AS 16 - Borrowing Costs

loan lena — loan ke upar lagne waala **Interest** → Normally P/L (Exp)

1] Definitions

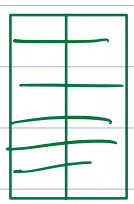
ⓐ **Borrowing costs** → These are Interest & other costs incurred on Borrowing of funds.

Borrowing cost incurred on Qualifying Assets will be Capitalised (i.e. Add to the cost of Asset)

ⓑ **Qualifying Asset** → Asset which takes substantial period of time (generally 12 months or more) to get ready for its intended use or sale.

eg:  Bldg. → 2yrs to construct this → loan taken to construct the Bldg. → Int on loan (Borrowing cost) → Incurred on a qualifying asset ∴ Add Interest to the cost of Bldg.

AK construction House

eg:  Bldg → 4yrs to construct this Bldg → But loan not taken → AS 16 → Not applicable → ~~Borrowing cost → Capitalise ?~~

2 things mandatory

① loan lena padega
② Qualifying asset pe kharcha karna padega.

⇒ AS 16 – Borrowing cost Applicable

Int Exp will be capitalised to cost of asset.

J-E

Bldg (Tot Exp)	xx	
To CIB		xx

Note:

1) Generally a period of 12 months or more is considered to be substantial for qualifying asset, but in some cases a shorter period of less than 12 months can also be considered substantial, if justified.

2) The following types of Borrowings will Not be covered under AS 16.
   (a) Borrowing funds by issuing equity share capital
   (b) Borrowing funds by issuing preference share capital.

3) Various types of Borrowing Costs covered in AS 16.

- Interest charges on Borrowings
- Amortisation of Premium/ Discount on Borrowings
  - Debenture Redeemed @10% premium.
  - Face value = 10L
  - Premium = 10L × 10% = 1L
  - ⇓
  - Borr. Cost
- Ancillary costs relating to Borrowings
  (eg: loan raising fees, loan processing fees etc) ⇓ Yeh fees bhi Borrowing cost hai
- Finance charges on asset acquired on Finance lease ⇓ Discussed in AS 19.
- Exchange loss on foreign loan ↓ Discussed later in this chapter

4] Examples of Qualifying Assets

→ PPE (AS 10), Intangible Assets (AS 26), Investment property (AS 13), Inventories
   - Contract ki ik taking 12 months or more to get ready → Qualifying Asset
   - If purchased in ready made condition → Not a qualifying Asset

→ Readymade investment purchased like investment in eq. shares → Not a Qualifying Asset.

② Borrowing cost eligible for capitalisation

- If Directly related to Acquisition, construction, production of Qualifying Assets ⇓ Capitalised
- If incurred for other than Qualifying Assets ↓ Trf to P/L

③ Types of Borrowings

1. Specific Borrowings
2. General Borrowings

④ Specific Borrowings

→ These are Borrowings specifically taken for qualifying assets

→ Borrowing cost eligible for capitalised

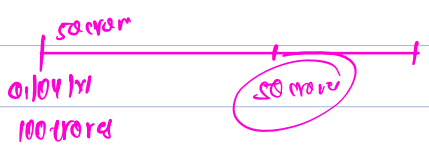
= Actual Borrowing cost during construction period	xxx
less: Income on Temporary Investments of idle funds of these Borrowings	(xx)

Eg① Specific Borrowings

loan taken on 01/04/x1 of ₹ 100 crores @ 12% for 12 months for construction of a Bldg which was completed on 31/3/x2.

The company invested idle funds of loan & earned ₹ 0.5 crores.

Calculate Borrowing cost to be capitalised.



