

# AS 16

# Borrowing Costs

Borrowing Cost: Interest → Qualifying Asset → subst. period of time  
 incurr (+) generally : 12m

### Question 1

A company incorporated in June 2020, has setup a factory within a period of 8 months with borrowed funds. The construction period of the assets had reduced drastically due to usage of technical innovations by the company and the company is able to justify the reasons for the same. Whether interest on borrowings for the period prior to the date of setting up the factory should be capitalized although it has taken less than 12 months for the assets to get ready for use. You are required to comment on the necessary treatment with reference to AS 16. (MTP 5 Marks April 21, April 22, RTP Nov'18)

### Answer 1 Quote

As per AS 16 'Borrowing Costs', a qualifying asset is an asset that necessarily takes a substantial period of time to get ready for its intended use or sale. Further, the standard states that what constitutes a substantial period of time primarily depends on the facts and circumstances of each case. However, ordinarily, a period of twelve months is considered as substantial period of time unless a shorter or longer period can be justified on the basis of facts and circumstances of the case. In estimating the period, time which an asset takes, technologically and commercially, to get it ready for its intended use or sale is considered.

It may be implied that there is a rebuttable presumption that a 12 months period constitutes substantial period of time.

Analysis  
 Under present circumstances where construction period has reduced drastically due to technical innovation, the 12 months period should at best be looked at as a benchmark and not as a conclusive yardstick. It may so happen that an asset under normal circumstances may take more than 12 months to complete. However, an enterprise that completes the asset in 8 months should not be penalized for its efficiency by denying it interest capitalization and vice versa. The substantial period criteria ensures that enterprises do not spend a of time and effort capturing immaterial interest cost for purposes of capitalization.

Conclusion  
 Therefore, if the factory is constructed in 8 months, then it shall be considered as a qualifying asset. The interest on borrowings for the same shall be capitalized although it has taken less than 12 months for the asset to get ready to use.

$$BC = 68.2 \rightarrow P/E/A ; QA \rightarrow \text{cost cap.} \Rightarrow 564/620 \times 68.2 = 62.04L$$

= 6.16L  
P/L

for other purp → P/L Dr.

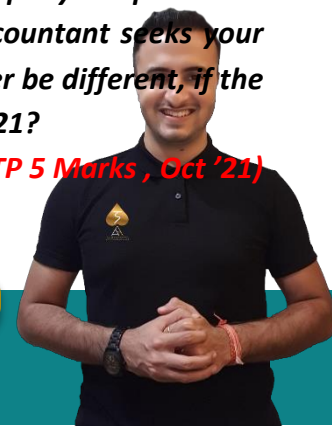
### Question 2

U Limited has obtained a term loan of ₹ 620 lacs for a complete renovation and modernization of its Factory on 1st April, 2020. Plant and Machinery was acquired under the modernization scheme and installation was completed on 30th April, 2021. An expenditure of ₹ 564 lacs was incurred on this Plant and Machinery and the balance loan of ₹ 56 lacs has been used for working capital purposes. The company has paid total interest of ₹ 68.20 lacs during financial year 2020-2021 on the above loan. The accountant seeks your advice how to account for the interest paid in the books of accounts. Will your answer be different, if the whole process of renovation and modernization gets completed by 28th February, 2021?

### Answer 2

$$\begin{matrix} 620 & \rightarrow & 564 \\ 68.2 & \times & x \end{matrix}$$

(MTP 5 Marks, Oct '21)



**Borrowing Cost:** As per AS 16 'Borrowing Costs', borrowing costs that are directly attributable to the acquisition, construction or production of a qualifying asset should be capitalized as part of the cost of that asset. Other borrowing costs should be recognized as an expense in the period in which they are incurred. Borrowing costs should be expensed except where they are directly attributable to acquisition, construction or production of qualifying asset.

**Qualifying Asset:** A qualifying asset is an asset that necessarily takes a substantial period of time (ordinarily, a period of twelve months unless a shorter or longer period can be justified on the basis of the facts and circumstances of the case) to get ready for its intended use or sale.

