CHAPTER 19
FINANCIAL INSTRUMENTS (IND AS 32/107/109)

PRACTICE QUESTIONS

TOPIC 1 – DEFINITION

Q1: Which of the following would meet and not meet the definition of financial instruments and fall outside the scope of Ind AS 32?

1. Cash deposited in banks
2. Gold deposited in banks
3. Trade receivables
4. Investments in debt instruments
5. Investments in equity instruments
6. Prepaid expenses
7. Inter-corporate loans and deposits
8. Deferred revenue
9. Tax liability
10. Provision for estimated litigation losses. **[MTP Nov 2021]**

Ans: Table showing classification of various items:

S. No.	Item	Classification
(1)	Cash deposited in banks	Financial Instrument
(2)	Gold deposited in banks	Not a financial instrument
(3)	Trade receivables	Financial Instrument
(4)	Investments in debt instruments	Financial Instrument
(5)	Investments in equity instruments	Financial Instrument
(6)	Prepaid expenses	Not a financial instrument
(7)	Inter-corporate loans and deposits	Financial Instrument
(8)	Deferred revenue	Not a financial instrument
(9)	Tax liability	Not a financial instrument
(10)	Provision for estimated litigation losses	Not a financial instrument

Q2: State whether the following items meet the definition of Financial Asset or Financial Liability for an entity:

1. A bank advances an entity a five-year loan. The bank also provides the entity with an overdraft facility for a number of years.
2. Entity A owns preference shares in Entity B. The preference shares entitle Entity A to dividends, but not to any voting rights.
3. An entity has a present obligation in respect of income tax due for the prior year.
4. In a lawsuit brought against an entity, a group of people is seeking compensation for damage to their health as a result of land contamination believed to be caused by waste from the entity's production process. It is unclear whether the entity is the source of the contamination since many entities operate in the same area and produce similar waste.

[RTP May 2023]

Ans:

(i) The entity has two financial liabilities namely (a) the obligation to repay the five- year loan and (b) the obligation to repay the bank overdraft to the extent that it has borrowed using the overdraft facility. Both the loan and the overdraft result in contractual obligations for the entity to pay cash to the bank for the interest incurred and for the return of the principal.

(ii) For Entity B: The preference shares may be equity instruments or financial liabilities of Entity B, depending on their terms and conditions.

For Entity A: Irrespective of Entity B's treatment, the preference shares are a financial asset because the investment satisfies the definition of a financial asset.

(iii) An income tax liability is created as a result of statutory requirements imposed by the government. The rights and obligations are not created by a contract. Hence, the liability for income-tax dues is not a financial liability.

(iv) The fact that a lawsuit may result in the payment of cash does not create a financial liability for the entity because there is no contract between the entity and the affected group. The entity will need to consider providing for the payment as per Ind AS 37 'Provisions, Contingent Liabilities and Contingent Assets'.

TOPIC 2 - COMPOUND FINANCIAL INSTRUMENTS

Q3: On 1 April, 2007 A Ltd. issued ₹ 10,00,000, 12% compulsory convertible debentures of face value of ₹ 100 per debenture at par. The debentures are convertible on 31.03.2011 into ordinary shares. The interest rate for equivalent debentures without conversion rights would have been 14%. Being compound financial instrument, you are required to separate equity and debt portion as on 01.04.07.

Ans: This is a compound financial instrument with two components – liability representing present value of future cash outflows and balance represents equity component.

Computation of Liability & Equity Component

Date	Particulars	Cash Flow	Discount Factor @14%	Net present Value
31-Mar-2008	Interest	120,000	0.8772	1,05,264
31-Mar-2009	Interest	120,000	0.7694	92,340
31-Mar-2010	Interest	120,000	0.6750	81,000
31-Mar-2011	Interest	120,000	0.5921	71,052
31-Mar-2011	Principal	0	0.5921	0
Total Liability Component				3,49,656
Total Proceeds				10,00,000
Total Equity Component (Bal fig)				6,50,344

Q4: On 1 April, 2008 A Ltd. issued 5000, 6 % convertible debentures of face value of ₹ 100 per debenture at par. The debentures are redeemable at par on 31.03.12 or these may be converted into ordinary shares at the option of the holder. The interest rate for equivalent debentures without conversion rights would have been 7%. Being compound financial instrument, you are required to separate equity and debt portion as on 01.04.08.

Ans: This is a compound financial instrument with two components – liability representing present value of future cash outflows and balance represents equity component.

Computation of Liability & Equity Component

Date	Particulars	Cash Flow	Discount Factor @7%	Net present Value
31-Mar-2009	Interest	30,000	0.9346	28,038
31-Mar-2010	Interest	30,000	0.8734	26,202
31-Mar-2011	Interest	30,000	0.8163	24,489
31-Mar-2012	Interest	30,000	0.7629	22,887
31-Mar-2012	Principal	5,00,000	0.6629	3,81,450
Total Liability Component				4,83,066
Total Proceeds				5,00,000
Total Equity Component (Bal fig)				16,934

Q5: On 1 April, 2008 A Ltd. issued ₹ 3,00,000, 12% convertible debentures of face value of ₹ 100 per debenture at par. 50% of debentures are redeemable at premium of 10% on 31.03.10. The balance 50% is to be converted into ordinary shares on 31.03.13. the interest rate for equivalent debentures without conversion rights would have been 15%. Being compound financial instrument, you are required to separate equity and debt portion as on 01.04.08.

Ans: This is a compound financial instrument with two components – liability representing present value of future cash outflows and balance represents equity component.

Computation of Liability & Equity Component

Date	Particulars	Cash Flow	Discount Factor @15%	Net present Value
31-Mar-2009	Interest	36,000	0.8696	31,306
31-Mar-2010	Interest	36,000	0.7561	27,220
31-Mar-2010	Principal	1,65,000	0.7561	1,24,757
31-Mar-2011	Interest	18,000	0.6575	11,835
31-Mar-2012	Interest	18,000	0.5717	10,291
31-Mar-2013	Interest	18,000	0.4972	8,950
31-Mar-2013	Principal	0	0.4972	0
Total Liability Component				2,14,357
Total Proceeds				3,00,000
Total Equity Component (Bal fig)				85,643

Q6: On 1 April, 2008 A Ltd. issued ₹ 10,00,000, 8% convertible debentures of face value of ₹ 100 per debenture at a discount of 10%. The debentures are redeemable at a premium of 10% on 31.03.11 or these may be converted into ordinary shares at the option of the holder. The interest rate for equivalent debentures without conversion rights would have been 20%. Being compound financial instrument, you are required to separate equity and debt portion as on 01.04.08.

Ans: This is a compound financial instrument with two components – liability representing present value of future cash outflows and balance represents equity component.

Computation of Liability & Equity Component

Date	Particulars	Cash Flow	Discount Factor @20%	Net present Value
31-Mar-2009	Interest	80,000	0.8333	66,664
31-Mar-2010	Interest	80,000	0.6944	55,552
31-Mar-2011	Interest	80,000	0.5787	46,296
31-Mar-2011	Principal	11,00,000	0.5787	6,36,570
Total Liability Component				8,05,082
Total Proceeds				9,00,000
Total Equity Component (Bal fig)				94,918

Q7: At the beginning of year 1, an enterprise issued 20,000 convertible debentures with face value ₹ 100 per debenture, at par. The debentures have six-year term. The interest at annual rate of 9%

is paid half-yearly. The bondholders have an option to convert half of the face value of debentures into 2 ordinary shares at the end of year 3. The bondholders not exercising the conversion option will be repaid at par to the extent of ₹ 50 per debenture at the end of year 3. The non-convertible portion will be repaid at 10% premium at the end of year 6. At the time of issue, the prevailing market interest rate for similar debt without conversion option was 10%. Being compound financial instrument, you are required to separate equity and debt portion.

Ans: This is a compound financial instrument with two components – liability representing present value of future cash outflows and balance represents equity component.

Computation of Liability & Equity Component

Half year end	Contractual Cash Flow	Discount Factor @5%	Net present Value
1	90,000	0.9524	85,716
2	90,000	0.907	81,630
3	90,000	0.8638	77,742
4	90,000	0.8227	74,043
5	90,000	0.7835	70,515
6	10,90,000	0.7462	8,13,358
7	45,000	0.7107	31,982
8	45,000	0.6768	30,456
9	45,000	0.6446	29,007
10	45,000	0.6139	27,626
11	45,000	0.5847	26,312
12	11,45,000	0.5568	6,37,536
Total Liability Component			19,85,922
Total Proceeds			20,00,000
Total Equity Component (Bal fig)			14,088

Q8: On 1st April, 2008 Sigma Ltd. issued 6% Convertible debentures of face value of ₹ 100 per debenture at par. The debentures are redeemable at a premium of 10% on 31-03- 2012 or these may be converted into ordinary shares at the option of the holder, the interest rate for equivalent debentures without conversion rights would have been 10%. Being a compound financial instrument, you are required to separate equity and debt portions as on 01-04-2008. Equity portion is ₹1,85,400. Find out the debt portion (Debenture amount).

Ans: Assume that total proceeds of the issue is = ₹ M Hence, interest payable every year = 6% of ₹ M =.06M

Present value of interest (10% discount factor)=0.06M x cumulative discount factor of 4 years = 0.06M x 3.17 = 0.1902M.

Present value of the principal repayable after four years [1.10 M x 0.68(10% discount factor)]= 0.748 M

Total present value of debentures (value of debt component) =0.1902M+0.748M=0.9382M

Hence, amount of equity = M –0.9382M = ₹ 1,85,400

0.0618M = ₹ 1,85,400

M = 1,85,400/0.0618=₹30,00,000

Therefore, total proceeds of the issue is ₹ 30,00,000

Debt portion (Debenture amount) = ₹ 30,00,000 – ₹ 1,85,400 = ₹ 28,14,600.

Q9: P Co. Ltd. (issuer) takes a loan from Q Co. Ltd. (holder) for ₹ 12 lakhs. The loan is perpetual and entitles the holder to fixed interest of 8% p.a. The rate of interest commensurate with credit risk profile of the issuer is 12% p.a. Calculate the value of the liability and equity components.

Ans: The values of the liability and equity components are calculated as follows:

Present value of interest payable in perpetuity (₹ 96,000 discounted at 12%) = ₹ 800,000

Therefore, equity component = fair value of compound instrument, say, ₹ 1,200,000 less financial liability component i.e. ₹ 800,000 = ₹ 400,000.

In subsequent years, the profit and loss account is charged with interest of 12% on the debt instrument.

Q10: On 1 July 20X1, D Ltd. issues preference shares to G Ltd. for a consideration of ₹ 10 lakhs. The holder has an option to convert these preference shares to a fixed number of equity instruments of the issuer anytime up to a period of 3 years. If the option is not exercised by the holder, the preference shares are redeemed at the end of 3 years. The preference shares carry a fixed coupon of 6% p.a. and is payable every year. The prevailing market rate for similar preference shares, without the conversion feature, is 9% p.a. Calculate the value of the liability and equity components.

Ans: The values of the liability and equity components are calculated as follows:

Present value of principal payable at the end of 3 years (₹ 10 lakhs discounted at 9% for 3 years) = ₹ 772,183

Present value of interest payable in arrears for 3 years (₹ 60,000 discounted at 9% for each of 3 years) = ₹ 151,878

Total financial liability = ₹ 924,061

Therefore, equity component = fair value of compound instrument, say, ₹ 1,000,000 less financial liability component i.e. ₹ 924,061 = ₹ 75,939.

In subsequent years, the profit and loss account is charged with interest of 9% on the debt instrument.

Q11: D Ltd. issues preference shares to G Ltd. for a consideration of ₹ 10 lakhs. The holder has an option to convert these preference shares to a fixed number of equity instruments of the issuer anytime up to a period of 3 years. If the option is not exercised by the holder, the preference shares are redeemed at the end of 3 years. The preference shares carry a coupon of RBI base rate plus 1% p.a. and is payable at the end of every year.

The prevailing market rate for similar preference shares, without the conversion feature or issuer's redemption option, is RBI base rate plus 4% p.a. On the date of contract, RBI base rate is 9% p.a.

Calculate the value of the liability and equity components.

Ans: The values of the liability and equity components are calculated as follows:

Present value of principal payable at the end of 3 years (₹ 10 lakhs discounted at 13% for 3 years) = ₹ 6,93,050

Present value of interest payable in arrears for 3 years (₹ 100,000 discounted at 13% for each of 3 years) = ₹ 2,36,115

Paragraph AG 31 of Ind AS 32 states that a common form of compound financial instruments is a debt instrument with an embedded conversion option, such as a bond convertible into ordinary shares of the issuer, and without any other embedded derivatives features.

The liability component = Present value of principal + Present value of Interest

= ₹ 6,93,050 + ₹ 2,36,115 = ₹ 9,29,165

Equity Component = ₹ 10,00,000 – ₹ 9,29,165 = ₹ 70,835

Q12: A Limited issues ₹ 1 crore optionally convertible bonds on 1 April 20X1. The bonds have a life of eight years and a face value of ₹ 10 each, and they offer interest, payable at the end of each financial year, at a rate of 6 per cent annum. The bonds are issued at their face value and each bond can be converted into one ordinary share in A Limited at any time in the next eight years. Companies of a similar risk profile have recently issued debt with similar terms, without the option for conversion, at a rate of 8 per cent per annum.

