marks)**

Solution:

Statement showing the amount of profit/loss to be taken to Profit and Loss Ac count and additional provision for the foreseeable loss as per AS 7

Cost of Construction	₹	₹
Material used		71,00,000
Labour Charges paid	36,00,000	
Add: Outstanding on 31.03.20X2	2,00,000	38,00,000
Hire Charges of Plant		10,00,000
Other Contract cost incurred		15,00,000
Cost incurred upto 31.03.20X2		1,34,00,000
Add: Estimated future cost		33,50,000
Total Estimated cost of construction		1,67,50,000
Degree of completion (1,34,00,000/1,67,50,000 x 100)		80%
Revenue recognized (80% of 1,50,00,000)		1,20,00,000

Total foreseeable loss (1,67,50,000 - 1,50,00,000)		17,50,000
Less: Loss for the current year (1,34,00,000 - 1,20,00,000)		14,00,000
Loss to be provided for		**3,50,000**

Illustration 12

RT Enterprises has entered into a fixed price contract for construction of a tower with its customer. Initial tender price agreed is ₹ 220 crore. At the start of the contract, it is estimated that total costs to be incurred will be ₹ 200 crore. At the end of year 1, this estimate stands revised to ₹ 202 crore. Assume that the construction is expected to be completed in 3 years.

During year 2, the customer has requested for a variation in the contract. As a result of that, the total contract value will increase by ₹ 5 crore and the costs will increase by ₹ 3 crore.

RT has decided to measure the stage of completion on the basis of the proportion of contract costs incurred to the total estimated contract costs.

Contract costs incurred at the end of each year is:

Year 1: ₹ 52.52 crore

Year 2: ₹ 154.20 crore (including unused material of 2.5 crore)

Year 3: ₹ 205 crore.

You are required to calculate:

(a) Stage of completion for each year.

(b) Profit to be recognised for each year.

Solution:

(a) Stage of completion = Costs incurred to date / Total estimated costs

Year 1: 52.52 crore / 202 crore = 26%

Year 2: (154.20 crore – 2.50 crore) / 205 crore = 74%

Year 3: 205 crore / 205 crore = 100%

(b) Profit for the year

	Year 1	**Year 2**	**Year 3**
Contract Revenue (1)	57.20 crore	109.30 crore	58.50 crore
	(220 crore x 26%)	(225 crore x 74% - 57.20 crore)	(225 crore x 100% - 109.30 crore – 57.20 crore)
Contract Cost (2)	52.52 crore	99.18 crore	53.30 crore
	(202 crore x 26%)	(205 crore x 74% - 52.52 crore)	(205 crore x 100% - 99.18 crore – 52.52 crore)
Contract Profit (1) – (2)	4.68 crore	10.12 crore	5.20 crore

MTP / RTP / Past Exam

Question 1 (MTP Mar'18, Aug'18, Oct'19)

X Ltd. negotiates with Bharat Petroleum Corporation Ltd (BPCL), for construction of "Franchise Retail Petrol Outlet Stations". Based on proposals submitted to different Zonal offices of BPCL, the final approval for one outlet each in Zone A, Zone B, Zone C, Zone D, is awarded to X Ltd. Agreement (in single document) is entered into with BPCL for Rs. 490 lakhs. The agreement lays down values for each of the four outlets (Rs. 88 + 132 + 160 + 110 lakhs) in addition to individual completion time. You are required to examine and comment whether X Ltd., will treat it as a single contract or four separate contracts. **(5 Marks)**

Solution:

As per AS 7 on 'Construction Contracts', when a contract covers a number of assets, the construction of each asset should be treated as a separate construction contract when:

a) separate proposals have been submitted for each asset;

b) each asset has been subject to separate negotiation and the contractor and customer have been able toaccept or reject that part of the contract relating to each asset; and

c) the costs and revenues of each asset can be identified.

In the given case, each outlet is submitted as a separate proposal to different Zonal Office, which can be separately negotiated, and costs and revenues thereof can be separately identified. Hence, each asset will be treated as a "single contract" even if there is one document of contract. Therefore, four separate contract accounts have to be recorded and maintained in the books of X Ltd. For each contract, principles of revenue and cost recognition have to be applied separately and net income will be determined for each asset as per AS 7.