**(i) When construction of asset completed on 30th April, 2021**

The treatment for total borrowing cost of ₹ 68.20 lakhs will be as follows:

Purpose	Nature	Interest to be capitalized ₹ in lakhs	Interest to be charged to profit and loss account ₹ in lakhs
Plant and machinery	Qualifying asset	[68.20 x (564/620)]	
Under Modernization		= 62.04	
And renovation			
scheme			
Working Capital	Not a qualifying asset		[68.20 x (56/620)]
			= 6.16
		62.04	6.16

**(ii) When construction of assets is completed by 28th February, 2021**

1-4-20 - 28-2-21 ⇒ 11 m

In this scenario, when the process of renovation gets completed in less than 12 months, the plant and machinery will not be considered as qualifying assets (until and unless the entity specifically considers that the asset took substantial period of time for completing their construction) and the whole of interest will be required to be charged off / expensed off to Profit and loss account.

**Question 3**



**(Includes concepts of AS 11- Effects of changes in Foreign Exchange Rates)**

Omega Limited has borrowed a sum of **US \$ 10,00,000** at the beginning of Financial Year 2021-22 for its residential project at **4%**. The interest is payable at the end of the Financial Year. At the time of availment of loan exchange rate was **₹ 56 per US \$** and the rate as on **31st March, 2022** was **₹ 62 per US \$**. If Omega Limited had borrowed the loan in India in Indian Rupee equivalent, the pricing of loan would have been **10.50%**.

You are required to compute Borrowing Cost and exchange difference for the year ending 31st March, 2022 as per applicable Accounting Standards.

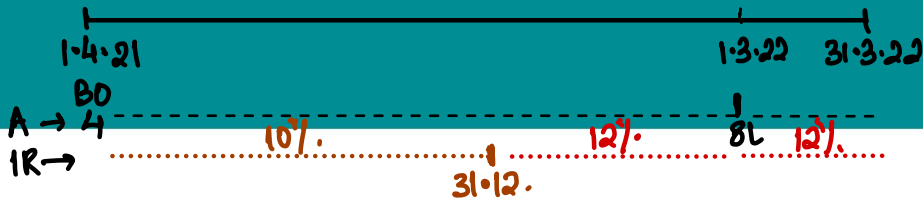
**(MTP 5 Marks Sep'22, Mar'18, Mar'19, MTP 4 Marks March 21 & Oct '23, RTP May '21)**

**Answer 3**

- (i) Interest for the period 2021-22 = US \$ 10 lakhs x 4% x ₹ 62 per US\$ = ₹ 24.80 lakhs
- (ii) Increase in the liability towards the principal amount = US \$ 10 lakhs x ₹ (62 - 56) = ₹ 60 lakhs







overdraft of ₹ 4 lakh, which increased to ₹ 8 lakh on 1st March, 2022; Interest was paid on the overdraft at 10% until 1st January, 2022 and then the rate was increased to 12%. You are required to calculate the annual capitalization rate for computation of borrowing cost in accordance with AS 16 'Borrowing Costs';

**WAIR**

(5 Marks Nov'21 & April 23)

**Answer 5**

Calculation of capitalization rate on borrowings other than specific borrowings

Nature of general borrowings	Period of Outstanding balance	Amount of loan (Rs.)	Rate of interest p.a.	Weighted average amount of Interest (Rs.)
	a	b	c	$d=[b \times c] \times (a/12)$
9% Debentures (100)	12 months	20,00,000	9%	1,80,000
Bank overdraft	9 months	4,00,000	10%	30,000
4L → April - Dec → 10%	2 months	4,00,000	12%	8,000
4L Jan - feb → 12%	1 month	8,00,000	12%	8,000
8L → 1/3/22 - 31/3 → 12%		36,00,000		2,26,000

Weighted average cost of borrowings =  $(20,00,000 \times (12/12)) + (4,00,000 \times (11/12)) + (8,00,000 \times (1/12))$   
 = 24,33,334