Required:

a) Provide the appropriate accounting entries for initial recognition.

b) Calculate the stream of interest expenses across the eight years of the life of the bonds.

c) Provide the accounting entries if the holders of the bonds elect to convert the bonds to ordinary shares at the end of the third year (after receiving interest for the third year).

[Exam Nov 2018 (8 Marks); Exam May 22 (14 Marks)]

Ans: Applying the guidance for compound instruments, the present value of the bond is computed to identify the liability component and then difference between the present value of these bonds & the issue price of 1 crore shall be allocated to the equity component. In determining the present value, the rate of 8 per cent will be used, which is the interest rate paid on debt of a similar nature and risk that does not provide an option to convert the liability to ordinary shares.

Present value of bonds at the market rate of debt

Present value of principal to be received in eight years discounted at 8% (10,000,000 X 0.5403)	=	5,403,000
Present value of interest stream discounted at 8% for 8 years (6,00,000 X 5.7466)	=	3,447,960
Total present value	=	8,850,960
Equity component	=	1,149,040
Total face value of convertible bonds	=	10,000,000

a) The accounting entries will be as follows:

	Dr. Amount (₹)	Cr. Amount (₹)
1 April, 20X1		
Bank Dr.	10,000,000	
To Convertible bonds (liability)		8,850,960
To Convertible bonds (equity component)		1,149,040
(Being entry to record the convertible bonds and the		
recognition of the liability and equity components)		
31st March, 20X2		
Interest expense Dr.	708,077	
To Bank		600,000
To Convertible bonds (liability)		108,077
(Being entry to record the interest expense, where the		
expense equals the present value of the opening		
liability multiplied by the market rate of interest).		

b) The stream of interest expense is summarised below, where interest for a given year is calculated by multiplying the present value of the liability at the beginning of the period by the market rate of interest, this is being 8 per cent.

Date	Payment	Interest expense at 8%	Increase inbond liability	Total bond liability
1 April, 20X1				8,850,960
31 March 20X2	600,000	708,077	108,077	8,959,037
31 March 20X3	600,000	716,723	116,723	9,075,760
31 March 20X4	600,000	726,061	126,061	9,201,821
31 March 20X5	600,000	736,146	136,146	9,337,967

31 March 20X6	600,000	747,037	147,037	9,485,004
31 March 20X7	600,000	758,800	158,800	9,643,804
31 March 20X8	600,000	771,504	171,504	9,815,308
31 March 20X9	600,000	784,692*	184,692	10,000,000

*difference is due to rounding off

c) If the holders of the bonds elect to convert the bonds to ordinary shares at the end of the third year (after receiving their interest payments), the entries in the third year would be:

		Dr. Amount (₹)	Cr. Amount (₹)
31 March 20X4			
Interest expense	Dr.	726,061	
To Bank			600,000
To Convertible bonds (liability)			126,061
(Being entry to record interest expense for the period)			
31 March 20X4			
Convertible bonds (liability)	Dr.	9,201,821	
Convertible bonds (equity component)	Dr.	1,149,040	
To Ordinary share capital A/c			10,000,000
To Securities Premium A/c			350,861
(Being entry to record the conversion of bonds into shares of A Limited recognised in equity share capital account at face value of the shares and there being no premium on equity shares, the balance has been transferred to retained earnings.)			

Q13: K Ltd. issued 5,00,000, 6% Convertible Debentures off ₹ 10 each on the First of April2010. The debentures are due for redemption on 31st March, 2014 at a premium of 10% convertible into equity shares to the extent of 50% and the balance to be settled in cash to the debenture holders The interest rate on equivalent debentures without conversion rights was 10%. You are required to separate the debt & equity components at the time of the issue and show the accounting entry in the company's books at initial recognition.

Ans: Computation of Debt Component of Convertible Debentures as on 1.4.2014

Particulars	₹
Present value of the principal repayable after four years	
[50,00,000 x 50% × 1.10 × 0.68 (10% Discount factor)] (a)	18,70,000

Present value of Interest [3,00,000 x 3.17 (4 years cumulative 10% discount factor)](b)			9,51,000
Total present Value of debt component (I) (a+b)			28,21,000
Issue proceeds from convertible debenture(II) (c)			50,00,000
Value of equity component (I-II) (a+b-c)			21,79,000
Journal entry at initial recognition		Dr. (₹)	Cr. (₹)
Cash / Bank A/c	Dr.	50,00,000	
To 6% Debenture (Liability component) A/c To 6% Debenture (Equity component) A/c (Being the disbursement recorded at fair value)			28,21,000

Q14: ABC Company issued 10,000 compulsory cumulative convertible preference shares (CCCPS) as on 1 April 20X1 @ ₹ 150 each. The rate of dividend is 10% payable every year. The preference shares are convertible into 5,000 equity shares of the company at the end of 5th year from the date of allotment. When the CCCPS are issued, the prevailing market interest rate for similar debt without conversion options is 15% per annum. Transaction cost on the date of issuance is 2% of the value of the proceeds.

Key terms:

Date of Allotment	01-Apr-20X1
Date of Conversion	01-Apr-20X6
Number of Preference Shares	10,000
Face Value of Preference Shares	150
Total Proceeds	15,00,000
Rate Of dividend	10%
Market Rate for Similar Instrument	15%
Transaction Cost	30,000
Face value of equity share after conversion	10
Number of equity shares to be issued	5,000
The effective interest rate for liability component	15.86%

Calculate the value of the liability and equity components. **[MTP NOV 2021; May 2023; SEP 2025]**

Ans: This is a compound financial instrument with two components – liability representing present value of future cash outflows and balance represents equity component.

a. **Computation of Liability & Equity Component**

Date	Particulars	Cash Flow	Discount Factor	Net present Value

01-Apr-20X1		0	1	0.00
31-Mar-20X2	Dividend	150,000	0.869565	130,434.75
31-Mar-20X3	Dividend	150,000	0.756144	113,421.6
31-Mar-20X4	Dividend	150,000	0.657516	98,627.4
31-Mar-20X5	Dividend	150,000	0.571753	85,762.95
31-Mar-20X6	Dividend	150,000	0.497177	74,576.55
Total Liability Component				502,823.25
Total Proceeds				1,500,000.00
Total Equity Component (Bal fig)				997,176.75

b. **Allocation of transaction costs**

Particulars	Amount	Allocation	Net Amount
Liability Component	502,823	10,056	492,767
Equity Component	997,177	19,944	977,233
Total Proceeds	1,500,000	30,000	1,470,000

c. **Accounting for liability at amortised cost:**

- Initial accounting = Present value of cash outflows less transaction costs

- Subsequent accounting = At amortised cost, ie, initial fair value adjusted for interest and repayments of the liability.

	Opening Financial Liability A	Interest B	Cash Flow C	Closing Financial Liability A+B-C
01-Apr-20X1	492,767	-	-	4,92,767
31-Mar-20X2	492,767	78,153	150,000	4,20,920
31-Mar-20X3	420,920	66,758	150,000	3,37,678
31-Mar-20X4	337,678	53,556	150,000	2,41,234
31-Mar-20X5	241,234	38,260	150,000	1,29,494
31-Mar-20X6	129,494	20,506	150,000	-

d. Journal Entries to be recorded for entire term of arrangement are as follows:

Date	Particulars		Debit	Credit
01-Apr-20X1	Bank A/c	Dr.	1,470,000	

	To Preference Shares Liability A/c To Equity Component of Preference sharesA/c (Being compulsorily convertible preferenceshares issued. The same are divided into equity component and liability component as per the calculation)		492,767 977,233
31-Mar-20X2	Preference shares Liability A/c Dr.	150,000	
	To Bank A/c (Being Dividend at the coupon rate of 10% paidto the shareholders)		150,000
31-Mar-20X2	Finance cost A/c Dr.	78,153	
	To Preference Shares Liability A/c (Being interest as per EIR method recorded)		78,153
31-Mar-20X3	Preference shares Liability A/c Dr.	150,000	
	To Bank A/c (Being Dividend at the coupon rate of 10% paidto the shareholders)		150,000
31-Mar-20X3	Finance cost A/c Dr.	66,758	
	To Preference Shares Liability A/c (Being interest as per EIR method recorded)		66,758
31-Mar-20X4	Preference shares Liability A/c Dr.	150,000	
	To Bank A/c (Being Dividend at the coupon rate of 10% paidto the shareholders)		150,000
31-Mar-20X4	Finance cost A/c Dr.	53,556	
	To Preference Shares Liability A/c (Being interest as per EIR method recorded)		53,556
31-Mar-20X5	Preference shares Liability A/c Dr.	150,000	
	To Bank A/c (Being Dividend at the coupon rate of 10% paidto the shareholders)		150,000
31-Mar-20X5	Finance cost A/c Dr.	38,260	
	To Preference Shares Liability A/c (Being interest as per EIR method recorded)		38,260
31-Mar-20X6	Preference shares Liability A/c Dr.	150,000	

	To Bank A/c (Being Dividend at the coupon rate of 10% paidto the shareholders)		150,000
31-Mar-20X6	Finance cost A/c Dr.	20,506	
	To Preference Shares Liability A/c (Being interest as per EIR method recorded)		20,506
31-Mar-20X6	Equity Component of Preference shares A/c Dr.	977,233	
	To Equity Share Capital A/cTo		50,000
	Securities Premium A/c (Being Preference shares converted in equity shares and remaining equity component is recognised as securities premium)		927,233

Q15: On 1 April 20X1, an 8% convertible loan with a nominal value of ₹ 6,00,000 was issued at par. It is redeemable on 31 March 20X5 also at par. Alternatively, it may be converted into equity shares on the basis of 100 new shares for each ₹ 200 worth of loan.

An equivalent loan without the conversion option would have carried interest at 10%. Interest of ₹ 48,000 has already been paid and included as a finance cost.

How will the Company present the above loan notes in the financial statements for the year ended 31 March 20X2.

Ans:

Step 1 There is an 'option' to convert the loans into equity i.e. the loan note holders do not have to accept equity shares; they could demand repayment in the form of cash.

Ind AS 32 states that where there is an obligation to transfer economic benefits there should be a liability recognised. On the other hand, where there is not an obligation to transfer economic benefits, a financial instrument should be recognised as equity.

In the above illustration we have both – 'equity' and 'debt' features in the instrument. There is an obligation to pay cash – i.e. interest at 8% per annum and a redemption amount – this is 'financial liability' or 'debt component'. The 'equity' part of the transaction is the option to convert. So it is a compound financial instrument.

Step 2 Debt element of the financial instrument so as to recognise the liability is the present value of interest and principal

The rate at which the same is to be discounted, is the rate of equivalent loan note without the conversion option would have carried interest at 10%, therefore this is the rate to be used for discounting

Step 3 Calculation of the debt element of the loan note as follows:

8% Interest discounted at a rate of 10% Present Value (6,00,000 x 8%)

S. No	Year	Interest amount	PVF	Amount
Year 1	20X2	48,000	0.91	43,680
Year 2	20X3	48,000	0.83	39,840
Year 3	20X4	48,000	0.75	36,063
1,19,583				
Year 4	20X5	648,000	0.68	4,40,640
Amount to be recognised as a liability	5,60,223			
Initial proceeds	(6,00,000)			
Amount to be recognised as equity	**39,777**			

Step 4 The next step is to recognise the interest component equivalent to the loan that would carry if there was no option to cover. Therefore, the interest should be recognised at 10%.

As on date ₹ 48,000 has been recognised in the statement of profit and loss i.e. 6,00,000 x 8% but we have discounted the present value of future interest payments and redemption amount using discount factors of 10%, so the finance charge in the statement of profit and loss must also be recognised at the same rate i.e. for the purpose of consistency.

The additional charge to be recognised in the income statement is calculated as:

Debt component of the financial instrument ₹ 5,60,000

Interest charge (5,60,000 x 10%)	₹ 56,000
Already charged to the income statement	(₹ 48,000)
Additional charge required	₹ 8,000

Q16: QA Ltd. has also issued 10,00,000 of 8% Long Term Bond-B Series of ₹ 1 each on 1st April, 2016. The bond tenure is 3 years. Interest is payable annually on 1st April each year. However, the bond holders of this series are entitled to convert the bonds to shares of ₹ 1 each on the date of maturity, instead of receiving the principal repayment. Interest rate on the similar bond without conversion option is 10%. QA Ltd. has requested you to suggest the following for this type of instrument:

(a) What is entry to be passed at the date of issuance of the bond as per applicable Ind AS?

(b) What is entry to be passed at the date of conversion of the bond as per applicable Ind AS? **[MTP May 2019]**

Ans: (a)

Cash/Bank A/c	Dr.	₹ 10,00,000
To 8% LT Bond Series B A/c		₹ 9,50,263
To Share Option A/c		₹ 49,737

Workings for the above

It is a compound instrument.