Question 2 (MTP Oct'18)

M/s Highway Constructions undertook the construction of a highway on 01.04.2016. The contract was to be completed in 2 years. The contract price was estimated at Rs.150 crores. Up to 31.03.2017 the company incurred Rs. 120 crores on the construction. The engineers involved in the project estimated that a further Rs. 45 crores would be incurred for completing the work. What amount should be charged to profit and loss statement for the year 2016 -17 as per the provisions of AS 7? **(5 Marks)**

Solution:

Statement showing amount to be charged to Profit and Loss Statement as per AS 7

	Rs. in crores
Cost of construction incurred upto 31.03.2017 Add:	120
Estimated future cost	45
Total estimated cost of construction	165
Degree of completion (120/165 x 100)	72.73%
Revenue recognized (72.73% of 150)	109 (approx)
Total foreseeable loss (165 – 150)	15
Less: Loss for the current year (120 – 109)	11
Loss to be provided for in the P&L statement	4

Question 3 (MTP Oct '21, April '23) (Past Exam May'18, May '23)

PRZ & Sons Ltd. are Heavy Engineering contractors specializing in construction of dams. From the records of the company, the following data is available pertaining to year ended 31st March, 2021:

	(Rs. crore)
Total Contract Price	2,400
Work Certified	1,250
Work pending certification	250
Estimated further cost to completion	1,750
Stage wise payments received	1,100
Progress in pipe line	300

Using the given data and applying the relevant Accounting Standard you are required to:

(i) Compute the amount of profit/loss for the year ended 31st March, 2021.

(ii) Arrive at the contract work in progress as at the end of financial year 2020-21.

(iii) Determine the amount of revenue to be recognized out of the total contract value.

(iv) Work out the amount due from/to customers as at year end. **(5 Marks)**

Solution:

(i)	Calculation of profit/ loss for the year ended 31st March, 2021	(Rs. in crores)
	Total estimated cost of construction (1,250 + 250 + 1,750)	3,250
	Less: Total contract price	(2,400)
	Total foreseeable loss to be recognized as expense	850

According to AS 7 (Revised 2002) "Construction Contracts", when it is probable that total contract costs will exceed total contract revenue, the expected loss should be recognized as an expense immediately.

(ii)	Contract work-in-progress i.e. cost incurred to date	(Rs. in crores)
	Work certified	1,250
	Work not certified	250
		1,500

(iii) Proportion of total contract value recognized as revenue

Percentage of completion of contract to total estimated cost of construction

= (1,500 / 3,250) X 100 = 46.15%

Revenue to be recognized till date = 46.15% of Rs. 2,400 crores = Rs. 1,107.60 crores.

(iv) Amount due from / to customers = Contract costs + Recognized profits – Recognized losses – (Progress payments received + Progress payments to be received)

= Rs. [1,500 + Nil – 850 – (1100 + 300)] crores

= Rs. [1,500 – 850 – 1,400] crores

Amount due to customers (shown as liability) = Rs. 750 crores.

Question 4 (MTP Oct'22, Past Exam July 21) (RTP May'24)

The following data is provided for M/s. Raj Construction Co.

(i) Contract Price - ₹ 85 lakhs

(ii) Materials issued - ₹ 21 Lakhs out of which Materials costing ₹ 4 Lakhs is still lying unused.at the end of the period.

(iii) Labour Expenses for workers engaged at site - ₹ 16 Lakhs (out of which ₹ 1 Lakh is still unpaid)

(iv) Specific Contract Costs = ₹ 5 Lakhs

(v) Sub-Contract Costs for work executed - ₹ 7 Lakhs, Advances paid to Sub-Contractors - ₹ 4 Lakhs

(vi) Further Cost estimated to be incurred to complete the contract - ₹ 35 Lakhs

You are required to compute the Percentage of Completion, the Contract Revenue and Cost to be recognized as per AS-7 **(5 Marks)**

Solution:

Computation of contract cost

	₹ Lakh	₹ Lakh
Material cost incurred on the contract (net of closing stock)	21-4	17
Add: Labour cost incurred on the contract (including outstanding amount)		16
Specified contract cost	given	5
Sub-contract cost (advances should not be considered)		7
Cost incurred (till date)		45
Add: further cost to be incurred		35
Total contract cost		80

Percentage of completion = Cost incurred till date/Estimated total cost

= ₹ 45,00,000/₹ 80,00,000

= 56.25%

Contract revenue and costs to be recognized

Contract revenue (₹ 85,00,000x56.25%) = ₹ 47,81,250

Contract costs = ₹ 45,00,000

Question 5 (RTP Nov '21)

a) In the case of a fixed price contract, the outcome of a construction contract can be estimated reliably only when certain conditions prescribed under AS 7 are satisfied. You are required to describe these conditions mentioned in the standard.

b) Mr. 'X' as a contractor has just entered into a contract with a local municipal body for building a flyover. As per the contract terms, 'X' will receive an additional Rs. 2 crore if the construction of the flyover were to be finished within a period of two years of the commencement of the contract. Mr. X wants to recognize this revenue since in the past he has been able to meet similar targets very easily. Is X correct in his proposal? Discuss.

Solution:

a) In the case of a fixed price contract, the outcome of a construction contract can be estimated reliably when all the following conditions are satisfied:

(i) total contract revenue can be measured reliably;

(ii) it is probable that the economic benefits associated with the contract will flow to the enterprise;

(iii) both the contract costs to complete the contract and the stage of contract completion at the reporting date can be measured reliably; and

(iv) the contract costs attributable to the contract can be clearly identified and measured reliably so that actual contract costs incurred can be compared with prior estimates.

b) According to AS 7 (Revised) 'Construction Contracts', incentive payments are additional amounts payable to the contractor if specified performance standards are met or exceeded. For example, a contract may allow for an incentive payment to the contractor for early completion of the contract. Incentive payments are included in contract revenue when: (i) the contract is sufficiently advanced that it is probable that the specified performance standards will be met or exceeded; and (ii) the amount of the incentive payment can be measured reliably. In the given problem, the contract has not even begun and hence the contractor (Mr. X) should not recognize any revenue of this contract.

Question 6 (RTP May'18, Nov'18, Nov'20)

Uday Constructions undertake to construct a bridge for the Government of Uttar Pradesh. The construction commenced during the financial year ending 31.03.2019 and is likely to be completed by the next financial year. The contract is for a fixed price of Rs. 12 crore with an escalation clause. You are given the following information for the year ended 31.03.2019:

Cost incurred upto 31.03.2019	Rs. 4 crore
Further cost estimated to complete the contract	Rs. 6 crore

Escalation in cost was by 5%. Hence, the contract price is also increased by 5%.

You are required to ascertain the stage of completion and compute the amount of revenue and profit to be recognized for the year as per AS 7.

Solution:

	Rs. in crore
Cost of construction of bridge incurred upto 31.3.2019	4.00
Add: Estimated future cost	6.00
Total estimated cost of construction	10.00
Contract Price (12 crore x 1.05)	12.60 crore

Stage of completion

Percentage of completion till date to total estimated cost of construction

= (4/10)X100 = 40%

Revenue and Profit to be recognized for the year ended 31st March, 2019 as per AS 7:

Proportion of total contract value recognized as revenue

= Contract price x percentage of completion

= Rs. 12.60 crore x 40% = Rs. 5.04 crore Profit for the year ended 31st March, 2019 = Rs. 5.04 crore – Rs. 4 crore = 1.04 crore.

Question 7 (RTP May 22)

B Ltd. undertook a construction contract for ₹ 50 crores in April, 2020. The cost of construction was initially estimated at ₹ 35 crores. The contract is to be completed in 3 years. While executing the contract, the company estimated that the cost of completion of the contract would be ₹ 53 crores.

Can the company provide for the expected loss in the financial Statements for the year ended 31st March, 2021? Explain.