Soln:

Total Borrowing cost incurred $100 cr \times 12\% \times \frac{12m}{12m}$ = 12 crores

Less: Income from Temporary Invst of idle funds = (0.5 crores)

Borrowing cost to be cap 11.5 crores

② General Borrowings

- All Borrowings that are not specific are general Borrowings.
- In this case, Qualifying Asset is funded from a pool of general Borrowings.
- Borrowing cost eligible for capitalisation in case of general Borrowings is calculated as follows: CR / WACC / WACR

Step ① Calculate Capitalisation Rate (weighted Average Cost of Capital / weighted Avg Capitalisation Rate)

= Total Interest (weighted Avg) / Total Borrowings (weighted Avg)

Step ② Calculate Borrowing cost to be capitalised.

= Expenditure Amt (x) Capitalisation Rate x No. of months that expenditure was outstanding

Eg① Generally Borrowings

01/04/X1 ⟶	ICICI Bank @ 12% ⟶	100 crores
⟶	HDFC Bank @ 14% ⟶	75 crores.
		175 crores

Funds utilized for construction of Bldg → (construction started on 01/04/X1 & completed on 31/3/X2)

01/04/X1 ⟶ 50 crores

01/07/X1 ⟶ 75 crores

01/01/X2 ⟶ 25 crores

Calculate Borrowing Cost to be capitalised.

Soln: Step① Capitalization Rate / WACC / WACR

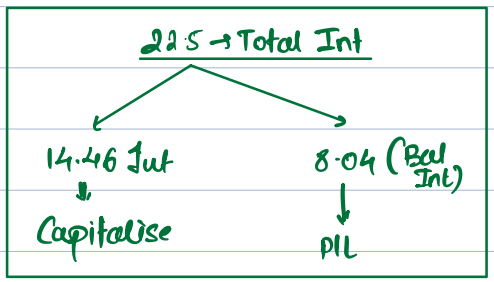
$$= \frac{\text{Total Interest (weighted Avg)}}{\text{Total Borrowings (weighted Avg)}} \times 100$$

$$= \frac{\overset{100\text{cr} \times 12\%}{12\text{cr}} + \overset{75\text{cr} \times 14\%}{10.5\text{cr}}}{175\text{cr}} \times 100$$

$$= 12.86\% \text{ approx}$$

Step② Borrowing Cost to be capitalised

01/04/X1 ⟶	50 crores × 12.86% × 12m/12m	= 6.43
01/07/X1 ⟶	75 crores × 12.86% × 9m/12m	= 7.23
01/01/X2 ⟶	25 crores × 12.86% × 3m/12m	= 0.80
	Borrowing Cost eligible for Capitalisation	14.46 crores



Eg 2: General Borrowing

01/04/X1 General Borrowings

ICICI Bank loan @ 10% → 100 cr

HDFC Bank loan @ 12% → 75 cr.

Term loan @ 14% → 50 cr.

Expenditure incurred on qualifying Asset

01/04/X1 → 50 crores

01/07/X1 → 100 crores

01/11/X1 → 25 crores.

Construction period is 12 months. Calculate Borrowing cost to be capitalised.

Soln: Step ① Cap-Rate / WACC / WACR

$$= \frac{\text{Total Interest (weighted Avg)}}{\text{Total Borrowings (weighted Avg)}} \times 100$$

$$= \frac{(100 \times 10\%) + (75 \times 12\%) + (50 \times 14\%)}{225 \text{ cr}} \times 100 = \frac{26}{225} \times 100$$

$$= 11.56\% \text{ p.a.}$$

Step② Borrowing cost to be capitalised

01/04/X1 ⟶ 50 cr × 11.56% × 12/12 = 5.78

01/07/X1 ⟶ 100 cr × 11.56% × 9/12 = 8.67

01/11/X1 ⟶ 25cr × 11.56% × 5/12 = 1.20

Total B.C to be cap 15.65

LDR

Eg 3: Specific Borrowing (+) General Borrowing

01/04/X1 ⟶ Specific Borrowing ⟶ 10% loan ⟶ 30 crores

01/04/X1 ⟶ General Borrowings ⟶ ICICI Bank loan @ 12% ⟶ 100 crores

⟶ HDFC Bank loan @ 14% ⟶ 75 crores

01/07/X1 ⟶ General Borrowings ⟶ Kotak Bank loan @ 8% ⟶ 125 crores

Expenditure incurred on Qualifying Asset

01/04/X1 ⟶ 50 crores < 30 crores → S.B, 20 crores → G.B.