Calculation of initial recognition amount of 8% Long term Loan Bond B Series liability and equity component

Particulars		₹
Present value of the principal repayable after 3 years (10,00,000 x .751315)		7,51,315
Present value of Interest [(10,00,000 x 8%) x 2.48685]		1,98,948
Total Present Value of Long term Loan Bond B	I	9,50,263
Issue proceeds from convertible bond	II	10,00,000
Value of equity component	(II – I)	49,737

(b) 8% LT Bond Series B A/c ₹ 10,00,000

Share Option A/c ₹ 49,737

To Share Capital A/c ₹ 10,00,000

To Other Equity A/c ₹ 49,737

Reasoning:

As per para AG32 of Ind AS 32, on conversion of a convertible instrument at maturity, the entity derecognises the liability component and recognises it as equity. The original equity component remains as equity (although it may be transferred from one line item within equity to another). There is no gain or loss on conversion at maturity.

CONVERSION OR EARLY SETTLEMENT OF COMPOUND FINANCIAL INSTRUMENTS

Q17: On 1 July 20X1, D Ltd. issues preference shares to G Ltd. for a consideration of ₹ 10 lakhs. The holder has an option to convert these preference shares to a fixed number of equity instruments of the issuer anytime up to a period of 3 years. If the option is not exercised by the holder, the preference shares are redeemed at the end of 3 years. The preference shares carry a fixed coupon of 6% p.a. and is payable every year. The prevailing market rate for similar preference shares, without the conversion feature, is 9% p.a.

Assume that D Ltd. has an early redemption option to prepay the instrument at ₹ 11 lakhs and on 30 June 20X3, it exercises that option. At 30 June 20X3, the interest rate has changed. At that time, D Ltd. could have issued a one-year (i.e. maturity 30 June 20X4) non-convertible instrument at 5%. Calculate the value of the liability and equity components.

Ans: As on 1 July 20X1

The values of the liability and equity components are calculated as follows:

Present value of principal payable at the end of 3 years (₹ 10 lakhs discounted at 9% for 3 years) = ₹ 772,183

Present value of interest payable in arrears for 3 years (₹ 60,000 discounted at 9% for each of 3 years) = ₹ 151,878

Total financial liability = ₹ 924,061

Therefore, equity component = fair value of compound instrument, say, ₹ 1,000,000 less financial liability component i.e. ₹ 924,061 = ₹ 75,939.

In subsequent years, the profit and loss account is charged with interest of 9% on the debt instrument.

Dates	*Cash flows*	*Finance cost at effective interest rate*	*Liability*	*Equity*
1July 20X1	*1,000,000*	*-*	*9,24,061*	*75,939*
30 June 20X2	*(60,000)*	*83,165*	*9,47,226*	*75,939*
30 June 20X3	*(60,000)*	*85,250*	*9,72,476*	*75,939*
30 June 20X4	*(10,60,000)*	*87,524*	*-*	*75,939*

As on 30 June 2023

Ind AS 32 requires that the amount paid (of ₹ 11 lakhs) is split by the same method as is used in the initial recording. However, at 30 June 20X3, the interest rate has changed. At that time, D Ltd. could have issued a one-year (i.e. maturity 30 June 20X4) non-convertible instrument at 5%.

The split will be made as below:

Particulars	Amount (₹)
Present value of principal payable at 30 June 20X4 in one year's time (₹ 10 lakhs discounted at 5% for one year)	9,52,381
Present value of interest payable (₹ 60,000 discounted at 5% for one year)	57,142
Total liability component	10,09,523
Consideration paid	11,00,000
Residual – equity component	90,477

Accordingly, the difference between consideration allocated to liability component (₹ 10,09,523) less carrying amount of financial liability on date of redemption i.e. 30 June 20X3 (₹ 9,72,476), amounting to ₹ 37,047 is recognised in profit or loss.

The residual i.e. consideration allocated to equity component is recognised in equity.

Q18: On 1 January 1999, A Ltd issued a 10 per cent convertible debenture with a face value of ₹ 1,000 maturing on 31 December 2008. The debenture is convertible into equity shares of A Ltd at a conversion price of ₹25 per share. Interest is payable half-yearly in cash. At the date of issue, A

Ltd could have issued non-convertible debt with a ten-year term bearing a coupon interest rate of 11 per cent.

On 1 January 2004, the convertible debenture has a fair value of ₹ 1,700. A Ltd makes a tender offer to the holder of the debenture to repurchase the debenture for ₹ 1,700, which the holder accepts. At the date of repurchase, A Ltd. could have issued non-convertible debt with a five-year term bearing a coupon interest rate of 8 per cent. Show how an entity accounts for (i) equity and liability at the inception and (ii) at the repurchase of the convertible instrument.

[RTP May 2025; Exam Sep 2025 (10 Marks)]

Ans: At the inception

Computation of fair value of Liability Component	**₹**
Present value of 20 half yearly interest payments of ₹ 50,	
discounted @ 11% (₹ 50 × 11.9504)	597
Present value of ₹ 1,000 due in ten years, discounted @ 11%	
compounded half yearly (₹ 1,000 × 0.343)	343
Fair value of liability component	940
Computation of Equity Component	₹
Issue proceeds from convertible debenture	1,000
Less: Fair value of liability component	940
Fair value of Equity Component	60

Journal Entries		**Debit (₹)**	**Credit (₹)**
Cash/Bank A/c	Dr.	1,000	
To Liability component			940
To Equity component			
(Being issue of debentures recorded at fair values)			

At the time of repurchase

The repurchase price is allocated as follows:

	Carrying value	**Fair Value**	**Difference**	
Liability component				
Present value of 10 remaining half-yearly interest payments of ₹ 50 discounted at 11%and 8% respectively	377	405		
Present value of ₹ 1,000 due in 5 years, discounted at 11% and 8% compounded half yearly, respectively	593	680		

		970	1085	115	
Equity component		60	615	555	
Total		1,030	1,700	670	

Journal Entries				
			Debit ₹	**Credit ₹**
Liability Component		Dr.	970	
Debt settlement expenses (statement of profit and loss)		Dr.	115	
	To Cash A/c			1085
(Being repurchase of the liability component)				
Equity component		Dr.	60	
Retained Earning		Dr.	555	
	To Cash A/c			615
(Being cash paid for the equity component)				

Q19: On 1 January 1999, Entity A issued a 10 per cent convertible debenture with a face value of ₹ 1,000 maturing on 31 December 2008. The debenture is convertible into equity shares of Entity A at a conversion price of ₹25 per share. Interest is payable half-yearly in cash. At the date of issue, Entity A could have issued non-convertible debt with a ten-year term bearing a coupon interest rate of 11 per cent.

On 1 January 2006, to induce the holder to convert the convertible debenture promptly, Entity A reduces the conversion price to ₹20 if the debenture is converted before 1 March 2006 (i.e. within 60 days). The market price of Entity A's equity shares on the date the terms are amended is ₹40 per share. How will the revised terms be accounted? **[RTP May 2022]**

Ans: The fair value of the incremental consideration paid by Entity A is calculated as follows:

Number of equity shares to be issued to debenture holders under amended conversion terms:

Face amount	₹ 1,000
New conversion price	₹ 20 per share
Number of equity shares to be issued on conversion (A)	50 shares
Number of equity shares to be issued to debenture holders under original conversion terms:	
Face amount	₹ 1,000
Original conversion price	₹25 per share

Number of equity shares issued upon conversion (B)	40 shares
Number of incremental equity shares issued upon conversion (A-B)	10 Shares
Value of incremental equity shares issued upon conversion (to be recognised as Loss in PL)	
₹40 per share x 10 incremental shares	₹400

TRADE DATE AND SETTLEMENT DATE ACCOUNTING

Q20: On 1 January 20X1, X Ltd. enters into a contract to purchase a financial asset for ₹ 10 lakhs, which is its fair value on trade date. On 4 January 20X1 (settlement date), the fair value of the asset is ₹ 10.5 lakhs. The amounts to be recorded for the financial asset will depend on how it is classified and whether trade date or settlement date accounting is used. Pass necessary journal entries.

Ans: Journal Entries in the Buyer's Books - Trade date accounting

Dr. / Cr.	Particulars	Amortised cost	Fair value through P&L	Fair value through OCI
1 January 20X1				
Dr.	Financial asset	10,00,000	10,00,000	10,00,000
Cr.	Financial liability (to pay)	(10,00,000)	(10,00,000)	(10,00,000)
4 January 20X1				
Dr.	Financial asset	-	50,000	50,000
Dr.	Financial liability (to pay)	10,00,000	10,00,000	10,00,000
Cr.	Profit or loss	-	(50,000)	-
Cr.	Other comprehensive income	-	-	(50,000)
Cr.	Cash	(10,00,000)	(10,00,000)	(10,00,000)

Settlement date accounting

Dr. / Cr.	Particulars	Amortised cost	Fair value through P&L	Fair value through OCI
Dr.	Financial asset	10,00,000	10,50,000	10,50,000
Cr.	Profit or loss	-	(50,000)	-
Cr.	Other comprehensive income	-	-	(50,000)
Cr.	Cash	(10,00,000)	(10,00,000)	(10,00,000)

Q21: On 30th March 2015 an entity enters into an agreement to purchase a Financial Asset for ₹ 100 which is the Fair Value on that date. On Balance Sheet date i.e. 31/3/2015 the Fair Value is 102 and on Settlement date i.e. 2/4/2015 Fair Value is 103. Pass necessary Journal entries on trade date and settlement date when the asset acquired is measured at

(a) Amortised cost

(b) FVTPL

(c) FVTOCI

Ans: Financial Asset at Amortised Cost

Dates	Trade Date Accounting	Amount	Settlement Date Accounting	Amount
30/3/2015	Financial Asset Dr. To Payables	100 100	No Entry	
31/3/2015	No Entry		No Entry	
2/4/2015	Payables Dr. To Cash	100 100	Financial Asset Dr. To Cash	100 100

Financial Asset at FVTPL

Dates	Trade Date Accounting	Amount	Settlement Date Accounting	Amount
30/3/2015	Financial Asset Dr. To Payables	100 100	No Entry	
31/3/2015	Financial Asset Dr. To P&L	2 2	Fair Value Change Dr. To P&L	2 2
2/4/2015	Financial Asset Dr. To P&L	1 1	Fair Value Change Dr. To P&L	1 1
	Payables Dr. To Cash	100 100	Financial Asset Dr. To Cash To Fair Value Change	103 100 3

Financial Asset at FVTOCI

Dates	Trade Date Accounting	Amount	Settlement Date Accounting	Amount
30/3/2015	Financial Asset Dr. To Payables	100 100	No Entry	
31/3/2015	Financial Asset Dr. To OCI	2 2	Fair Value Change Dr. To OCI	2 2
2/4/2015	Financial Asset Dr. To OCI	1 1	Fair Value Change Dr. To OCI	1 1
	Payables Dr. To Cash	100 100	Financial Asset Dr. To Cash To Fair Value Change	103 100 3

FINANCIAL ASSETS: MEASUREMENTS

Q22: A Ltd. invested in equity shares of C Ltd. on 15th March for ₹ 10,000. Transaction costs were ₹ 500 in addition to the basic cost of ₹ 10,000. On 31 March, the fair value of the equity shares was ₹ 11,200 and market rate of interest is 10% per annum for a 10 year loan. Pass necessary journal entries. Analyse the measurement principal and pass necessary journal entries.

Ans: The above investment is in equity shares of C Ltd and hence, does not involve any contractual cash flows that are solely payments of principal and interest. Hence, these equity shares shall be measured at fair value through profit or loss. Also, an irrecoverable option exists to designate such investment as fair value through other comprehensive income.

Journal Entries

Upon initial recognition –

Investment in equity shares of C Ltd.	Dr.	10,000	
Transaction Cost	Dr	500	
To Bank a/c			10,500
(Being investment recognized at fair value plus transaction costs upon initial recognition)			
Profit and Loss A/c	Dr	500	
To Transaction Cost			500

Subsequently –

Investment in equity shares of C Ltd.	Dr.	1,200	
To Fair value gain on financial instruments			1,200
(Being fair value gain recognized at year end in P&L)			
Fair value gain on financial instruments		1,200	

To Profit and Loss A/c 1,200

Q23: Metallics Ltd. has made an investment in equity instrument of a company – Castor Ltd. for 19% equity stake. Significant influence not exercised. The investment was made for ₹ 5,00,000 for 10,000 equity shares on 01 April 20X1. On 30 June 20X1 the fair value per equity share is ₹45. The Company has taken an irrevocable option to measure such investment at fair value through other comprehensive income.

Ans: The Company has made an irrecoverable option to carry its investment at fair value through other comprehensive income. Accordingly, the investment shall be initially recognised at fair value and all subsequent fair value gains/ losses shall be recognised in other comprehensive income (OCI).