Solution:

As per para 35 of AS 7 "Construction Contracts", when it is probable that total contract costs will exceed total contract revenue, the expected loss should be recognized as an expense immediately. Therefore, the foreseeable loss of ₹ 3 crores (₹ 53 crores less ₹ 50 crores) should be recognized as an expense immediately in the year ended 31st March, 2021. The amount of loss is determined irrespective of

(i) Whether or not work has commenced on the contract;

(ii) Stage of completion of contract activity; or

(iii) The amount of profits expected to arise on other contracts which are not treated as a single construction contract in accordance provisions of AS 7.

Question 8 (Past Exam Nov 20) (MTP Sep '23)

Rajendra undertook a contract ₹ 20,00,000 on an arrangement that 80% of the value of work done, as certified by the architect of the contractee should be paid immediately and that the remaining 20% be retained until the Contract was completed. In Year 1, the amounts expended were ₹ 8,60,000, the work was certified for ₹ 8,00,000 and 80% of this was paid as agreed. It was estimated that future expenditure to complete the Contract would be ₹ 10,00,000. In Year 2, the amounts expended were ₹ 4,75,000. Three-fourth of the work under contract was certified as done by December 31st and 80% of this was received accordingly. It was estimated that future expenditure to complete the Contract would be ₹ 4,00,000. In Year 3, the amounts expended were ₹ 3,10,000 and on June 30th, the whole Contract was completed. Show how Contract revenue would be recognized in the P & L A/c of Mr. Rajendra each year. **(5 Marks)**

Solution:

(a) Year 1	**₹**
Actual expenditure	8,60,000
Future estimated expenditure	10,00,000
Total Expenditure	18,60,000

% of work completed = $\frac{8,60,000}{18,60,000}$ ×100 = 46.24%(Rounded off)

Revenue to be recognized (cumulative) = 20,00,000 x 76.95% = 15,39,000

Less: revenue recognized in Year 1 = (9,24,800)

Revenue to be recognized in Year 2 ₹ 6,14,200

Year 2

Actual expenditure	4,75,000
Future Expenditure	4,00,000
Expenditure incurred in year 1	8,60,000
	17,35,000
% of work completed $= \frac{4,75,000+8,60,000}{17,35,000}$	= 76.95%(Rounded off)
Revenue to be recognized (cumulative)	= 20,00,000 ×76.95%
	= 15,39,000
Less: revenue recognized in Year 1	= (9,24,800)
Revenue to be recognized in Year 1	= Rs. 6,14,200

Year 3

Whole contract got completed therefore total contract value less revenue recognized up to year 2 will be amount of revenue to be recognized in year 3 i.e. 20,00,000 – 15,39,000 (9,24,800 + 6,14,200) = ₹ 4,61,000. Note: Calendar year has been considered as accounting year.

Question 9 (MTP May'22)

Grace Ltd., a firm of contractors provided the following information in respect of a contract for the year ended on 31st March,2022:

Particulars	**(₹ in '000)**
Fixed Price Contract with an escalation clause Work Certified	35,000
Work not Certified (includes ₹ 26,25,000 for materials issued, out of which material	17,500
lying unused at the end of the period is ₹ 1,40,000)	
Estimated further cost to completion	3,815
Progress Payment Received Payment to be Received	17,325
Escalation in cost is by 8% and accordingly the contract price is increased by 8%	14,000
	4,900

From the above information, you are required to:

I. Compute the contract revenue to be recognized.

II. Calculate Profit /Loss for the year ended 31st March,2022 and additional provision for loss to be made, if any, for the year ended 31st March, 2022. **(5 Marks)**

Solution:

Calculation of total estimated cost of construction

		₹ in thousand
Cost of Contract incurred till date		

Work certified	17,500	
Work not certified (3,815 thousand – 140 thousand)	3,675	21,175
Add: Estimated future cost		17,325
Total estimated cost of construction		38,500
Contract Price (35,000 thousand x 1.08)		37,800

Stage of completion

Percentage of completion till date to total estimated cost of construction = [Cost of work completed till date / total estimated cost of the contract] x 100

= [₹ 21,175 thousand / ₹ 38,500 thousand] x 100= 55%

Revenue to be recognized for the year ended 31stMarch, 2022

Proportion of total contract value recognized as revenue = Contract price x percentage of completion = ₹ 37,800 thousand x 55% = ₹ 20,790 thousand