Capitalization rate =  $[(\text{Weighted average amount of interest} / \text{Weighted average of general borrowings}) \times 100]$   
 =  $[(2,26,000 / 24,33,334) \times 100] = 9.29\% \text{ p.a.}$

Total Interest →  $(20,00,000 \times 12/12 \times 9\%) + (4,00,000 \times 9/12 \times 10\%) + (4,00,000 \times 2/12 \times 12\%) + (8,00,000 \times 1/12 \times 12\%)$   
 = 2,26,000

**Question 6**

In May, 2020, Omega Ltd. took a bank loan from a Bank. This loan was to be used specifically for the construction of a new factory building. The construction was completed in January, 2021 and the building was put to its use immediately thereafter. Interest on the actual amount used for construction of the building till its completion was ₹ 18 lakhs, whereas the total interest payable to the bank on the loan for the period till 31 st March, 2021 amounted to ₹ 25 lakhs. the company wants to treat ₹ 25 lakhs as part of the cost of factory building and thus capitalize it on the plea that the loan was specifically taken for the construction of factory building? Explain the treatment in line with the provisions of AS 16.

(RTP Nov 21, Nov 19, May'18)

**Answer 6**

AS 16 clearly states that capitalization of borrowing costs should cease when substantially all the activities necessary to prepare the qualifying asset for its intended use are completed. Therefore, interest on the amount that has been used for the construction of the building up to the date of completion (January, 2021) i.e. ₹ 18 lakhs alone can be capitalized. It cannot be extended to ₹ 25 lakhs.

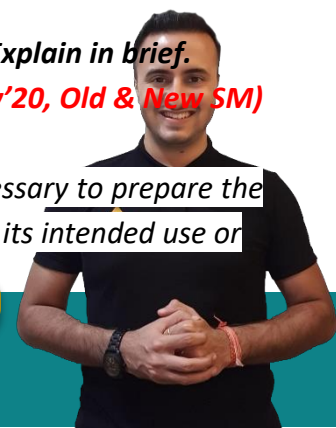
**Question 7**

When capitalization of borrowing cost should cease as per Accounting Standard 16? Explain in brief.

(RTP May '21, Nov'20, Old & New SM)

**Answer 7**

Capitalization of borrowing costs should cease when substantially all the activities necessary to prepare the qualifying asset for its intended use or sale are complete. An asset is normally ready for its intended use or



sale when its physical construction or production is complete even though routine administrative work might still continue. If minor modifications such as the decoration of a property to the user's specification, are all that are outstanding, this indicates that substantially all the activities are complete. When the construction of a qualifying asset is completed in parts and a completed part is capable of being used while construction continues for the other parts, capitalization of borrowing costs in relation to a part should cease when substantially all the activities necessary to prepare that part for its intended use or sale are complete.

### Question 8

Zen Bridge Construction Limited obtained a loan of Rs. 64 crores to be utilized as under:

(i)	Construction of Hill link road in Kedarnath	Rs. 50 crores
(ii)	Purchase of Equipment and Machineries	Rs. 6 crores
(iii)	Working Capital	Rs. 4 crores
(iv)	Purchase of Vehicles	Rs. 1crore
(v)	Advances for tools/cranes etc.	Rs. 1crore
(vi)	Purchase of Technical Know how	Rs. 2 crores
(vii)	Total Interest charged by the Bank for the year ending 31st March, 2018	Rs. 1.6 crores

Show the treatment of Interest according to Accounting Standard by Zen Bridge Construction Limited.

(RTP May 19)

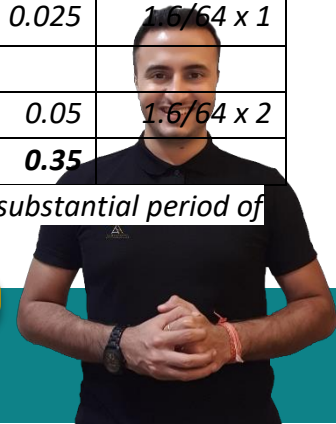
### Answer 8

According to AS 16 'Borrowing costs', qualifying asset is an asset that necessarily takes substantial period of time to get ready for its intended use. As per the standard, borrowing costs that are directly attributable to the acquisition, construction or production of a qualifying asset should be capitalized as part of the cost of that asset. Other borrowing costs should be recognized as an expense in the period in which they are incurred. Capitalization of borrowing costs is also not suspended when a temporary delay is a necessary part of the process of getting an asset ready for its intended use or sale.