01/07/X1 ⟶ 75 crores

01/01/X2 ⟶ 25 crores.

Constructed started on 01/04/X1 & completed on 31/3/X2. Calculate BC to be capitalised.

Soln: Step① Capitalization Rate/WACC = Total Int (weighted Avg) / Total Borrowings (weighted Avg)

(exclude specific Borrowing) only for general Borrowing.

= (12cr + 10.5cr + 7.5cr) / (100cr + 75cr + 93.75) × 100

7.5cr = 125cr × 8% × 9/12

93.75 = 125cr × 9/12

= 11.16% p.a.

Step ② Borrowing Cost to be capitalised

ⓐ Specific Borrowing (Int Capitalised) — 3 crores → (A)

(30 cr x 10% x 12/12)

ⓑ General Borrowing (Int Capitalised)

01.04.X1 ~~50 cr~~ 20 cr x 11.16% x 12/12 = 2.23 cr

[30 crore funded from Sp. Borr.]

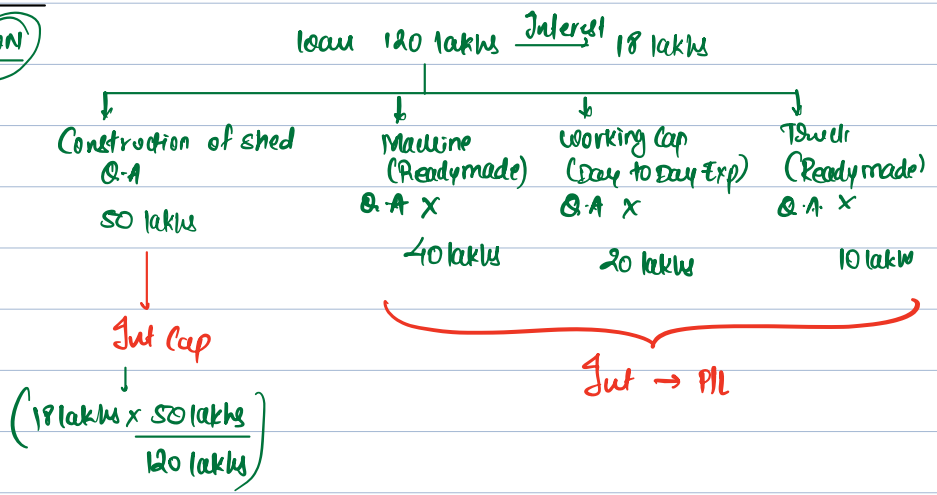
01.07.X1 75 cr x 11.16% x 9/12 = 6.28 cr

01.01.X2 25 cr x 11.16% x 3/12 = 0.70 cr → 9.21 crores → (B)

Total B.C Cap (A + B) — 12.21 crores.

Illus 1

CWN



As per AS 16, Borr. Cost, Borrowing cost incurred on acquisition, construction or production of Q.A is capitalised to the cost of asset.

Other Borr. Cost should be trf to PL.

Q.A is an asset that takes substantial period of time to get ready for its intended use or sale.

Purpose	Q.A or Not	Interest to be Cap.	Interest charged to PIL
1. Construction of shed	Q.A	7.5 lakhs ($18L \times \frac{50}{120}$)	-
2. Purchase of Machinery	Not a Q.A	-	6 lakhs ($18L \times \frac{40}{120}$)
3. Working Cap	Not a Q.A	-	3 lakhs ($18L \times \frac{20}{120}$)
4. Purchase of Truck	Not a Q.A	-	1.5 lakhs ($18L \times \frac{10}{120}$)
	Total	7.5 lakhs	10.5 lakhs

Ques 3

As per AS 16, Borr. Cost, Borrowing cost incurred on acquisition, construction or production of Q.A is capitalised to the cost of asset.