Loss to be recognized for the year ended 31st March, 2022

Loss for the year ended 31stMarch, 2022 = Cost incurred till date – Revenue to be recognized for the year ended 31st March, 2022

= ₹ 21,175 thousand – ₹ 20,790 thousand = ₹ 385 thousand

Provision for loss to be made at the end of 31stMarch, 2022

		₹ in thousand
Total estimated loss on the contract		
Total estimated cost of the contract	38,500	
Less: Total revised contract price	(37,800)	700
Less: Loss recognized for the year ended 31st March, 2022		(385)
Provision for loss to be made at the end of 31stMarch, 2022		315

Question 10 (RTP Sep'24)

Mehta ltd. has undertaken bridge construction contract wherein, bridge will be constructed in 3 years. The details of the contracts are as follows:

(i) Initial contract revenue ₹ 900 crore

(ii) Initial contract cost ₹ 800 crore

	Years		
	I	II	III
	₹ in crore	₹ in crore	₹ in crore
Estimated contract cost	805		
Increase in contract revenue	-	20	
Estimated additional increase cost	-	15	

Contract cost incurred upto	161	584	820

At the end of year II, cost incurred includes ₹ 10 crore, for material stored at the sites to be used in year III to complete the project.

State the amount of revenue, expenses and profit to be recognized in the Statement of Profit and Loss in these three years.

Solution:

Statement showing analysis of the contract details

(₹ in crore)

	Year I	Year II	Year III
(a) Initial revenue agreed	900	900	900
(b) Increase in contract revenue	-	20	20
(c) Total Contract Value	900	920	920
(d) Contract cost incurred upto the date of reporting	161	574	820
		(excluding ₹ 10* crore of material stored)	
(e) Estimated cost to complete	644	246	-
(f) Total estimated contract	805	820(805+15)	820
(g) Stage of Completion	20%	70%	100%
[(d/f) x 100)]	(161/805 x 100)	(574/820 x 100)	(820/820 x 100)

* Note: 10 crore, for material stored at the sites to be used in its 1st year. i.e. in IInd year it is already included so it will be deducted in II year only.

Statement showing amount of revenue, expenses and profit to be recognized in the Statement of Profit and Loss in three years

(₹ in crore)

	Upto reporting date	Recognised in the prior year	Recognized in the current year
Year I			
Revenue (900 x 20/100)	180	-	180
Expenses	161	-	161
Profit	19	-	19
Year II			
Revenue (920 x 70/100)	644	180	464
Expenses (820 x 70/100)	574	161	413
Profit	70	19	51
Year III			
Revenue	920	644	276
Expenses	820	574	246
Profit	100	70	30

MCQs

The below information relates to Questions 1- – 3:

XY Ltd. agrees to construct a building on behalf of its client GH Ltd. on 1st April 20X1. The expected completion time is 3 years. XY Ltd. incurred a cost of ₹ 30 lakh up to 31st March 20X2. It is expected that additional costs of ₹ 90 lakh. Total contract value is ₹ 112 lakh. As at 31st March 20X2, XY Ltd. has billed GH Ltd. For ₹ 42 lakh as per the agreement. Assume that the work is completed to the extent of 75% by the end of Year 2.

1. Revenue to be recognized by XY Ltd. for the year ended 31st March 20X2 is

(a) ₹ 28 lakh

(b) ₹ 42 lakh

(c) ₹ 30 lakh

(d) ₹ 32 lakh

2. Total expense to be recognised in Year 1 is

(a) ₹ 30 lakh

(b) ₹ 120 lakh

(c) ₹ 38 lakh

(d) ₹ 36 lakh

3. Revenue to be recognised for year 2 is

(a) ₹ 84 lakh

(b) ₹ 42 lakh

(c) ₹ 56 lakh

(d) ₹ 28 lakh

Below information relates to Questions 4 – 5

M/s AV has presented the information for Contract No. XY123:

Total contract value ₹ 370 lakh

Certified work completed ₹ 320 lakh

Costs incurred to date ₹ 360 lakh

Progress Payments received ₹ 300 lakh

Expected future costs to be incurred ₹ 50 lakh

4. Revenue to be recognised by M/s AV is

(a) ₹ 320 lakh

(b) ₹ 370 lakh

(c) ₹ 360 lakh

(d) ₹ 400 lakh

5. Total expense to be recognised by M/s AV is

(a) ₹ 360 lakh

(b) ₹ 400 lakh

(c) ₹ 320 lakh

(d) ₹ 360 lakh

6. LP Contractors undertakes a fixed price contract of ₹ 200 lakh. Transactions related to the contract include:

Material purchased: ₹ 80 lakh

Unused material: ₹ 30 lakh

Labour charges: ₹ 60 lakh

Machine used for 3 years for the contract. Original cost of the machine is ₹ 100 lakh. Expected useful life is 15 years.

Estimated future costs to be incurred to complete the contract: ₹ 80 lakh.

Loss on contract to be recognised is:

(a) ₹ 40 lakh

(b) ₹ 10 lakh

(c) ₹ 90 lakh

(d) ₹ 50 lakh

MCQ

1. (a) 2. (d) 3. (c) 4. (a) 5. (d) 6. (b)

Solved Example

Example 1

Entity XY contracts with AB to construct 2 residential buildings in the same premises. The construction of both buildings will begin simultaneously. Building material, construction work, and other related activities will go on in parallel to provide cost savings to entity XY. This also helps AB achieve a timely completion of the two buildings and negotiate a consolidated price for the two buildings.

The above example suggests that there is a single contract negotiated to construct two buildings that are closely interrelated and interdependent in terms of their ultimate purpose and use. Therefore, this represents a Construction Contract.

Example 2

H, a sole-proprietor, contracts with M/s DM Construction, to dismantle his office premises and construct it from scratch.

In the given case, the construction contract includes both demolition as well as construction of a new building.

Example 3: Cost-Plus contract

The language can be changed as under (Entire Question):

ABC Constructions has a contract to build an office building.

The terms and conditions are as under:

1. ABC's profit is agreed at:
    - 25% on expected contract's cost; For this purpose, the expected cost cannot exceed ₹ 22 crores.
2. The agreed price will be revised depending upon the actual cost incurred.
    - The cost for fixation will be taken actual cost or ₹ 22 crores whichever is less.

Price fixation based on expected cost:

Assume that the costs expected to be incurred by ABC are ₹16 crore. Thus, ABC can charge a profit of ₹ 4 crores (25% on actual cost).

The contract price will be ₹ 20 crores. (₹16 crores plus ₹ 4 crores)

Price fixation based on actual cost incurred – Scenario 1:

However, if cost incurred by ABC is ₹15 crore, in that case, it would be able to charge a profit of:

= 25% on ₹15 crore = 15 x 25% = ₹ 3.75 crore

Thus, Total Value of the contract will stand revised as follows:

= Actual Costs + Profit (25% of costs) = ₹ 15 crore + ₹ 3.75 crore = ₹ 18.75 crores.

Price fixation based on actual cost incurred – Scenario 2:

For any unavoidable reasons, if total cost incurred by ABC is ₹ 25 crore, it can only charge a profit on the expected costs of ₹22 crore as under:

Thus, Total Value of the contract will stand revised as follows:

= Expected Costs + Profit (20% of costs) = ₹ 22 crore + ₹ 4.40 crore = ₹ 26.40 crores.

Analysis of the above scenario:

Cost actually incurred by ABC = ₹ 25 crores.

Actual profit earned by ABC = Total Value of the contract

– Actual costs incurred

= ₹ 26.40 Crores

– ₹ 25 Crores = ₹ 1.40 Crores.

Example 4

X Ltd. commenced a construction contract on 01/04/X1. The contract price agreed was reimbursable cost plus 10%. The company incurred ₹1,00,000 in 20X1-X2, of which cost of ₹90,000 is reimbursable. The further non-reimbursable costs to be incurred to complete the contract are estimated at ₹5,000. The other costs to complete the contract could not be estimated reliably. The Profit & Loss A/c extract of X Ltd. for 20X1-X2 is shown below:

Solution

Profit & Loss Account

	₹ 000		**₹ 000**
To Construction Costs	100	By Contract Price (90+9)	99
To Provision for loss	5	Net loss	6
	105		**105**