The treatment of interest by Zen Bridge Construction Ltd. can be shown as:

	Qualifying Asset	Interest to be capitalized Rs. in crores	Interest to be charged to Profit & Loss A/c Rs. in crores	
Construction of hill road*	Yes	1.25		$1.6/64 \times 50$
Purchase of equipment and machineries	No		0.15	$1.6/64 \times 6$
Working capital	No		0.10	$1.6/64 \times 4$
Purchase of vehicles	No		0.025	$1.6/64 \times 1$
Advance for tools, cranes etc.	No		0.025	$1.6/64 \times 1$
Purchase of technical know-how	No	1.25	0.05	$1.6/64 \times 2$
<b>Total</b>			<b>0.35</b>	

\*Note: It is assumed that construction of hill road will normally take more than a year (substantial period of time), hence considered as qualifying asset.





### **Question 9**

**(a) An enterprise has constructed a complex piece of equipment (qualifying asset) that is to be installed on the production line of a manufacturing plant. The equipment has been constructed over a period of 15 months. However, on installation, certain calibrations are required to achieve the desired level of production before it is finally commissioned. This process is expected to take approximately 2 months during which test runs will be made. Should the borrowing costs attributable to borrowings pertaining to the 2 months test run period be capitalized?**

**(b) Should capitalization of borrowing costs be continued when the qualifying asset has been constructed but marketing activities to sell the asset are still in progress?**

**(RTP May '22)**

### **Answer 9**

(a) As per AS 16 Borrowing Costs "Capitalization of borrowing costs should cease when substantially all the activities necessary to prepare the qualifying asset for its intended use or sale are complete"; On installation of the equipment, an evaluation has to be made to conclude whether substantially all the activities necessary to prepare the asset are complete. After an equipment has been installed it is usually tested and adjusted for commercial production before it is finally commissioned.

The calibrations and adjustments required during this period are performed in order to bring the equipment up to the stage at which it is ready to commence commercial production. Until the asset reaches the stage when it is ready to support commercial levels of production, it is not appropriate to conclude that substantially all the activities necessary to prepare the asset are complete.

Thus, the borrowing cost incurred during the normal period of test runs (after the installation) are required to be capitalized.

(b) As per provisions of AS 16, capitalization of borrowing costs should cease when substantially all the activities necessary to prepare the qualifying asset for its intended use or sale are complete.

Further, the standard also explains that "An asset is normally ready for its intended use or sale when its physical construction or production is complete even though routine administrative work might still continue. If minor modifications, such as the decoration of a property to the user's specification, are all that are outstanding, this indicates that substantially all the activities are complete"; The emphasis in the Standard is on "to prepare the qualifying asset for its intended use or sale" and not the actual activity of sale.

Therefore, where the physical construction of the asset is complete, substantially all the activities necessary to prepare the qualifying asset for its intended use or sale are complete. Therefore, in the given case, the borrowing costs pertaining to the period during which the marketing activities to sell the asset are still in progress should not be capitalized as part of the cost of the asset.

### **Question 10**

**Harish Construction Company is constructing a huge building project consisting of four phases. It is expected that the full building will be constructed over several years but Phase I and Phase II of the building will be started as soon as they are completed.**





Following is the detail of the work done on different phases of the building during the current year:

(₹ in lakhs)

	Phase I	Phase II	Phase III	Phase IV
	₹	₹	₹	₹
Cash expenditure	10	30	25	30
Building purchased	24	34	30	38
Total expenditure	34	64	55	68
Total expenditure of all phases				221
Loan taken @ 15% at the beginning of the year				200

