

## TOPIC – 13

### ACCOUNTING STANDARDS – 7

### CONSTRUCTION CONTRACTS

#### TOTAL NO. OF QUESTIONS - 13

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#### SERIES 100 - PRACTICAL QUESTIONS

##### Q.A57.SM.101: (% of Completion)

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

##### Q.A57.SM.102: (% of Completion & Foreseeable Loss)

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

	Rs.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).

**Q.A57.SM.103: (Foreseeable Loss)**

On 1<sup>st</sup> December, 20X1, Vishwakarma Construction Co. Ltd. undertook a contract to construct a building for Rs.85 lakhs. On 31<sup>st</sup> March, 20X2, the company found that it had already spent Rs.64,99,000 on the construction. Prudent estimate of additional cost for completion was Rs.32,01,000. What amount should be charged to revenue in the final accounts for the year ended 31st March, 20X2 as per provisions of Accounting Standard 7 (Revised)?

**Q.A57.SM.104: (% of Completion)**

A firm of contractors obtained a contract for construction of bridges across river Krishna. The following details are available for the year ended 31.3.04

Total Contract Price	1,000
Work Certified	500
Work not Certified	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 requirement of AS 7.

**Q.A57.SM.105:(MTP Oct20 & May21) (% of Completion & Foreseeable Loss)**

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



- Materials used Rs. 71,00,000
- Labour charges paid Rs. 36,00,000
- Hire charges of plant Rs. 10,00,000
- Other contract cost incurred Rs. 15,00,000
- Labour charges of Rs. 2,00,000 are still outstanding on 31.3.X2.
- It is estimated that by spending further Rs.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.

**Q.A57.SM.106 (Contract Revenue)**

AB contractors enters into a contract on 1<sup>st</sup> 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 31<sup>st</sup> 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.

**Q.A57.SM.107 (% of Completion)**

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.

**Q.A57.RMP.108: (Exam May 18 & May 23, MTP Nov21)**

Sarita Construction Co. obtained a contract for construction of a dam. The following details are available in records of company for the year ended 31st March, 2018:



	Rs In Lakhs
Total Contract Price	12,000
Work Certified	6,250
Work not certified	1,250
Estimated further cost to completion	8,750
Progress payment received	5,500
Progress payment to be received	1,500

Applying the provisions of Accounting Standard 7 "Accounting for Construction Contracts" you are required to compute:

- (i) Profit/Loss for the year ended 31st March, 2018.  
 (ii) Contract work in progress as at end of financial year 2017-18.  
 (iii) Revenue to be recognized out of the total contract value.  
 (iv) Amount due from/to customers as at the year end.

**Q.A57.RMP.109: (RTP May'24) (% of Completion)**

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

- Contract Price - ₹ 85 lakhs
- Materials issued - ₹ 21 Lakhs out of which Materials costing ₹ 4 Lakhs is still lying unused at the end of the period.
- Labor Expenses for workers engaged at site - ₹ 16 Lakhs (out of which ₹ 1 Lakh is still unpaid)
- Further Cost estimated to be incurred to complete the contract - ₹ 35 Lakhs
- Specific Contract Cost - Rs. 5 Lakhs
- Sub-contract Cost (work done) - Rs. 7 Lakhs
- Advance to Sub-contractor - Rs. 4 Lakhs.

You are required to compute the Percentage of Completion, the Contract Revenue and Cost to be recognized as per AS-7.

## SOLUTIONS OF ABOVE QUESTIONS OF SERIES 100

### SOLUTION Q101

#### Profit & Loss Account

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

#### Customer account

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

### SOLUTION Q102

	Rs.000
A. Cost incurred to date	390
B. Estimate of cost to completion	<u>260</u>
C. Estimated total cost	<u>650</u>
D. Degree of completion (A/C)	60%
E. Revenue Recognised (60% of 600)	360
Total foreseeable loss (650-600)	50
Less: Loss for current year (E-A)	<u>(30)</u>
Expected loss to be recognised immediately	<u>20</u>

#### Profit & Loss A/C

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

**SOLUTION Q103**

Cost incurred till 31 <sup>st</sup> March 20X1	64,99,000
Prudent estimate of additional cost of completion	32,01,000
Total Cost of Construction	97,00,000
Less – Contract Price	85,00,000
<b>Total Foreseeable Losses</b>	<b>12,00,000</b>

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

Contract work in Progress =  $64,99,000 \times 100 / 97,00,000 = 67\%$

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	$12,00,000 - 8,04,000$	3,96,000

**SOLUTION Q104**

(a)	Amount of Foreseeable Loss	
	Total Cost of Construction (500+105+495)	1,100
	Less: Total Contract Price	(1,000)
	<b>Total foreseeable loss to be recognised as expense</b>	<b>100</b>

According to AS 7, When it is probable that total contract cost will exceed total contract revenue, the expected loss should be recognised as an expense immediately.

(b)	Contracts work-in-progress i.e., Cost incurred to date are ₹ 605 lakhs	(₹ in lakhs)
	Work Certified	500
	Work uncertified	105
		<b>605</b>

This is  $55\%$  ( $605 / 1,100 \times 100$ ) of total cost of Construction

(c) Proportion of total contract value recognise as Revenue:

$55\%$  of ₹ 1,000 lakhs = ₹ 550 lakhs.