Other Borr. Cost should be trf to PIL.

Q.A is an asset that takes substantial period of time to get ready for its intended use or sale.

Total Int Exp = 11,00,000

(-) Income from Idle funds (200000)

Borrowing cost 9,00,000

Purpose	Q.A or Not	Interest to be Cap.	Interest charged to P/L
1. Construction of shed	Q.A	360000 (900000 x 40/100)	-
2. Purchase of Machinery	Not a Q.A	-	315000 (900000 x 35/100)
3. Working Cap	Not a Q.A	-	225000 (900000 x 25/100)
	Total	360000	540000

Ques 8 → H.W (Self)

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illus 2 (UOR)

Step ① Calculation of Cap. Rate / WACC (for gen. Borrowings)

$$= \frac{\text{Total Int (weighted Avg)}}{\text{Total Borrowings (weighted Avg)}} \times 100$$

$$= \frac{(5,00,000 \times 11\%) + (900000 \times 13\%)}{500000 + 900000} \times 100$$

$$= \frac{172000}{1400000} \times 100$$

$$= 12.285\% \text{ approx (OR) } 12.29\%$$

Step 2: B.C to be cap

ⓐ Specific Borrowing — 10000 → (A)

(1L × 10% × 12/12)

ⓑ General Borrowing

1/1/X1	1,00,000 × 12·285% × 12/12	=	12285
01/04/X1	250000 × 12·285% × 9/12	=	23034
01/07/X1	450000 × 12·285% × 6/12	=	27641
01/12/X1	120000 × 12·285% × 1/12	=	1229 → 64189 → (B)

Total Borrowing cost to be capitalised ₹74189 approx

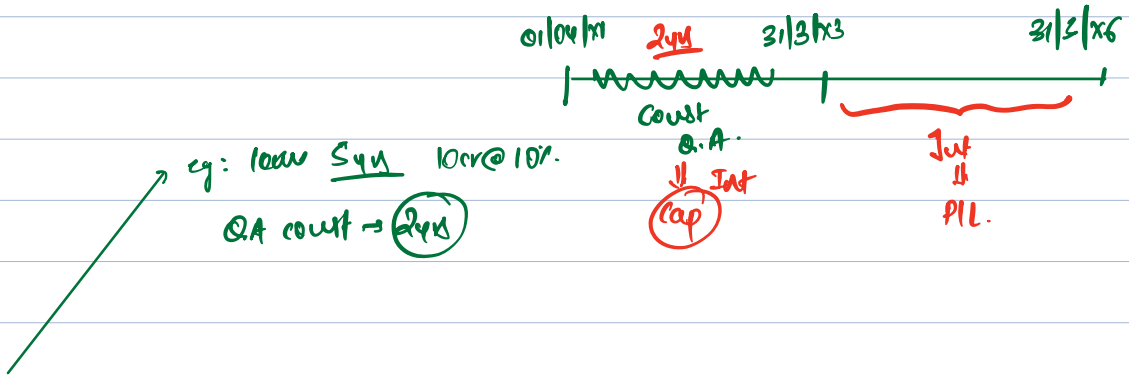
J-E for capitalising cost & Borr. Cost

31/12/X1 PPE (Bldg) 10,94,189

To CLB 10,94,189

(10,20,000 + 74189)

↓ Cost of construction ↓ Borrowing cost



④ Period of Capitalisation

A. Commencement

Commencement of capitalisation begins when ALL conditions are satisfied:

1] Expenditure on QA has been incurred.

2] Activities that are necessary have been started (such activities not only include physical work, but also include technical work, registration work, site preparation planning etc.)

3] Borrowing Cost is incurred

eg: 01.04.X1 → Expenditure incurred
01.05.X1 → B.C incurred
01.06.X1 → Registration work Begins
01.07.X1 → Physical work.
↳ (Not relevant)

Cap of Int → Start → 01/06/X1 (commence)

B. Suspension

Capitalisation should be suspended during extended period if active development is NOT taking place.