Journal entries

Upon initial recognition –

Investment in equity shares of C Ltd.	Dr.	5,00,000	
To Bank a/c			5,00,000

(Being investment recognized at fair value plus transaction costs upon initial recognition)

Subsequently –

Fair value loss on financial instruments (OCI)	Dr.	50,000	
To Investment in equity shares of C Ltd.			50,000

(Being fair value loss recognized in OCI section of the Statement of Profit and Loss under items that cannot be reclassified to profit or loss)

Fair value reserve for Equity Instruments	Dr.	50,000	
To Fair value loss on financial instruments			50,000

(Being fair value loss recognized in other comprehensive income accumulated in equity investments fair value reserve)

Q24: FEE Ltd., borrows a sum of ₹ 20 crore from COFEE Ltd., repayable as a single bullet payment at the end of 5 years. The interest thereon @ 5% p.a. is payable at yearly rests. Since the market is 8% FEE Ltd paid an origination fee of ₹ 2,40 crores to COFEE Ltd., to compensate COFEE Ltd., for the lower rate of interest. Apart from the above, there are no other transactions between the two parties. You are required to show the value at which COFEE Ltd., would recognize the loan and the annual interest thereon. **[ICAI SM – Old syllabus]**

Ans: Therefore, the fair value of the loan to Cofee Ltd. Is the present value of the interest it will receive over the next 5 years & the present value of repayment it will at the end of the 5th year.

P.V. of interest discounted @ 8% = [(20,00,00,000 × 5%) × 3.9926] =₹ 3,99,36,000 (A)

P.V. of principal amount = ₹ 20,00,00,000 × discounted @ 8%= 20,00,00,000 × 0.6806 = 13,61,20,000 (B)

FV of Loan (A + B) i.e. ₹17,60,46,000 (i.e. approximately 17,60,00,000 which is loan amount net of origination fees.

COFEE Ltd. will recognize the loan at ₹ 17.60 crores only.

COFEE Ltd will recognize the interest using the effective interest rate method as worked out below:

Year	Amortised Cost (Opening	Interest income @ 8% to be Recognised	Total	Payment received	Amortised Cost (Closing Balance)
	(1)	(2)	(3)	(4)	(5) = (3) – (4)
1	17,60,00,000	1,40,80,000	19,00,80,000	1,00,00,000	18,00,80,000
2	18,00,80,000	1,44,06,400	19,44,86,400	1,00,00,000	18,44,86,400
3	18,44,86,400	1,47,58,912	19,92,45,312	1,00,00,000	18,92,45,312
4	18,92,45,312	1,51,39,625	20,43,84,937	1,00,00,000	19,43,84,937
5	19,43,84,937	1,56,15,063*	21,00,00,000	21,00,00,000	Nil

*Note: The interest in the 5th year, has been adjusted in accordance to the value received on closure.

Q25: As part of staff welfare measures, Y Co Ltd. has contracted to lend to its employees sums of money at 5% per annum rate of interest. The amounts lent are to be repaid in five equal instalments for principle along with the interest. The market rate of interest is 10% per annum for comparable loans. Y lent ₹ 1,600,000 to its employees on 1st January 20X1.

Following the principles of recognition and measurement as laid down in Ind AS 109, you are required to record the entries for the year ended 31 December 20X1, for the transaction and also compute the value of loan initially to be recognised and amortised cost for all subsequent years.

Ans: (i) Calculation of initial measurement amount of loan to its employees:

Yearend	Cash flow		Total	PV factor	Present value
	Principal	Interest @ 5%			
20X1	320,000	80,000	400,000	.909	363,600
20X2	320,000	64,000	384,000	.827	317,568
20X3	320,000	48,000	368,000	.751	276,368
20X4	320,000	32,000	352,000	.683	240,416
20X5	320,000	16,000	336,000	.620	208,320
					1,406,272

(ii) Calculation of amortised cost of loan to employees

Yearend	Amortised cost (opening balance)	Interest to be recognised	Repayment (including interest)	Amortised cost (closing balance)
20X1	1,406,272	140,627	400,000	1,146,899
20X2	1,146,899	114,690	384,000	877,589
20X3	877,589	87,759	368,000	597,348
20X4	597,348	59,735	352,000	305,083
20X5	305,083	30,917*	336,000	-

*305,083 x 10% = 30,508. Difference of ₹ 409 is due to approximation in computation.

(iii) Journal Entries to be recorded of Y Ltd. for the year ended 31 December 20X1

Date	Particulars		Debit	Credit
1 Jan 20X1	Staff loan A/c	Dr.	14,06,272	
	Prepaid staff cost A/c*	Dr.	1,93,728	
	[(1,600,000 – 1,406,272), Refer part (ii)]			16,00,000
	To Bank A/c			
	(Being disbursement of loans to staff and excess loan balance over present valuethereof in order to reflect the loan at its present value booked as prepaid staff cost)			
31 Dec 20X1	Staff loan A/c	Dr.	1,40,627	
	To Interest expense A/c			1,40,627
	(Being interest accrued on loans to staff)			
31 Dec 20X1	Staff cost A/c	Dr.	38,746	
	To Prepaid expense A/c			38,746
	(Being prepaid expense charged for theyear against staff cost)			

* Where the difference between the amount given by the Company to its employees and its fair value represents another asset, then such asset shall be recognised. Accordingly, such difference is recognised as prepaid employee cost and amortised over the period of loan.

Q26: A Ltd has made a security deposit whose details are described below. Make necessary journal entries for accounting of the deposit. Assume market interest rate for a deposit for similar period to be 12% per annum.

Particulars	**Details**
Date of Security Deposit (Starting Date)	1-Apr-20X1
Date of Security Deposit (Finishing Date)	31-Mar-20X6
Description	Lease
Total Lease Period (Years)	5
Discount rate	12.00%
Security deposit (A)	10,00,000
Present value annuity factor	0.567427

Determine, how above financial asset should be measured and briefly explain measurement determined as such. Make necessary journal entries for accounting of the security deposit in the first year and last year. **[Exam Nov 2019; Dec 21 (5 Marks); MTP Nov 2023; SEP 25]**

Ans: The above security deposit is an interest free deposit redeemable at the end of lease term for ₹ 1,000,000. Hence, this involves collection of contractual cash flows and shall be accounted at amortised cost.

Upon initial measurement – Particulars	**Details**
Security deposit (A)	10,00,000
Total Lease Period (Years)	5
Discount rate	12.00%
Present value annuity factor	0.56743
Present value of deposit at beginning (B)	5,67,427
ROU Assets at beginning (A-B)	4,32,573

Journal Entries

Security deposit a/c	Dr.	5,67,427	
ROU Assets a/c	Dr.	4,32,573	
To Bank a/c			10,00,000

Subsequently, every annual reporting year, interest income shall be accrued@ 12% per annum and ROU Assets shall be amortised on straight line basis over the lease term.

For instance – year 1			
Security deposit a/c	Dr.	68,091	
To Interest income			68,091
Depreciation	Dr.	86,515	

To ROU Assets a/c			86,515

At the end of 5 years, the security deposit shall accrue to ₹ 10,00,000 and ROU Assets shall be fully amortised. Journal entry for realisation of security deposit –

Bank a/c	Dr.	10,00,000	
To Security deposit a/c			10,00,000

Q27: XYZ Ltd. is a company incorporated in India. It provides INR 10,00,000 interest free loan to its wholly owned Indian subsidiary (ABC). There are no transaction costs.

How should the loan be accounted for, in the separate financial statements of XYZ, individual financial statements of ABC and consolidated financial statements of the group?

Consider the following scenarios:

a) The loan is repayable on demand.

b) The loan is repayable after 3 years. The current market rate of interest for similar loan is 10% p.a. for both holding and subsidiary.

c) The loan is repayable when ABC has funds to repay the loan.

Ans: Ind AS 109 requires that a financial assets and liabilities are recognized on initial recognition at its fair value, as adjusted for the transaction cost. In accordance with Ind AS 113 Fair Value Measurement, the fair value of a financial liability with a demand feature (e.g., a demand deposit) is not less than the amount payable on demand, discounted from the first date that the amount could be required to be paid.

Using the guidance, the loan will be accounted for as below in various scenarios:

Scenario (a): Since the loan is repayable on demand, it has fair value equal to cash consideration given. The parent and subsidiary recognize financial asset and liability, respectively, at the amount of loan given. Going forward, no interest is accrued on the loan.

Upon repayment, both the parent and the subsidiary reverse the entries made at origination.

Scenario (b): Both parent and subsidiary recognize financial asset and liability, respectively, at fair value on initial recognition. The difference between the loan amount and its fair value is treated as an equity contribution to the subsidiary. This represents a further investment by the parent in the subsidiary.

Accounting in the books of XYZ Ltd (Parent)

S. No.	Particulars		Amount	Amount
1	**On the date of loan**			
	Loan to ABC Ltd (Subsidiary)	Dr.	7,51,315	
	Deemed Investment (Capital Contribution) in ABC Ltd.	Dr.	2,48,685	
	To Bank			10,00,000
	(Being the loan is given to ABC Ltd and recognised atfair value)			

2	**Accrual of Interest income**			
	Loan to ABC Ltd	Dr.	75,131	
	To Interest income			75,131
	(Being interest income accrued) – Year 1			
3	Loan to ABC Ltd	Dr.	82,645	
	To Interest income			82,645
	(Being interest income accrued) – Year 2			
4	Loan to ABC Ltd	Dr.	90,909	
	To Interest income			90,909
	(Being interest income accrued) – Year 3			
5	Bank		10,00,000	
	To Loan to ABC Ltd (Subsidiary)			10,00,000

Accounting in the books of ABC Ltd (Subsidiary)

S. No.	Particulars		Amount	Amount
1	**On the date of loan**			
	Bank	Dr.	10,00,000	
	To Loan from XYZ Ltd (Payable)			751,315
	To Equity (Deemed Capital Contribution fromXYZ Ltd)			2,48,685
	(Being the loan taken from XYZ Ltd. and recognized at Fair value)			
2	**Accrual of Interest**			
	Interest expense	Dr.	75,131	
	To Loan from XYZ Ltd (Payable)			75,131
	(Being interest expense recognised) – Year 1			
3	Interest expense	Dr.	82,645	
	To Loan from XYZ Ltd (Payable)			82,645
	(Being interest expense recognised) – Year 2			
4	Interest expense	Dr.	90,909	
	To Loan from XYZ Ltd (Payable)			90,909
	(Being interest expense recognised) – Year 3			
5	**On repayment of loan**			
	Loan from XYZ Ltd (Payable)	Dr.	10,00,000	
	To Bank			10,00,000

Working Notes:-

1 **Computation of Present value of loan**	
Rate	10%
Amount of Loan	10,00,000
Year	3
Present Value	7,51,315
2 **Computation of interest for Year I**	
Present Value	7,51,315
Rate	10%
Period of interest - for 1 year	1
Closing value at the end of year 1	8,26,446
Interest for 1st year	75,131
3 **Computation of interest for Year 2**	
Value of loan as at the beginning of Year 2	8,26,446
Rate	10%
Period of interest - for 2nd year	1
Closing value at the end of year 2	9,09,091
Interest for 2nd year	82,645
Computation of interest for Year 3 Value of loan as at the beginning of Year 3	9,09,091
Rate	10%
Period of interest - for 3rd year	1
Closing value at the end of year 3	10,00,000
Interest for 3rd year	90,909

Scenario (c): Generally, a loan, which is repayable when funds are available, can't be stated to be repayable on demand. Rather, the entities need to estimate repayment date and determine its measurement accordingly. If the loan is expected to be repaid in three years, its measurement will be the same as in scenario (b).

In the Consolidated Financial Statements (CFS), the loan and interest income/expense will get eliminated as intra-group transaction in all three scenarios. Hence the above accounting will not have any impact in the CFS. However, if the loan is in foreign currency, exchange difference will continue to impact the statement of profit and loss in accordance with the requirements of Ind AS 21.

Q28: A Ltd issued redeemable preference shares to a Holding Company – Z Ltd. The terms of the instrument have been summarized below. Account for this in the books of Z Ltd.