(a) Amount Due from/to Customers: (Contract Cost + Recognised Profits – Recognised Losses) – (Progress Payments Received + Progress Payments to be received)

=  $(605 + Nil - 100) - (400 + 140)$

=  $505 - 540$

Amount Due to Customers = ₹ 35 lakhs

(b) The relevant disclosures under AS 7 are given bellow:

Contract Revenue	550
Contract Expenses	605
Recognised Profits less Recognised Losses	(100)
Progress Billing ₹ (400+ 140)	540

Retention (billed but not received from contractee)	140
Gross amount due to customers	35

**SOLUTION: Q105**

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

Cost of Construction	Rs.	Rs.
Material used		71,00,000
Labour Charges paid	36,00,000	
Add: Outstanding on 31.03.20X2	<u>2,00,000</u>	38,00,000
Hire Charges of Plant		10,00,000
Other Contract cost incurred		<u>15,00,000</u>
<b>Cost incurred up to 31.03.20X2</b>		<b>1,34,00,000</b>
Add: Estimated future cost		<u>33,50,000</u>
<b>Total Estimated cost of construction</b>		<b><u>1,67,50,000</u></b>
Degree of completion (1,34,00,000/1,67,50,000x100)		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)		<u>14,00,000</u>
<b>Loss to be provided for</b>		<b>3,50,000</b>

**SOLUTION Q106**

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%)	<u>0.30 crore [1.20 crore x 25%]</u>
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

**SOLUTION Q107**

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

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

**SOLUTION: Q108**

(i)	Loss for the year ended, 31st March, 2018	(Rs in lakhs)
	Amount of foreseeable loss	
	Total cost of construction (6,250 + 1,250 + 8,750)	16,250
	Less: Total contract price	(12,000)

Total foreseeable loss to be recognised as expense	4,250
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According to AS 7, when it is probable that total contract costs will exceed total contract revenue, the expected loss should be recognised as an expense immediately.

Loss for the year ended, 31st March, 2018 amounting Rs 4,250 will be recognized.

(ii)	<b>Contract work-in-progress as on 31.3.18</b>	<b>(Rs in lakhs)</b>
	Contract work-in-progress i.e., cost incurred to date are Rs 7,500 lakhs:	6,250
	Work certified	1,250
	Work not certified	7,500

(iii) **Proportion of total contract value recognised as revenue**

Cost incurred till 31.3.18 is 46.15%  $(7,500/16,250 \times 100)$  of total costs of construction.

Proportion of total contract value recognised as revenue:

46.15% of Rs 12,000 lakhs = Rs 5,538 lakhs

(iv) **Amount due from/to customers at year end**

(Contract costs + Recognised profits - Recognised Losses) - (Progress payments received + Progress payments to be received)

$$= (7,500 + \text{Nil} - 4,250) - (5,500 + 1,500) \text{ Rs in lakhs}$$

$$= [3,250 - 7,000] \text{ Rs in lakhs}$$

Amount due to customers = Rs 3,750 lakhs

**SOLUTION: Q109**

**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
<b>Cost incurred (till date)</b>		<b>45</b>
Add: further cost to be incurred		35
<b>Total contract cost</b>		<b>80</b>

- **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**

$$\text{Contract revenue } (₹ 85,00,000 \times 56.25\%) = ₹ 47,81,250$$

$$\text{Contract costs} = ₹ 45,00,000$$

**SERIES 200 – CASE STUDIES BASED QUESTIONS****Q.AS7.SM.201**

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.

**Q.AS7.SM.202**

It is argued that profit on construction contracts should not be recognised 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.

**Q.AS7.SM.203: (Segmentation Criteria)**

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?

**Q.AS7.RMP.204: (RTP May21 & May'25)**

a) Sky Limited belongs to Heavy Engineering Contractors specializing in construction of Flyovers. The company just entered into a contract with a local municipal corporation for building a flyover. No

*activity has started on this contract.*

*As per the terms of the contract, Sky Limited will receive an additional Rs. 50 lakhs if the construction of the flyover were to be finished within a period of two years from the commencement of the contract. The accountant of the entity wants to recognize this revenue since in the past the company has been able to meet similar targets very easily. Give your opinion on this treatment.*

- (b) ABC Ltd., a construction contractor, undertakes the construction of commercial complex for XYZ Ltd. ABC Ltd. submitted separate proposals for each of 3 units of commercial complex. A single agreement is entered into between the two parties. The agreement lays down the value of each of the 3 units i.e. Rs. 50 lakh, Rs. 60 lakh and Rs. 75 lakh respectively. Agreement also lays down the completion time for each unit.

*Comment, with reference to AS 7, whether ABC Ltd., should treat it as a single contract or three separate contracts.*

## SOLUTIONS OF ABOVE QUESTIONS OF SERIES 200

### SOLUTION Q201

*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.*

### SOLUTION Q202

*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 by high profits in future years.***

*The current treatment under AS 7 results in matching 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 fair representation of the underlying financial substance of the transaction.*

### SOLUTION Q203

*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:*

- (c) *Separate proposals have been submitted for each asset;*
- (d) *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*
- (e) *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.*

### **SOLUTION Q204**

**(a)** *According to AS 7 '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 both the conditions are met:*

- (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 (Sky Limited) should not recognize any revenue of this contract. Therefore, the accountant's contention for recognizing Rs. 50 lakhs as revenue is not correct.*

**(b)** *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.*

*ABC Ltd. has submitted separate proposals for each of the 3 units of commercial complex. Also, the revenue and completion time has been laid down for each unit separately which implies separate negotiation for them.*

*Therefore, ABC Ltd. is required to treat the construction of each unit as a separate construction contract as the above-mentioned conditions of AS 7 are fulfilled in the given case.*



Student Notes: -