Note: Capitalisation is NOT suspended if temporary delay is a necessary part of construction.

Eg① Const start 01/04/X1
01/11/X1 to 30/11/X1 → strike
Const End 31/3/X3

Total months = 24 months
1m → Cap. Suspend → Int P/L
23m → Jut Cap.

Eg 2 Const start Bridge 01/04/X1
01/11/X1 to 30/11/X1 → High tide/ Bridge sukhne rakha tha (part of process)
Const completed on 31/3/X3

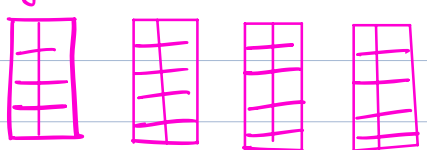
In above case as work stopped is a normal part of process, No suspension.

C. Cessation

- Cease capitalisation when substantially all the activities necessary to prepare QA are complete.
(If minor modifications such as decoration are pending, it will still indicate that substantially the activities are complete)

- When construction of QA is completed in parts, cease capitalisation of each part which is completed, provided such part can be used separately

Eg: AK House



Tower A & B Ready on 31/3/X3
(Tower A & B can be used even if C&D are not ready)
↓
Stop capitalisation

Tower C & D not yet ready
↓
Continue Capitalisation

Illus 10 (LDR)

Normally 12m is considered to be substantial period. But in many ques even if construction is of 6m/7m/9m/10m etc. → it is considered as qualifying asset in ICAI ques.
If ques specifically says 6m/7m is not substantial → Then it wont be a Q.A.

Total Expense Incurred (All 4 phases) = 221 lakhs
Loan taken @ 15% = 200 lakhs

Total Interest Incurred = 30,00,000 (full year)
(200 lakhs x 15%)

Phase I & II (6m Cap period)

Cost incurred = 34L + 64L
= 98L

Int for Phase I & II = 1330317
(30,00,000 x 98L/221L) (full 12 months)

- Ready in 6m (Cap period) → 6,65,158.5 → Interest Capitalise
- Balance 6m → 6,65,158.5 → Interest (P/L)

Phase III & IV

Cost incurred = 55L + 68L
= 123L

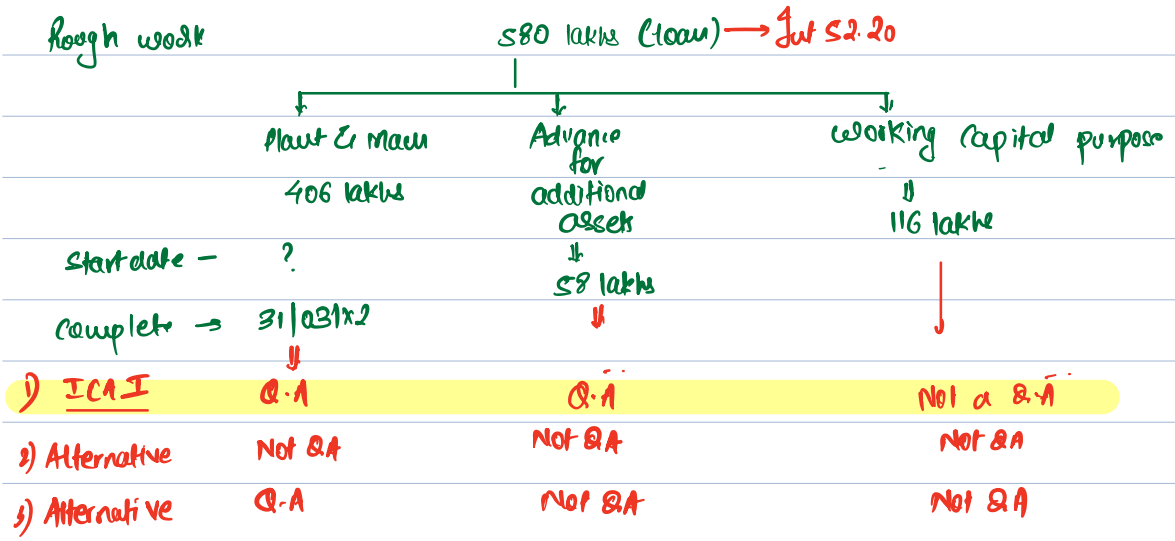
Int for Phase III & IV = 1669683
(30,00,000 x 123L/221L) (full 12 months)

Full Int Cap as work is not yet completed.