Nature	Non-cumulative redeemable preference shares
Repayment:	Redeemable after 5 years

Date of Allotment:	1-Apr-20X1
Date of repayment:	31-Mar-20X6
Total period:	5.00 years
Value of preference shares issued:	100,000,000
Dividend rate	0.0001%
Market rate of interest	12.00% per annum
Present value factor	0.56743

[Exam May 2018 (8 Marks)]

Ans: Applying the guidance in Ind AS 109, a 'financial asset' shall be recorded at its fair value upon initial recognition. Fair value is normally the transaction price. However, sometimes certain type of instruments may be exchanged at off market terms (ie, different from market terms for a similar instrument if exchanged between market participants). For example, a long-term loan or receivable that carries no interest while similar instruments if exchanged between market participants carry interest, then fair value for such loan receivable will be lower from its transaction price owing to the loss of interest that the holder bears. In such cases where part of the consideration given or received is for something other than the financial instrument, an entity shall measure the fair value of the financial instrument. In the above case, since A Ltd has issued preference shares to its Holding Company – Z Ltd, the relationship between the parties indicates that the difference in transaction price and fair value is akin to investment made by Z Ltd. in its subsidiary. Following is the table summarising the computations on initial recognition:

Market rate of interest	12.00%
Present value factor	0.56743
Present value	56,742,686
Loan component	56,742,686
Investment in subsidiary	43,257,314

Subsequently, such preference shares shall be carried at amortised cost at each reporting date. The computation of amortised cost at each reporting date has been done as follows:

Year	Date	Opening Asset	Interest @ 12%	Closing balance
1	31-Mar-20X2	56,742,686	6,790,467	63,533,153
2	31-Mar-20X3	63,533,153	7,623,978	71,157,131
3	31-Mar-20X4	71,157,131	8,538,856	79,695,987
4	31-Mar-20X5	79,695,987	9,589,720	89,285,707
5	31-Mar-20X6	89,285,707	10,714,285	100,000,000

Journal Entries to be done at every reporting date

Particulars		Amount	Amount
Date of transaction			
Investment - Equity portion	Dr.	43,257,314	

Loan receivable	Dr.	56,742,686	
To Bank			(100,000,000)
Interest income - March 31, 20X2			
Loan receivable	Dr.	6,790,467	
To Interest income			(6,790,467)
Interest income - March 31, 20X3			
Loan receivable	Dr.	7,623,978	
To Interest income			(7,623,978)
Interest income - March 31, 20X4			
Loan receivable	Dr.	8,538,856	
To Interest income			(8,538,856)
Interest income - March 31, 20X5			
Loan receivable	Dr.	9,589,720	
To Interest income			(9,589,720)
Interest income - March 31, 20X6			
Loan receivable	Dr.	10,714,285	
To Interest income			(10,714,285)
Settlement of transaction			
Bank	Dr.	100,000,000	
To Loan receivable			(100,000,000)

Q29: Wheel Co. Limited has a policy of providing subsidized loans to its employees for the purpose of buying or building houses. Mr. X, who's executive assistant to the CEO of Wheel Co. Limited, took a loan from the Company on the following terms:

- Principal amount: 1,000,000
- Interest rate: 4% for the first 400,000 and 7% for the next 600,000
- Start date: 1 January 20X1
- Tenure: 5 years
- Pre-payment: Full or partial pre-payment at the option of the employee
- The principal amount of loan shall be recovered in 5 equal annual instalments and will be first applied to 7% interest bearing principal
- The accrued interest shall be paid on an annual basis
- Mr. X must remain in service till the term of the loan ends

The market rate of a comparable loan available to Mr. X, is 12% per annum.

Following table shows the contractually expected cash flows from the loan given to Mr. X:

(amount in ₹)

Date	Outflows	Principal	Interest income 7%	Interest income 4%	Principal outstanding
1-Jan-20X1	(1,000,000)				1,000,000
31-Dec-20X1		200,000	42,000	16,000	800,000
31-Dec-20X2		200,000	28,000	16,000	600,000
31-Dec-20X3		200,000	14,000	16,000	400,000
31-Dec-20X4		200,000	-	16,000	200,000
31-Dec-20X5		200,000	-	8,000	-

Mr. S, pre-pays ₹ 200,000 on 31 December 20X2, reducing the outstanding principal as at that date to ₹ 400,000.

Following table shows the actual cash flows from the loan given to Mr. X, considering the pre-payment event on 31 December 20X2: (amount in ₹)

Date	Outflows	Principal	Interest income 7%	Interest income 4%	Principal outstanding
1-Jan-20X1	(1,000,000)				1,000,000
31-Dec-20X1		200,000	42,000	16,000	800,000
31-Dec-20X2		400,000	28,000	16,000	400,000
31-Dec-20X3		200,000	-	16,000	200,000
31-Dec-20X4		200,000	-	8,000	-
31-Dec-20X5		-	-	-	-

Record journal entries in the books of Wheel Co. Limited considering the requirements of Ind AS 109. **[Exam JULY 2021 (14 Marks); MTP Nov 22]**

Ans. As per requirement of Ind AS 109, a financial instrument is initially measured and recorded at its fair value. Therefore, considering the market rate of interest of similar loan available to Mr. X at 12%, the fair value of the contractual cash flows shall be as follows:

	Inflows				
Date	**Principal**	**Interest income 7%**	**₹ Interest income 4%**	**Discount factor @12%**	**PV**
31-Dec-20X1	200,000	42,000	16,000	0.8929	2,30,357
31-Dec-20X2	200,000	28,000	16,000	0.7972	1,94,515
31-Dec-20X3	200,000	14,000	16,000	0.7118	1,63,709
31-Dec-20X4	200,000	-	16,000	0.6355	1,37,272
31-Dec-20X5	200,000	-	8,000	0.5674	1,18,025

Total (fair value)		8,43,878

Benefit to Mr. X, to be considered a part of employee cost for Wheel Co. ₹ 1,56,121

The deemed employee cost is to be amortised over the period of loan i.e. the minimum period that Mr. X must remain in service.

The amortization schedule of the ₹ 843,878 loan is shown in the following table:

Date	Loan outstanding	Total cash inflows (principal repayment + interest	Interest @ 12%
1-Jan-20X1	843,878		
31-Dec-20X1	687,143	258,000	101,265
31-Dec-20X2	525,600	244,000	82,457
31-Dec-20X3	358,672	230,000	63,072
31-Dec-20X4	185,713	216,000	43,041
31-Dec-20X5	(0)	208,000	22,287

Journal Entries to be recorded at every period end:

a. **1 January 20X1 –**

Particulars	Dr. Amount (₹)	Cr. Amount (₹)
Loan to employee A/c Dr. Pre-paid employee cost A/c Dr To Cash A/c (Being loan asset recorded at initial fair value)	843,879 156,121	 1,000,000

b. 31 December 20X1 –

Cash A/c Dr. To Interest income (profit and loss) @12% A/c To loan to employee A/c (Being first instalment of repayment of loan accounted for using the amortised cost and effective interest rate of 12%)	258,000	 101,265 156,735
Employee benefit (profit and loss) A/c Dr. To Pre-paid employee cost A/c (Being amortization of pre-paid employee cost charged to profit and loss as employee benefit cost)	31,224	 31,224

On 31 December 20X2, due to pre-payment of a part of loan by Mr. X, the carrying value of the loan shall be re-computed by discounting the future remaining cash flows by the original effective interest rate.

There shall be two sets of accounting entries on 31 December 20X2, first the realisation of the contractual cash flow as shown in (c) below and then the accounting for the pre-payment of ₹ 200,000 included in (d) below:

c. 31 December 20X2 –

Particulars	Dr. Amount (₹)	Cr. Amount (₹)
Cash A/c Dr. To Interest income (profit and loss) @12% A/c To loan to employee A/c (Being second instalment of repayment of loan accounted for using the amortised cost and effective interest rate of 12%)	244,000	 82,457 161,543
Employee benefit (profit and loss) A/c Dr To Pre-paid employee cost A/c (Being amortization of pre-paid employee cost charged to profit and loss as employee benefit cost)	31,224	 31,224

Computation of new carrying value of loan to employee:

	Inflows				
Date	Principal	Interest income 7%	Interest income 4%	Discount factor @12%	PV
31-Dec-20X3	200,000	-	16,000	0.8929	192,857
31-Dec-20X4	200,000	-	8,000	0.7972	165,816
Total (revised carrying value)					358,673
Less: Current carrying value					525,601
Adjustment required					166,928

The difference between the amount of pre-payment and adjustment to loan shall be considered a gain, though will be recorded as an adjustment to pre-paid employee cost, which shall be amortised over the remaining tenure of the loan.

d. 31 December 20X2 prepayment–

Particulars	Dr. Amount (₹)	Cr. Amount (₹)
Cash A/c Dr. To Pre-paid employee cost A/c To loan to employee A/c (Being gain to Wheel Co. Limited recorded as an adjustment to pre-paid employee cost)	200,000	 33,072 166,928

The amortisation schedule of the new carrying amount of loan shall be as follows:

Date	Loan outstanding	Total cash inflows (principal repayment + interest	Interest @ 12%
31-Dec-20X2	358,673		
31-Dec-20X3	185,714	216,000	43,041
31-Dec-20X4	-	208,000	22,286

Amortisation of employee benefit cost shall be as follows:

Date	Balance	Amortised to P&L	Adjustment
1-Jan-20X1	156,121		

31-Dec-20X1	124,897	31,224	
31-Dec-20X2	60,601	31,224	33,072
31-Dec-20X3	30,300	30,300	
31-Dec-20X4	-	30,300	

e. 31 December 20X3 –

Particulars	Dr. Amount (₹)	Cr. Amount (₹)
Cash A/c Dr. To Interest income (profit and loss) @12% A/c To loan to employee A/c (Being third instalment of repayment of loan accounted for using the amortised cost and effective interest rate of 12%)	216,000	 43,041 172,959
Employee benefit (profit and loss) A/c Dr To Pre-paid employee cost A/c (Being amortization of pre-paid employee cost charged to profit and loss as employee benefit cost)	30,300	 30,300

f. 31 December 20X4 –

Particulars	Dr. Amount (₹)	Cr. Amount (₹)
Cash A/c Dr To Interest income (profit and loss) @12% A/c To loan to employee A/c (Being last instalment of repayment of loan accounted for using the amortised cost and effective interest rate of 12%)	208,000	 22,286 185,714
Employee benefit (profit and loss) A/c Dr To Pre-paid employee cost A/c (Being amortization of pre-paid employee cost charged to profit and loss as employee benefit cost)	30,300	 30,300

Q30: KK Ltd. has granted an interest free loan of ₹ 10,00,000 to its wholly owned Indian Subsidiary YK Ltd. There is no transaction cost attached to the said loan. The Company has not finalised any terms and conditions including the applicable interest rates on such loans. The Board of Directors of the Company are evaluating various options and has requested your firm to provide your views under Ind AS in following situations:

(i) The Loan given by KK Ltd. to its wholly owned subsidiary YK Ltd. is interest free and such loan is repayable on demand.

(ii) The said Loan is interest free and will be repayable after 3 years from the date of granting such loan. The current market rate of interest for similar loan is 10%. Considering the same, the fair value of the loan at initial recognition is ₹ 8,10,150.

(iii) The said loan is interest free and will be repaid as and when the YK Ltd. has funds to repay the Loan amount.

Based on the same, KK Ltd. has requested you to suggest the accounting treatment of the above loan in the stand-alone financial statements of KK Ltd. and YK Ltd. and also in the consolidated financial statements of the group. Consider interest for only one year for the above loan.

Further the Company is also planning to grant interest free loan from YK Ltd. to KK Ltd. in the subsequent period. What will be the accounting treatment of the same under applicable Ind AS?

[RTP May 2019; Exam Dec 21 (12 Marks)]

Ans: **Scenario (i) :** Since the loan is repayable on demand, it has fair value equal to cash consideration given. KK Ltd. and YK Ltd. should recognize financial asset and liability, respectively, at the amount of loan given (assuming that loan is repayable within a year). Upon, repayment, both the entities should reverse the entries that were made at the origination.

Journal entries in the books of KK Ltd.

At origination

Loan to YK Ltd. A/c	Dr.	₹ 10,00,000	
To Bank A/c			₹ 10,00,000

On repayment

Bank A/c	Dr.	₹ 10,00,000	
To Loan to YK Ltd. A/c			₹ 10,00,000

Journal entries in the books of YK Ltd.

At origination

Bank A/c	Dr.	₹ 10,00,000	
To Loan from KK Ltd. A/c			₹ 10,00,000

On repayment

Loan from KK Ltd. A/c	Dr.	₹ 10,00,000	
To Bank A/c			₹ 10,00,000

In the consolidated financial statements, there will be no entry in this regard since loan receivable and loan payable will get set off.

Scenario (ii): Applying the guidance in Ind AS 109, a 'financial asset' shall be recorded at its fair value upon initial recognition. Fair value is normally the transaction price. However, sometimes certain type of instruments may be exchanged at off market terms (ie, different from market terms for a similar instrument if exchanged between market participants).

If a long-term loan or receivable that carries no interest while similar instruments if exchanged between market participants carry interest, then fair value for such loan receivable will be lower from its transaction price owing to the loss of interest that the holder bears. In such cases

where part of the consideration given or received is for something other than the financial instrument, an entity shall measure the fair value of the financial instrument. The difference in fair value and transaction cost will treated as investment in Subsidiary YK Ltd.

Both KK Ltd. and YK Ltd. should recognise financial asset and liability, respectively, at fair value on initial recognition, i.e., the present value of ₹ 10,00,000 payable at the end of 3 years using discounting factor of 10%. Since the question mentions fair value of the loan at initial recognition as ₹ 8,10,150, the same has been considered. The difference between the loan amount and its fair value is treated as an equity contribution to the subsidiary. This represents a further investment by the parent in the subsidiary.

Journal entries in the books of KK Ltd. (for one year)

At origination

Loan to YK Ltd. A/c	Dr.	₹ 8,10,150	
Investment in YK Ltd. A/c	Dr.	₹ 1,89,850	
To Bank A/c			₹ 10,00,000

During periods to repayment- to recognise interest

Year 1 – Charging of Interest

Loan to YK Ltd. A/c	Dr.	₹ 81,015	
To Interest income A/c			₹ 81,015

Transferring of interest to Profit and Loss

Interest income A/c	Dr.	₹ 81,015	
To Profit and Loss A/c			₹ 81,015

On repayment

Bank A/c	Dr.	₹ 10,00,000	
To Loan to YK Ltd. A/c			₹ 10,00,000

Note- Interest needs to be recognised in statement of profit and loss. The same cannot be adjusted against capital contribution recognised at origination.