During mid of the current year, Phase I and Phase II have become operational. Find out the total amount to be capitalized and to be expensed during the year. (RTP Nov '22)

**Answer 10**

	Particulars	₹
1.	Interest expense on loan ₹ 2,00,00,000 at 15%	30,00,000
2.	Total cost of Phases I and II (₹ 34,00,000 + ₹ 64,00,000)	98,00,000
3.	Total cost of Phases III and IV (₹ 55,00,000 + ₹ 68,00,000)	1,23,00,000
4.	Total cost of all 4 phases	2,21,00,000
5.	Total loan	2,00,00,000
6.	Interest on loan used for Phases I & II, based on proportionate Loan amount = $30,00,000 / 2,21,00,000 \times 98,00,000$	13,30,317 (approx.)
7.	Interest on loan used for Phases III & IV, based on proportionate Loan amount $30,00,000 / 2,21,00,000 \times 1,23,00,000$	16,69,683 (approx.)

**Accounting treatment:**

**1. For Phase I and Phase II**

Since Phase I and Phase II have become operational at the mid of the year, half of the interest amount of ₹ 6,65,158.50 (i.e. ₹ 13,30,317/2) relating to Phase I and Phase II should be capitalized (in the ratio of asset costs 34:64) and added to respective assets in Phase I and Phase II and remaining half of the interest amount of ₹ 6,65,158.50 (i.e. ₹ 13,30,317/2) relating to Phase I and Phase II should be expensed during the year.

**2. For Phase III and Phase IV**

Interest of ₹ 16,69,683 relating to Phase III and Phase IV should be held in Capital Work-in-Progress till assets construction work is completed, and thereafter capitalized in the ratio of cost of assets. No part of this interest amount should be charged/expensed off during the year since the work on these phases has not been completed yet.

**Question 11**

First Ltd. began construction of a new factory building on 1st April, 2017. It obtained Rs. 2,00,000 as a special loan to finance the construction of the factory building on 1st April, 2017 at an interest rate of 8% per annum. Further, expenditure on construction of the factory building was financed through other non-specific loans. Details of other outstanding non-specific loans were:





Amount (Rs.)	Rate of Interest per annum
4,00,000	9%
5,00,000	12%
3,00,000	14%

The expenditures that were made on the factory building construction were as follows:

Date	Amount (Rs.)
1st April, 2017	3,00,000
31st May, 2017	2,40,000
1st August, 2017	4,00,000
31st December, 2017	3,60,000

The construction of factory building was completed by 31st March, 2018. As per the provisions of AS 16, you are required to:

- (1) Calculate the amount of interest to be capitalized.
- (2) Pass Journal entry for capitalizing the cost and borrowing cost in respect of the factory building.

(PYP May '19, 5 Marks)

**Answer 11**

(i) Computation of average accumulated expenses

		Rs.
Rs. 3,00,000 x 12 / 12	=	3,00,000
Rs. 2,40,000 x 10 / 12	=	2,00,000
Rs. 4,00,000 x 8 / 12	=	2,66,667
Rs. 3,60,000 x 3 / 12	=	90,000
		<b>8,56,667</b>

(ii) Calculation of average interest rate other than for specific borrowings

Amount of loan (Rs. )	Rate of interest	Amount of interest (₹ )
4,00,000	9%	= 36,000
5,00,000	12%	= 60,000
<b>3,00,000</b>	<b>14%</b>	<b>= 42,000</b>
Weighted average rate of interest $1,38,000 / 12,00,000 \times 100$		<u>1,38,000</u>
		<b>= 11.5%</b>

(iii) Amount of interest to be capitalized

Interest on average accumulated expenses:	Rs.
Specific borrowings (Rs. 2,00,000 x 8%)	= 16,000
Non-specific borrowings (Rs. 6,56,667* x 11.5%)	= <u>75,517</u>
<b>Amount of interest to be capitalised</b>	<b>= 91,517</b>





**(iv) Total expenses to be capitalized for building**

	Rs.
Cost of building Rs. (3,00,000 + 2,40,000 + 4,00,000 + 3,60,000)	13,00,000
Add: Amount of interest to be capitalized	91,517
	<b>13,91,517</b>

**Journal Entry**

Date	Particulars	Dr. (Rs.)	Cr. (Rs.)
31.3.2018	Building A/c Dr.	13,91,517	
	To Building WIP* A/c		13,00,000
	To Borrowing costs A/c (Being amount of cost of building and borrowing cost thereon capitalized)		91,517

**Question 12**

On 1st April, 2022 Workhouse Limited took a loan from a Financial Institution for ₹ 25,00,000 for the construction of Building. The rate of interest is 12%.