Total Interest Capitalised = 665158.5 + 1669683 = 2334841.5
Total Interest trf to P/L = 665158.5

Illus 3 (LOR)

Rough work



** It is assumed in the above solution that the modernisation and renovation of plant and machinery will take substantial period of time (i.e. more than twelve months). Regarding purchase of additional assets, the nature of additional assets has also been considered as qualifying assets. Alternatively, the plant and machinery and additional assets may be assumed to be non-qualifying assets on the basis that the renovation and installation of additional assets will not take substantial period of time. In that case, the entire amount of interest, ₹ 52.20 lakhs will be recognised as expense in the profit and loss account for year ended 31st March, 20X2.

ICAI Soln

Purpose	Q.A or Not	Interest to be Cap.	Interest charged to PL
1) Construction of P&M	Q.A	36.54 (52.20 x 406/580)	
2) Advance for additional assets	Q.A	5.22 (52.20 x 58/580)	
3) Working Cap	Not a Q.A		10.44 (52.20 x 116/580)
	Total	41.76 ⇓ Int Cap	10.44 ⇓ Int PL

Illus 4 to Illus 7 → Refer B.B.

Illus 8 (LDR) → Self Practice

Illus 9 → Refer Q.B Qus 1, 5, 6 → Refer Q.B.

Ques 7 (LDR)

As per AS 16, Borr. Cost, Borrowing cost incurred on acquisition, construction or production of Q.A is capitalised to the cost of asset.

Other Borr. Cost should be trf to PIL.

Q.A is an asset that takes substantial period of time to get ready for its intended use or sale.

In case of specific Borrowing, income from idle funds is to be deducted from actual Borrowing costs.

loan taken on 01.06.21

Calculation of Interest

Total Interest $(1000L \times 12\% \times \frac{10m}{12m})$ = 10,00,000

(-) Income on Temp. Invst (Given) (50,000)

Net Borrowing Cost 9,50,000

Purpose	Q.A or Not	Interest to be Cap.	Interest charged to PIL
1) Construction of Bldg	Q.A	380000 ($950000 \times 40/100$)	
2) working Cap.	Not a Q.A		285000 ($950000 \times 30/100$)
3) Purchase of Machi	Not a Q.A		142500 ($950000 \times 15/100$)
4) Purch of Furn.	Not a Q.A		19000 ($950000 \times 2/100$)
5) Purchase of Truck	Not a Q.A		123500 ($950000 \times 13/100$)
	Total	380000 (Cap)	570000 (PIL)

Ques 9

Step ① Cal^{n} of Cap. Rate (Gen. Borr)

$$= \frac{\text{Total Int (weighted Avg)}}{\text{Total Borr. (weighted Avg)}} \times 100$$

$$= \frac{36000 (+) 60000 (+) 42000}{400000 (+) 500000 (+) 300000} \times 100$$

$$= 11.5\% \text{ p.a.}$$

Step ② Borrowing cost to be capitalised

ⓐ Specific Borrowing

200000 x 8% x 12/12 : 16000

ⓑ General Borrowing (31 (+) 21 → used from C.B = 1L)

01/04/X7 → 100000 x 11.5% x 12/12 = 11500

31/05/X7 → 240000 x 11.5% x 10/12 = 23000

1/08/X7 → 400000 x 11.5% x 8/12 = 30667

31/12/X7 → 360000 x 11.5% x 3/12 = 10350 → 75517

91517

J.E.