Journal entries in the books of YK Ltd. (for one year)

At origination

Bank A/c	Dr.	₹ 10,00,000	
To Loan from KK Ltd. A/c			₹ 8,10,150
To Equity Contribution in KK Ltd. A/c			₹ 1,89,850

During periods to repayment- to recognise interest

Year 1

Interest expense A/c	Dr.	₹ 81,015	

To Loan from KK Ltd. A/c ₹ 81,015

On repayment

Loan from KK Ltd. A/c Dr. ₹ 10,00,000

To Bank A/c ₹ 10,00,000

In the consolidated financial statements, there will be no entry in this regard since loan and interest income/expense will get set off.

Scenario (iii): Generally, a loan which is repayable when funds are available, cannot be stated as loan repayable on demand. Rather the entity needs to estimate the repayment date and determine its measurement accordingly by applying the concept prescribed in Scenario (ii).

In the consolidated financial statements, there will be no entry in this regard since loan and interest income/expense will get set off.

In case the subsidiary YK Ltd. is planning to grant interest free loan to KK Ltd., then the difference between the fair value of the loan on initial recognition and its nominal value should be treated as dividend distribution by YK Ltd. and dividend income by the parent KK Ltd.

FINANCIAL ASSETS: RECLASSIFICATION

Q31: Bonds (currently Classified as AC) for ₹ 1,00,000 reclassified as FVTPL. Fair value on reclassification is ₹ 90,000. Pass the required journal entry.

Ans:

Particulars		Amount	Amount
Bonds at FVTPL	Dr.	90,000	
PL (Loss on reclassification)	Dr.	10,000	
To Bonds at amortised cost			1,00,000

Q32: Bonds (currently Classified as AC) for ₹ 1,00,000 reclassified as FVOCI. Fair value on reclassification is ₹ 90,000. Pass the required journal entry.

Ans:

Particulars		Amount	Amount
Bonds at FVOCI	Dr.	90,000	
OCI (Loss on reclassification)	Dr.	10,000	
To Bonds at amortised cost			1,00,000

Q33: Bonds (currently Classified as FVTPL) for ₹ 100,000 reclassified as Amortised cost. Fair value on reclassification is ₹ 90,000. Pass the required journal entry.

Ans:

Particulars	Amount	Amount

Bonds at Amortised cost	Dr.	90,000	
PL (Loss on reclassification)	Dr.	10,000	
To Bonds at FVTPL			1,00,000

Q34: Bonds (currently Classified as FVTPL) for ₹ 100,000 reclassified as FVOCI. Fair value on reclassification is ₹ 90,000. Pass the required journal entry.

Ans:

Particulars		Amount	Amount
Bonds at FVOCI	Dr.	90,000	
PL (Loss on reclassification)	Dr.	10,000	
To Bonds at FVTPL			1,00,000

Q35: Bonds (currently Classified as FVOCI) for ₹ 100,000 reclassified as Amortised cost. Fair value on reclassification is ₹ 90,000 and ₹ 10,000 loss was recognised in OCI till date of reclassification. Pass required journal entry.

Ans:

Particulars		Amount	Amount
Bonds at FVOCI	Dr.	10,000	
To OCI - Loss on reclassification			10,000
[Being loss recognized in OCI now reversed prior toreclassification]			
Bonds (Amortised cost)	Dr.	1,00,000	
To Bonds at FVOCI			1,00,000
[Being bonds reclassified from FVOCI to Amortised cost]			

Q36: Bonds (currently Classified as FVOCI) for ₹ 100,000 reclassified as FVTPL. Fair value on reclassification is ₹ 90,000. Pass the required journal entry.

Ans:

Particulars		Amount	Amount
P&L - Loss on reclassification	Dr.	10,000	
To Bonds at FVTOCI			10,000
Bonds at FVTPL	Dr.	90,000	
To Bonds at FVOCI			90,000

DERECOGNITION OF FINANCIAL ASSETS

Q37: A Ltd. has receivables ₹ 1,00,000 yielding 12% interest p.a. for 10 years. The company transferred the right to receive 50% principal on maturity and the right to receive 70% interest per year to B Ltd. Fair value of principal part is ₹ 95,000 and Interest part is ₹ 15,000. Show important accounting entries in books of A Ltd. **[Other Sources]**

Ans:

(i)	Calculation of fair value of loan			₹	₹
	Fair Value of Principal Portion				95,000
	Fair Value of Interest Portion				15,000
					1,10,000
(ii)	Allocation of carrying amount in the ratio of fair values:				
		Fair value			Appointment
		(₹)			(₹)
	Securitized component of loan				
	- Principal Portion (50%)	47,500	(47,500/1,10,000) x 1,00,000		43,182
	- Interest Portion (70%)	10,500	(10,500/1,10,000) x 1,00,000		9,545
		58,000			52,727
	Retained Component of loan				
	- Principal strip receivable (50%)	47,500	(47,500/1,10,000) x 1,00,000		43,182
	- Interest strip receivable (30%)	4,500	(4,500/1,10,000) x 1,00,000		4091
		1,10,000			1,00,000
(iii)	Entries to record the derecognition of the Loan			₹	₹
	Bank A/c		Dr.	58,000	
	To Receivables A/c				52,727
	To Profit & Loss A/c				5,273
	(Being entry for securitization				
	Interest strip a/c		Dr.	4,091	
	Principal strip A/c		Dr.	43,182	
	To Loan A/c				47,273
	(Being creation of principal strip receivable and interest strip receivable)				

Q38: A Ltd. has lent ₹ 1,00,000 yielding 10% interest p.a. for 4 years. The company transferred the right to receive 60% principal on maturity and the right to receive 40% interest per year. Show important accounting entries in books of A Ltd. Assume expected yield rate 6% p.a.

[Other Sources]

Ans:

(i)	Calculation of fair value of loan		₹	₹
	Fair Value of Principal Portion	1,00,000 x PVF (6%,4)		79,210
	Fair Value of Interest Portion	10,000 x PVAF (6%,4)		34,651
				1,13,861

(ii)	Allocation of carrying amount in the ratio of fair values:			
		Fair value		Appointment
		(₹)		(₹)
	Securitized component of loan			
	- Principal Portion (60%)	47,526	(47,526/1,13,861) x 1,00,000	41,740
	- Interest Portion (40%)	13,860	(13,860/1,13,861) x 1,00,000	12,173
		61,386		53,913
	Retained Component of loan			
	- Principal strip receivable (40%)	31,684	(31,684/1,13,861) x 1,00,000	27,827
	- Interest strip receivable (60%)	20,791	(20,791/1,13,861) x 1,00,000	18,260
		1,13,861		1,00,000

(iii)	Entries to record the derecognition of the Loan		₹	₹
	Bank A/c	Dr.	61,386	
	To Loan A/c			53,913
	To Profit & Loss A/c			7,473
	(Being entry for securitization			
	Interest strip a/c	Dr.	18,260	
	Principal strip A/c	Dr.	27,827	
	To Loan A/c			46,087
	(Being creation of principal strip receivable and interest strip receivable)			

Q39: A hold ₹ 1000 of loan yielding interest @ 18% per annum with the remaining life of 9 years. Fair value of these loan is estimated at ₹ 1100/-. The company securitises the principal component of loan plus the right to receive interest @ 14% to an SPE for ₹ 1000/. 2% interest will be allowed to company as cost of service to loans. The fair value of servicing asset so created is estimated at ₹ 40/- after adjusting the costs likely to be incurred. The remaining 2% interest is treated as an

interest strip receivable whose fair value is estimated at ₹ 60/. Give the accounting treatment of the above transactions in the form of journal entries in the books of originator.

[ICAI SM – Old syllabus]

Ans:

Allocation of carrying amount			
		Fair value	**Carrying amount**
		₹	**₹**
Principal + 14% Interest transferred		1,000	909
Servicing asset		40	36
Interest strip		60	55
Total		1,100	1000

Journal Entries in the Books of A Ltd.			
Cash	Dr.	1,000	
To Loan			909
To Profit & Loss A/c			91
Servicing Asset	Dr.	36	
Interest Strip	Dr.	55	
To Loans			91

Q40: A Ltd. has lent ₹ 50,000 yielding 18% interest p.a. for 10 years. The company transferred the right to receive principal ₹ 50,000 on maturity and the right to receive 14% interest per year. Of the balance 4% interest, 2% is due to the transferor, i.e. A Ltd. as service fee for collection of principal and interest. The expected cost for collection etc. is ₹ 400. A Ltd. has retained the right to receive the remaining 2% interest per year. Show important accounting entries in books of A Ltd. Assume expected yield rate 13% p.a. **[ICAI SM – Old syllabus]**

Ans:

	Interest Transferred	**Principal Transferred**	**Interest Retained**	**Service Fee**
Cash inflow	7,000	50,000	1,000	1,000
Less: Cost of servicing loan	---	---	---	400
Net cash flow	7,000	50,000	1,000	600
Year	1 - 10	10	1 - 10	1 – 10
DF (13%)	5.43	0.29	5.43	5.43

Fair value of components	38,010	14,500	5,430	3,258
Allocation of carrying amount				
		Fair value		**Carrying amount**
	₹	₹		₹
Principal transferred	38,010			
Interest transferred	14,500	52,510		42,902
Servicing asset		3,258		2,662
Interest strip		5,430		4,436
Total		61,198		50,000

Journal Entries in the Books of A Ltd.

Cash	Dr.	52,510	
To Loan			42,902
To Profit & Loss A/c			9,608
Servicing Asset	Dr.	2,662	
Interest Strip	Dr.	4,436	
To Loans			7,098

Q41: Entity C agrees with factoring company D to enter into a debt factoring arrangement. Under the terms of the arrangement, the factoring company B agrees to pay ₹ 91.5 crores, less a servicing charge of ₹ 1.5 crores (net proceeds of ₹ 90 crores), in exchange for 100% of the cash flows from short-term receivables. The receivables have a face value of ₹ 100 crores and carrying amount of ₹ 95 crores. The customers will be instructed to pay the amounts owed into a bank account of the factoring company. Entity C also writes a guarantee to the factoring company under which it will reimburse any credit losses upto ₹ 5 crores, over and above the expected credit losses of ₹ 5 crores and losses of up to ₹ 15 crores are considered reasonably possible. The guarantee is estimated to have a fair value of ₹ 0.5 crores. Comment. Pass the necessary Journal Entry

Ans: a) In this situation, the "continuing involvement asset" will be recognised at ₹ 5 crores i.e. lower of:

i. the amount of the asset – ₹ 95 crores

ii. the guarantee amount – ₹ 5 crores

b) The associated liability is recognised at ₹ 5.5 crores, as below:

i. the guarantee amount (i.e. ₹ 5 crores) plus

ii. the fair value of the guarantee (i.e. ₹ 0.5 crores). Comment

c) The journal entries passed by Entity C on the date of derecognition is as below:

Cash Dr. ₹ 90 crores

Loss on derecognition	Dr.	₹ 5.5 crores	
Continuing involvement asset	Dr.	₹ 5 crores	
To Receivables			₹ 95 crores
To Associated liability			₹ 5.5 crores

Notes:

- the entity shall continue to recognise any income arising on the transferred asset to the extent of its continuing involvement and shall recognise any expense incurred on the associated liability
- In the example above, the guarantee liability of ₹ 0.5 crores shall be amortised in profit or loss over the underlying period.

FINANCIAL LIABILITIES: MEASUREMENTS

Q42: A Ltd has borrowed from RBC Bank ₹ 10,000 at a fixed interest of 10% per annum. Loan processing fees were additionally paid for ₹ 500 and loan is payable after 5 years in bullet repayment of principal. Details are as follows:

Particulars	Details
Loan amount	₹ 10,000
Date of loan (Starting Date)	1-Apr-20X1
Date of repayment of principal amount (Finishing Date)	31-March-20X6
Interest rate	10.00%
Interest charge	Interest to be charged and paid yearly
Upfront fees	₹ 500

How would loan be accounted in books of A Ltd?

Ans: The loan taken by A Ltd shall be measured at amortised cost as follows:

Initial measurement – At transaction price less processing fees

= 10,000 – 500 = 9,500

Subsequently – interest to be accrued using effective rate of interest as follows:

Year end	Openingbalance	Interest @11.42%	Repayment of interest & principal	Closing balance
1	9,500	1,085	1,000	9,585
2	9,585	1,095	1,000	9,679
3	9,679	1,105	1,000	9,785
4	9,785	1,117	1,000	9,902
5	9,902	1,098*	11,000	-

* Difference due to approximation

Computation of IRR

IRR would be the rate using which the present value of cash flow should come out to be ₹ 9,500 i.e. (₹ 10,000 less ₹ 500).