In addition to above loan, the company has taken multiple borrowings as follows:

- i) 8% Debentures ₹ 15,00,000
- ii) 15% Term Loan ₹ 30,00,000
- iii) 10% Other Loans ₹ 18,00,000

The company has utilised the above funds in construction / purchase of the following assets:

- (i) Building ₹ 70,00,000
- (ii) Furniture ₹ 22,00,000
- (iii) Plant & Machinery ₹ 90,00,000
- (iv) Factory Shed ₹ 43,00,000

The construction of Building, Plant & Machinery and Factory Shed was completed on 31st March 2023. Readymade Furniture was purchased directly from the market. The factory was ready for production on 1st April 2023.

You are required to calculate the borrowing cost for both qualifying and non-qualifying assets.

**(PYP 5 Marks May '23)**

**Answer 12**

**Interest to be Capitalized (on qualifying asset)**

	Particulars	Computation	₹
i.	On specific Borrowings	25,00,000x12%	3,00,000
ii. iii.	On non-specific borrowings	(W.N.1)	6,67,500
	Amount of interest to be Capitalised	(i+ii)	<b>9,67,500</b>

**Interest transferred to P&L (on non-qualifying asset)**

	Particulars	Computation	₹
i.	On non-specific Borrowings	(W.N.1)	82,500



**Working note:**
**1. Treatment of interest under AS 16 on non-specific borrowings**

	Particulars	Qualifying asset	# Computation	Interest-Capitalized	Interest charged to P&L A/c
i.	Building	Yes	$45,00,000/2,00,00,000 \times 63,00,000 \times 11.9048\%$	1,68,750	–
ii.	Furniture	No	$22,00,000/2,00,00,000 \times 63,00,000 \times 11.9048\%$	–	82,500
iii.	Plant & Machinery	Yes	$90,00,000/2,00,00,000 \times 63,00,000 \times 11.9048\%$	3,37,500	–
iv.	Factory shed	Yes	$43,00,000/2,00,00,000 \times 63,00,000 \times 11.9048\%$	1,61,250	–
	<b>Total</b>			<b>6,67,500</b>	<b>82,500</b>

**NOTE:** Alternative manner of presentation for Treatment of interest under AS 16 on non-specific borrowings:

	Particulars	Qualifying asset	Expenses Share in Incurred borrowings	Interest-Capitalized ₹	Interest charged to P&L A/c ₹
i.	Building	Yes	$45,00,000 \times 7,50,000 / 200$	1,68,750	–
ii.	Furniture	No	$22,00,000 \times 7,50,000 / 200$	–	82,500
iii.	Plant & Machinery	Yes	$90,00,000 \times 7,50,000 / 200$	3,37,500	–
iv.	Factory shed	Yes	$43,00,000 \times 7,50,000 / 200$	1,61,250	–
	<b>Total</b>		<b>2,00,00,000</b>	<b>6,67,500</b>	<b>82,500</b>

**1. Weighted Average interest rate for non-specific borrowings**

Particulars	Amount of loan (a)	Rate of interest (b)	Amount of interest (c) = (a) x (b)
Debentures	15,00,000	8%	1,20,000
Term loan	30,00,000	15%	4,50,000
Other loans	18,00,000	10%	1,80,000
	<b>63,00,000</b>	<b>7,50,000</b>	
		<b># Weighted Average Rate of Interest</b> $= 7,50,000 / 63,00,000 \times 100 = 11.9048\%$	