Bldg	1391517	
To CIB		1391517

(13L + 91517)

↓ Cost ↓ Int cap

Ques 10 (LOR)

Step ① Cap. Rate → 12%. (as there is only 1 General Borrowing)

Step ② Borrowing Cost to be capitalised

ⓐ Specific Borrowing

* 2000000 × 10% × 12/12 — 200000 → Ⓐ

ⓑ General Borrowing

1st April 21 –

1st Aug 21 – ~~2%~~ 1400000 × 12% × 8/12 = 112000

1st Jan 22 – 400000 × 12% × 3/12 — 12000 → 124000 → Ⓑ

Total Int. Cap. 324000

* Note: Capitalise full Interest on specific Borrowing during capitalisation period.
Date of expenditure in case of specific Borrowing is NOT relevant.

J.E

31/3/22	Plant A/c	Dr	4124000	
	To CIB A/c			4124000
	(38,00,000 + 324000)			
	↓ Cost incurred	↓ B.C incurred		

Qwes 11 (LDR)

AK Sir Note: If expenditure incurred is suppose 100 lakhs, But loan is only taken of ₹ 70 lakhs, then interest will be capitalised on the amount of Borrowing i.e. 70 lakhs.

(A) Interest to Capitalised on Specific Borrowing

(taken for Bldg → Q.A) → 25,00,000 × 12% × 12/12 — 300000 → (A)

(B) Interest to be capitalised for general Borrowing

- Borrowing Amt = 63,00,000
- Total expenditure = 200,00,000 (excl Building Sp. Borr)

Extra Note: we did not calculate Cap. Rate in this case as expenditure is more than Borrowings & Normally we apply the Cap. Rate on Expenditure But here since Borrowing is less ∴ we did directly.

Total Interest on General Borrowing = 750000
(120000 + 450000 + 180000)

Purpose	QA or NOt	Interest to be Capitalised	Interest charged to P/L
① Building	QA	168750 (750000 × 45L/200L)	
② Furniture	Not a QA		82500 (750000 × 22L/200L)
③ Plant & Machy	QA	337500 (7500000 × 90L/200L)	
④ Factory	QA	161250 (750000 × 43L/200L)	
		667500 → (B)	82500

Total B.C Cap (Specific + General) (A + B)

300000 + 667500

= 967500

Ques 12 (COR)

i) Data Bank loan (fully utilized for qualifying Asset)

Interest to be Capitalised = ~~480000~~ 400000 (-) 30000 = 370000

(6,000,000 × 8% × ~~12/12~~ 10/12)

↓

Temporary Invst Income (Given)

ii) Satya Bank ltd loan

Rough work → 20L Int (192000)

6L — work cap Purpose ⇓ Not a QA ⇓ Int PIL

14L (Bal) ⇓ used for QA ⇓ Construction completed by 31/1/23

∴ 10 months Int Cap.

Alternate working

6000000 × 8% × 2m/12m = 80000

loan	Purpose	QA or not	Interest cap	Int Trf to PIL
1) Data Bank loan	Const of New Bldg	QA (10months)	370000 (Refer working above)	110000 → Exp 30000 → Income Net → 80,000
2) Satya Bank loan ⇓ Interest Amt 192000	Const of 14L New Bldg	QA (10months)	112000 (192000 × 14L/20L × 10m/12m)	22400 (192000 × 14L/20L × 2m/12m)
	6L working Cap.	Not a QA	-	57600 (192000 × 6L/20L × 12m/12m)
			482000	160000

Total Int (480000) (-) Int Cap

Ques 4 (LDR) → As annual cap Rate is asked ∴ Court start date of 1st Dec is not relevant

Rough work

① Corporate Deposit
20 Lakhs @ 9%

② Overdraft loan
12 months
400000 (April to Feb (11 months)) → 9m → 10%; 2m → 12%
800000 (March (1 month)) → 1m → 12%