For this, we should first compute present value of cashflows using any two rates as follows:

Yearend	Opening balance	Repayment/Cashflows	Closing balance	PVF @ 10%	Present Value at 10% rate	PVF @ 13%	Present Value at 13% rate
1	9,500	1,000	8,500	0.909	909	0.885	885
2	8,500	1,000	7,500	0.826	826	0.783	783
3	7,500	1,000	6,500	0.751	751	0.693	693
4	6,500	1,000	5,500	0.683	683	0.613	613
5	5,500	11,000	(5,500)	0.621	6,830	0.543	5,970*
					10,000		**8,945**

*Difference is due to approximation

Taking 10% as discount rate, present value (PV) comes out to be ₹ 10,000.

If rate is increased by 3% over a base rate of 10%, PV decreases by ₹ 1,055 (i.e. ₹ 10,000 less ₹ 8945).

To decrease PV by ₹ 1,055, rate should be increased	=	3%
To decrease PV by Re.1, rate should be increased	=	3%
		1,055
To decrease PV by ₹ 500, rate should be increased	=	3% x (500/1,055)
	=	1.42%

This would mean that the discount rate to get present value of cashflows equivalent to ₹ 9,500 should be 11.42% (i.e. 10% + 1.42%).

Q43: A Ltd has made a borrowing from RBC Bank for ₹ 10,000 at a fixed interest of 12% per annum. Loan processing fees were additionally paid for ₹ 500 and loan is payable 4 half-yearly installments of ₹ 2,500 each. Details are as follows:

Particulars	Details
Loan amount	₹ 10,000
Date of loan (Starting Date)	1-Apr-20X1
Date of loan (Finishing Date)	31-March-20X2
Description of repayment	Repayment of loan starts from 30-Sept-20X1 (To be paid half yearly)

Installment amount	₹ 2,500
Interest rate	12.00%
Interest charge	Interest to be charged quarterly
Upfront fees	₹ 500

Compute the interest to be charged to the statement of profit & loss every quarter over the period of loan. The effective interest rate is 16.60% per annum. **[Exam May 22 (5 Marks)]**

Ans: The loan taken by A Ltd shall be measured at amortised cost as follows:

- Initial measurement – At transaction price less processing fees

= 10,000 – 500 = 9,500

- Subsequently – interest to be accrued using effective rate of interest as follows:

Date	Amount of Loan	Repayment	Upfront fees paid	Amount of Interest	Days	IRR Calculation	Revised Interest computed	Loan Balance
1-Apr-20X1	10,000	-	500	-	-	9,500	-	-
30-Jun-20X1	-	-	-	300	90	(300)	389	9,589
30-Sep-20X1	-	2500	-	300	92	(2,800)	401	7,190
31-Dec-20X1	-	-	-	225	92	(225)	301	7,266
31-Mar 20X2	-	2500	-	225	90	(2,725)	297	4,838
30-Jun-20X2	-	-	-	150	91	(150)	200	4,888
30-Sep-20X2	-	2500	-	150	92	(2,650)	204	2,442
31-Dec-20X2	-	-	-	75	92	(75)	102	2,473
31-Mar-20X3	-	2500	-	75	91	(2,575)	102	0
IRR						16.60%		

Q44: XYZ issued ₹ 4,80,000 4% redeemable preference shares on 1st April 20X5 at par. Interest is paid annually in arrears, the first payment of interest amounting ₹ 19,200 was made on 31st March 20X6 and it is debited directly to retained earnings by accountant. The preference shares are redeemable for a cash amount of ₹ 7,20,000 on 31st March 20X8. The effective rate of interest on the redeemable preference shares is 18% per annum. The proceeds of the issue have been recorded within equity by accountant as this reflects the legal nature of the shares. Board of directors intends to issue new equity shares over the next two years to build up cash resources to redeem the preference shares.

Mukesh, Accounts manager of XYZ has been told to review the accounting of aforesaid issue. CFO has asked from Mukesh the closing balance of preference shares at the year end. If you were Mukesh, then how much balance you would have shown to CFO on analysis of the stated issue. Prepare necessary adjusting journal entry in the books of account, if required. **[RTP May 2020]**

Ans: The preference shares provide the holder with the right to receive a predetermined amount of annual dividend out of profits of the company, together with a fixed amount on redemption.

Whilst the legal form is equity, the shares are in substance debt. The fixed level of dividend is interest and the redemption amount is equivalent to the repayment of a loan.

Under Ind AS 32 'Financial Instruments: Presentation' these instruments should be classified as financial liabilities because there is a contractual obligation to deliver cash. The preference shares should be accounted for at amortised cost using the effective interest rate of 18%.

Year	1 April, 20X5 ₹	Interest @18% ₹	Paid at 4% ₹	31 March, 20X6 ₹
20X5-20X6	480,000	86,400	(19,200)	547,200

Accordingly, the closing balance of Preference shares at year end i.e. 31 st March, 20X6 would be ₹ 5,47,200.

Accountant has inadvertently debited interest of ₹ 19,200 in the profit and loss. However, the interest of ₹ 86,400 should have been debited to profit and loss as finance charge.

Similarly, amount of ₹ 5,47,200 should be included in borrowings (non-current liabilities) and consequently, Equity should be reduced by ₹ 480,000 proceeds of issue and

₹ 67,200 (86,400 – 19,200) i.e. total by 5,47,200.

Necessary adjusting journal entry to rectify the books of accounts will be:

	₹	₹
Preference share capital (equity) (Balance sheet) Dr.	4,80,000	
Finance costs (Profit and loss) Dr.	86,400	
To Equity – Retained earnings (Balance sheet)		19,200
To Preference shares (Long-term Borrowings) (Balance sheet)		5,47,200

Q45: QA Ltd. issued 10,00,000 of 8% Long Term bond-A Series of ₹ 1 each on 1st April, 2016. The bond tenure is 3 years. Interest is payable annually on 1st April each year. The investors expect an effective interest rate on the loan at 10%. QA Ltd. wants you to suggest the suitable accounting entries for the issue of these bonds as per applicable Ind AS. Consider the discounting factor 3 years, 10% discounting factor is 0.751315 and 3 years cumulative discounting factor is 2.48685.

(i) What is the principal value of the bond at the initial recognition at the time of issue of bond as per applicable Ind AS?

(ii) What is the present value of the interest payment to be recognised as part of the sale price of the bond as per applicable Ind AS?

(iii) What are the proceeds of the sale of the bond to be recognized at the time of initial recognition as per applicable Ind AS?

(iv) What is the accounting entry to be passed at the time of accounting for payment of interest for the first year? **[MTP May 2019]**

Ans: (i) ₹ 7,51,315

(ii) ₹ 1,98,948

(iii) ₹ 9,50,263

(iv) Bond Interest Expenses A/c Dr. ₹ 95,026

To Discount on Bond A/s ₹ 15,026

To Cash/Bank A/c ₹ 80,000

Workings for the above

Since the Effective interest rate on the loan is 10% while the Bond has been issued at 8%, the financial liability will be recognized at fair value determined as follows:

Calculation of initial recognition amount of 8% Long term Loan Bond A Series

Particulars	**₹**
Present value of the principal repayable after 3 years (10,00,000 x .751315)	7,51,315
Present value of Interest [(10,00,000 x 8%) x 2.48685]	1,98,948
Total Present Value of Long term Loan Bond	9,50,263

Interest for the first year recognized in the books as per effective interest rate method

= ₹9,50,263 x 10% = ₹ 95,026

However, interest paid is @ 8% i.e. ₹ 10,00,000 x 8% = ₹ 80,000

Q46: NAV Limited granted a loan of ₹ 120 lakh to OLD Limited for 5 years @ 10% p.a. which is Treasury bond yield of equivalent maturity. But the incremental borrowing rate of OLD Limited is 12%. In this case, the loan is granted to OLD Limited at below market rate of interest. Ind AS 109 requires that a financial asset or financial liability is to be measured at fair value at the initial recognition. Should the transaction price be treated as fair value? If not, find out the fair value. What is the accounting treatment of the difference between the transaction price and the fair value on initial recognition in the book of NAV Ltd.? **[Nov 2018 Exam (4 Marks)]**

Ans: Since the loan is granted to OLD Ltd at 10% i.e below market rate of 12%. It will be considered as loan given at off market terms. Hence the Fair value of the transaction will be lower from its transaction price & not the transaction price.

Calculation of fair value

Year	**Future cash flow (in lakh)**	**Discounting factor @ 12%**	**Present value (in lakh)**
1	12	0.892	10.704

2	12	0.797	9.564
3	12	0.712	8.544
4	12	0.636	7.632
5	120+12=132	0.567	74.844
			111.288

The fair value of the transaction be ₹ 111.288 lakh.

Since fair value is based on level 1 input or valuation technique that uses only data from observable markets, difference between fair value and transaction price will be recognized in Profit and Loss as fair value loss i.e ₹ 120 lakh– ₹ 111.288 lakh= ₹ 8.712 lakh.

Note: One may also calculate the above fair value by the way of annuity on interest amount rather than separate calculation.

DERECOGNITION OF FINANCIAL LIABILITIES

Q47: On 1 January 20X0, XYZ Ltd. issues 10 year bonds for ₹ 10,00,000, bearing interest at 10% (payable annually on 31st December each year). The bonds are redeemable on 31 December 20X9 for ₹ 10,00,000. No costs or fees are incurred. The effective interest rate is therefore 10%. On 1 January 20X5 (i.e. after 5 years) XYZ Ltd. and the bondholders agree to a modification in accordance with which:

- the term is extended to 31 December 20Y1;
- interest payments are reduced to 5% p.a.;
- the bonds are redeemable on 31 December 20Y1 for ₹ 15,00,000; and
- legal and other fees of ₹1,00,000 are incurred.

XYZ Ltd. determines that the market interest rate on 1 January 20X5 for borrowings on similar terms is 11%.

Record journal entries in the books of XYZ Limited till 31 December 20X6, after giving effect of the changes in the terms of the loan on 1 January 20X5. **[MTP SEP 2025]**

Ans: On 1 January 20X5, the discounted present value of the remaining cash flows of the original financial liability is ₹ 10,00,000.

On this date, XYZ Ltd. will compute the present value of:

cash flows under the new terms – i.e. ₹ 15,00,000 payable on 31 December 20Y1 and ₹ 50,000 payable for each of the 7 years ending 31 December 20Y1 any fee paid (net of any fee received) – i.e. ₹ 1,00,000 using the original effective interest rate of 10%.

The total of these amounts to ₹ 11,13,158 (Refer Working Note).

This differs from the discounted present value of the remaining cash flows of the original financial liability by 11.32% i.e. by more than 10%. Hence, extinguishment accounting applies.

The next step is to estimate the fair value of the modified liability. This is determined as the present value of the future cash flows (interest and principal), using an interest rate of 11% (the market rate at which XYZ Ltd. could issue new bonds with similar terms). The estimated fair value on this basis is ₹ 958,097 (Refer Working Note). A gain or loss on modification is then determined as:

Gain (loss) = carrying value of existing liability - fair value of modified liability - fees and costs incurred i.e. ₹ 10,00,000 – ₹ 9,58,097 – ₹ 1,00,000 = Loss of ₹ 58,097

Working Note:

Amount	Discounting factor @ 10%	Present value	Discounting factor @ 11%	Present value
15,00,000	0.513158	7,69,737	0.481658	7,22,487
1,00,000		1,00,000		
50,000 for 7 years	4.868419	2,43,421	4.712196	2,35,610
		11,13,158		9,58,097
PV of original cash flows @ original EIR		(10,00,000)		
Difference		1,13,158		
Difference %		11.32%		

Q48: On 1 January 20X0, XYZ Ltd. issues 10 year bonds for ₹ 1,000,000, bearing interest at 10% (payable annually on 31st December each year). The bonds are redeemable on 31 December 20X9 for ₹ 1,000,000. No costs or fees are incurred. The effective interest rate is therefore 10%. On 1 January 20X5 (i.e. after 5 years) XYZ Ltd. and the bondholders agree to a modification in accordance with which:

- no further interest payments are made
- the bonds are redeemed on the original due date (31 December 20X9) for ₹ 1,600,000;
- legal and other fees of ₹ 50,000 are incurred.

Give Accounting treatment. **[ICAI SM]**

Ans: On 1 January 20X5, the discounted present value of the remaining cash flows of the original financial liability is ₹ 10,00,000.

On this date, XYZ Ltd. will compute the present value of:

(i) cash flows under the new terms – i.e. ₹ 16,00,000 payable on 31 December 20X9

(ii) any fees paid (net of any fees received) – i.e. ₹ 50,000 using the original effective interest rate of 10%.

The total of these amounts to ₹ 10,43,474 (Refer Working Note). This differs from the discounted present value of the remaining cash flows of the original financial liability by 4.35% i.e. by less than 10%. Hence, modification accounting applies.

On this basis:

(i) the fees paid of ₹ 50,000 are netted against the existing liability of ₹ 10,00,000, resulting in an adjusted carrying amount of ₹ 9,50,000;

(ii) the effective interest rate (EIR) is recalculated. This is the rate which discounts the future cash flows (₹ 16,00,000 in five years' time) to the adjusted carrying amount of ₹ 9,50,000. The adjusted EIR is 10.99%

(iii) the adjusted EIR is used to determine the amortised cost and interest expense in future periods.