Step ① Calculation of Annual Capitalisation Rate

$$\frac{\text{Total Interest (weighted Avg) WN1}}{\text{Total Borrowings (weighted Avg) WN2}} \times 100$$

$$= \frac{226000}{24,33,334} \times 100$$

$$= 9.29\% \text{ p.a approx}$$

WN ① Total Interest (weighted Avg)

ⓐ 20,00,000 x 9% x 12/12	=	180000
ⓑ Overdraft		
400000 x 10% x 9/12	=	30000
400000 x 12% x 2/12	=	8000
800000 x 12% x 1/12	=	8000
		226000

WN ② Total Borrowings (weighted Avg)

ⓐ 20,00,000 x 12/12	=	20,00,000
ⓑ Overdraft		
400000 x 9/12	=	300000
400000 x 2/12	=	66667
800000 x 1/12	=	66667
		24,33,334

Ques 13 (LDR)^3

Special point for this ques

① If in ques planned expenditure & actual expenditure both are given, then calculate Borrowing cost as per actual expenditure.

② If in any month we have surplus funds & there is no overdraft, that means we have not taken loan ∴ Ignore Int for that month/period.

③ If any month our expenditure is suppose ₹100 lakhs, but loan is taken only of 70 lakhs, then interest will be capitalised only on 70 lakhs

④ If Int is calculated on monthly basis, then compounding will be applicable (i.e. Int on Int)

Month	Opening	Actual Exp for the month	Interest per month	Total expenditure outstanding (including Interest)
Oct 2023	-	4,00,000	5000 (4L × 15% × 1/12)	405000
Nov 2023	405000	795000	15000 (405000 + 795000) × 15% × 1/12	1215000
Dec 2023 (No Suspension)	1215000	-	15188 (1215000 × 15% × 1/12)	1230188
Jan 2024	1230188	50000	NIL (Refer Note ② above)	1280188
Feb 2024	1280188	200000	17500 (~~1280188 + 200000~~ 14,00,000) × 15% × 1m/12m (Refer Note ③ above)	1497688
March 2024	1497688	1200000	33721 (1497688 + 1200000) × 15% × 1/12	2731409
		Total B.C	86409	

⑤ Exchange loss on loan taken for C.A in foreign currency

Eg: AK Virtuals (Indian Co.) loan taken for C.A = $10000 (US Bank) @ 5% p.a.
on 01/04/X1

Similar loan in India is provided @ 12% p.a.

Exchange Rate on 01/04/X1 = ₹70/$

Exchange Rate on 31/3/X2 = ₹75/$

Soln: ⓐ Int on foreign loan

loan on 01/04/X1 = $10000

Int @ 5% on yr end = $500 × ₹75/$ = ₹37500 → Capitalise

ⓑ Exchange loss on loan Amount = ₹50,000

[$10000 × (₹75/$ − ₹70/$)]

ⓒ Interest if loan was taken in Indian currency = 84000

($10000 × ₹70/$) = ₹7,00,000 × 12%

ⓓ Difference between Interest in India & Foreign

84000 − 37500 = 46500 → Max. Ex loss that can be capitalised.

(37500 ↓ Already Cap.)

Ex loss → 50000

46500 ↓ Capitalise

3500 (Balance) ↓ PL

Total Capitalise = Int + Ex loss = 84000
37500 46500

Note: If in above case, there is exchange gain, then above concept is not applicable. Directly tf that gain to PIL

Qus 2 (LOR)

₹

(a) Int on foreign loan = 24.8 lakhs

$10L x 4% x ~~$6~~ ₹62/$

(b) Ex loss

$10L x (62 - 56) = ₹60 lakhs

(c) Int on Indian loan

$10L x ₹56/$ x 10.50% : 58.8 lakhs

(d) Diff Btw India & foreign Int

58.8 (-) 24.8 lakhs = 34 lakhs → Max Ex loss that can be cap.

Ex loss → 60 lakhs

34 lakhs → Capitalise

Bal 26 lakhs → PIL

Total Capitalise = Int on foreign loan (+) Ex loss

= ₹24.8 lakhs (+) 34 lakhs

= ₹58.8 lakhs