Working Note:

For testing extinguishment -

Cash flows under new terms	16,00,000
PV as at 01 January 20x5	
Revised cash flows@ original EIR	9,93,474
Fees incurred	50,000
PV of revised cash flows @ original EIR	10,43,474
PV of original cash flows @ original EIR	(10,00,000)
Difference	43,474
Difference %	4%
Less than 10% - Indicates modification	

Accounting for revised cash flows @ original EIR

Year	Opening balance	Interest	Payment	Closing balance
0	10,00,000	-	-50,000	9,50,000
1	9,50,000	1,04,405	0	10,54,405
2	10,54,405	1,15,879	0	11,70,284
3	11,70,284	1,28,614	0	12,98,898
4	12,98,898	1,42,749	0	14,41,647
5	14,41,647	1,58,353*	-16,00,000	-
* Difference is due to approximation				

Q49: Wheel Co. Limited borrowed ₹ 500,000,000 from a bank on 1 January 20X1. The original terms of the loan were as follows:

- Interest rate: 11%
- Repayment of principal in 5 equal instalments

- Payment of interest annually on accrual basis
- Upfront processing fee: ₹ 5,870,096

Effective interest rate on loan: 11.50%

On 31 December 20X2, Wheel Co. Limited approached the bank citing liquidity issues in meeting the cash flows required for immediate instalments and re-negotiated the terms of the loan with banks as follows:

- Interest rate 15%
- Repayment of outstanding principal in 10 equal instalments starting 31 December 20X3
- Payment of interest on an annual basis

Record journal entries in the books of Wheel Co. Limited till 31 December 20X3, after giving effect of the changes in the terms of the loan on 31 December 20X2

[MTP May 2022; Nov 24; Exam May 25 (10 Marks)]

Ans: On the date of initial recognition, the effective interest rate of the loan shall be computed keeping in view the contractual cash flows and upfront processing fee paid. The following table shows the amortisation of loan based on effective interest rate:

Date	Cash flows (principal)	Cash flows (interest and fee)	Amortised cost (opening + interest – cash flows)	Interest @ EIR (11.50%)
1-Jan-20X1	(500,000,000)	5,870,096	494,129,904	
31-Dec-20X1	100,000,000	55,000,000	395,954,843	56,824,939
31-Dec-20X2	100,000,000	44,000,000	297,489,650	45,534,807
31-Dec-20X3	100,000,000	33,000,000	198,700,959	34,211,310
31-Dec-20X4	100,000,000	22,000,000	99,551,570	22,850,610
31-Dec-20X5	100,000,000	11,000,000	(0)	11,448,430

a. 1 January 20X1 –

Particulars	Dr. Amount (₹)	Cr. Amount (₹)
Cash A/c Dr. To Loan from bank A/c (Being loan recorded at its fair value less transaction costs on the initial recognition date)	494,129,904	 494,129,904

b. 31 December 20X1 –

Particulars	Dr. Amount (₹)	Cr. Amount (₹)
Loan from bank A/c Dr. Interest expense (profit and loss) Dr. To Cash A/c	98,175,061 56,824,939	 155,000,000

(Being first instalment of loan and payment of interest accounted for as an adjustment to the amortised cost of loan)		

c. 31 December 20X2 – Before Wheel Co. Limited approached the bank –

Particulars	Dr. Amount (₹)	Cr. Amount (₹)
Interest expense (profit and loss) Dr. To Loan from bank A/c To cash A/c (Being loan payment of interest recorded by the Company before it approached the Bank for deferment of principal)	45,534,807	 1,534,807 44,000,000

Upon receiving the new terms of the loan, Wheel Co. Limited, re-computed the carrying value of the loan by discounting the new cash flows with the original effective interest rate and comparing the same with the current carrying value of the loan. As per requirements of Ind AS 109, any change of more than 10% shall be considered a substantial modification, resulting in fresh accounting for the new loan:

Date	Cash flows (principal)	Interest outflow @15%	Discount factor	PV of cash flows
31-Dec-20X2	(400,000,000)			
31-Dec-20X3	40,000,000	60,000,000	0.8969	89,686,099
31-Dec-20X4	40,000,000	54,000,000	0.8044	75,609,805
31-Dec-20X5	40,000,000	48,000,000	0.7214	63,483,092
31-Dec-20X6	40,000,000	42,000,000	0.6470	53,053,542
31-Dec-20X7	40,000,000	36,000,000	0.5803	44,100,068
31-Dec-20X8	40,000,000	30,000,000	0.5204	36,429,133
31-Dec-20X9	40,000,000	24,000,000	0.4667	29,871,422
31-Dec-20Y0	40,000,000	18,000,000	0.4186	24,278,903
31-Dec-20Y1	40,000,000	12,000,000	0.3754	19,522,235
31-Dec-20Y3	40,000,000	6,000,000	0.3367	15,488,493
PV of new contractual cash flows discounted at 11.50%				451,522,791
Carrying amount of loan				397,489,650
Difference				54,033,141
Percentage of carrying amount				13.59%

Note: Calculation above done on full decimal, though in the table discount factor is limited to 4 decimals.

Considering a more than 10% change in PV of cash flows compared to the carrying value of the loan, the existing loan shall be considered to have been extinguished and the new loan shall be accounted for as a separate financial liability. The accounting entries for the same are included below:

d. 31 December 20X2 – accounting for extinguishment

Particulars	Dr. Amount (₹)	Cr. Amount (₹)
Loan from bank (old) A/c Dr	397,489,650	
Finance cost (profit and loss) Dr	2,510,350	
To Loan from bank (new) A/c		400,000,000
(Being new loan accounted for at its principal amount in absence of any transaction costs directly related to such loan and correspondingly a de-recognition of existing loan)		

e. 31 December 20X3

Particulars	Dr. Amount (₹)	Cr. Amount (₹)
Loan from bank A/c Dr.	40,000,000	
Interest expense (profit and loss) Dr.	60,000,000	
To cash A/c		100,000,000
(Being first instalment of the new loan and payment of interest accounted for as an adjustment to the amortised cost of loan)		

Q50: JK Ltd. has an outstanding unsecured loan of ₹ 90 crores to a bank. The effective interest rate (EIR) of this loan is 10%. Owing to financial difficulties, JK Ltd. is unable to service the debt and approaches the bank for a settlement.

The bank offers the following terms which are accepted by JK Ltd.:

2/3rd of the debt is unsustainable and hence will be converted into 70% equity interest in JK Ltd. The fair value of net assets of JK Ltd. is ₹ 80 crores.

1/3rd of the debt is sustainable and the bank agrees to certain moratorium period and decrease in interest rate in initial periods. The present value of cash flows as per these revised terms calculated using original EIR is ₹ 25 crores. The fair value of the cash flows as per these revised terms is ₹ 28 crores.

Record journal entries in the books of JK Limited after giving effect of the changes in the terms of the loan.

Ans: Fair value of the consideration paid is ₹ 56 crores (70% of ₹ 80 crores) plus ₹ 28 crores i.e. ₹ 84 crores.

Accordingly, 2/3rd of the original financial liability is extinguished through issue of equity shares and terms of 1/3rd of the original financial liability have been modified. JK Ltd. will need to evaluate if this modification tantamount to "substantial modification" or not.

Applying the guidance contained in Appendix D to Ind AS 109:

Difference between the fair value of equity instruments (₹ 56 crores) and 2/3rd of the original financial liability (2/3rd of ₹ 90 crores = ₹ 60 crores) i.e. ₹ 4 crores will be recognised as a gain in the statement of profit or loss

Carrying amount of original financial liability which is not extinguished (1/3rd of ₹ 90 crores

= ₹ 30 crores) is compared with the present value of cash flows as per these revised terms (₹ 25 crores)

As the difference is more than 10%, this results in substantial modification of the original financial liability. Resultantly, the existing financial liability (₹ 30 crores) will be extinguished and the new financial liability will be recognised at its fair value i.e. ₹ 28 crores.

The difference i.e. ₹ 2 crores will be recognised as a gain in the statement of profit or loss

IMPAIRMENT OF FINANCIAL ASSETS

Q51: Entity A originates a single 10 year amortising loan for CU1 million. Taking into consideration the expectations for instruments with similar credit risk (using reasonable and supportable information that is available without undue cost or effort), the credit risk of the borrower, and the economic outlook for the next 12 months, Entity A estimates that the loan at initial recognition has a probability of default (POD) of 0.5 per cent over the next 12 months. Entity A also determines that changes in the 12-month PoD are a reasonable approximation of the changes in the lifetime POD for determining whether there has been a significant increase in credit risk since initial recognition. Loss given default (LGD) is estimated as 25% of the balance outstanding. Calculate loss allowance.

Ans: At reporting date, no change in 12-month POD and entity assesses that there is no significant increase in credit risk since initial recognition – therefore lifetime ECL is not required to be recognised.

Particulars	Details
Loan	₹1,000,000 (A)
LGD	25% (B)
POD – 12 months	0.5% (C)
Loss allowance (for 12-months ECL)	₹1,250 (A*B*C)

Q52: Bank A originates 2,000 bullet loans with a total gross carrying amount of CU 500,000. Bank A segments its portfolio into borrower groups (Groups X and Y) on the basis of shared credit risk characteristics at initial recognition. Group X comprises 1,000 loans with a gross carrying amount per client of CU 200, for a total gross carrying amount of CU 200,000. Group Y comprises 1,000 loans with a gross carrying amount per client of CU 300, for a total gross carrying amount of CU 300,000. There are no transaction costs and the loan contracts include no options (for example, prepayment or call options), premiums or discounts, points paid, or other fees. Calculate loss rate when

Group	Historic per annum average defaults	Present value of observed loss assumed
X	4	CU 600
Y	2	CU 450

Ans: Bank A measures expected credit losses on the basis of a loss rate approach for Groups X and Y. In order to develop its loss rates, Bank A considers samples of its own historical default and loss experience for those types of loans.

In addition, Bank A considers forward-looking information, and updates its historical information for current economic conditions as well as reasonable and supportable forecasts of future economic conditions. Historically, for a population of 1,000 loans in each group, Group X's loss rates are 0.3 per cent, based on four defaults, and historical loss rates for Group Y are 0.15 per cent, based on two defaults.

	Number of clients in sample	Estimated per client gross carrying amount at default	Total estimated gross carrying amount at default	Historic per annum average defaults	Estimated total gross carrying amount at default	Present value of observed loss assumed	Loss rate
Group	A	B	C = A × B	D	E = B × D	F	G = F ÷ C
X	1,000	CU200	CU2,00,000	4	CU800	CU600	0.3%
Y	1,000	CU300	CU3,00,000	2	CU600	CU450	0.15%

Q53: Company M, a manufacturer, has a portfolio of trade receivables of CU30 million in 20X1 and operates only in one geographical region. The customer base consists of a large number of small clients and the trade receivables are categorised by common risk characteristics that are representative of the customers' abilities to pay all amounts due in accordance with the contractual terms. The trade receivables do not have a significant financing component in accordance with Ind AS 115. In accordance with paragraph 5.5.15 of Ind AS 109 the loss allowance for such trade receivables is always measured at an amount equal to lifetime expected credit losses.

Please use the following information of debtors outstanding:

	Gross carrying amount
Current	CU 15,000,000
1–30 days past due	CU 7,500,000
31–60 days past due	CU 4,000,000
61–90 days past due	CU 2,500,000
More than 90 days past due	CU 1,000,000
	CU 30,000,000

Company M uses following default rates for making provisions:

	Current	1–30 days past due	31–60 days past due	61–90 days past due	More than 90 days past due
Default rate	0.3%	1.6%	3.6%	6.6%	10.6%

Determine the expected credit losses for the portfolio. **[Exam Nov 22 (5 Marks)]**

Ans: To determine the expected credit losses for the portfolio, Company M uses a provision matrix. The provision matrix is based on its historical observed default rates over the expected life of the trade receivables and is adjusted for forward-looking estimates. At every reporting date the historical observed default rates are updated and changes in the forward-looking estimates are analysed. In this case it is forecast that economic conditions will deteriorate over the next year.

On that basis, Company M estimates the following provision matrix:

	Current	1–30 days past due	31–60 days past due	61–90 days past due	More than 90 days past due
Default rate	0.3%	1.6%	3.6%	6.6%	10.6%

The trade receivables from the large number of small customers amount to CU 30 million and are measured using the provision matrix.

	Gross carrying amount	Lifetime expected credit loss allowance (Gross carrying amount x lifetime expected credit loss rate)
Current	CU 15,000,000	CU 45,000
1–30 days past due	CU 7,500,000	CU 120,000
31–60 days past due	CU 4,000,000	CU 144,000
61–90 days past due	CU 2,500,000	CU 165,000
More than 90 days past due	CU 1,000,000	CU 106,000
	CU 30,000,000	**CU 580,000**

Q54: On 1st April 2017, A Ltd. lent ₹ 2 crores to a supplier in order to assist them with their expansion plans. The arrangement of the loan cost the company ₹ 10 lakhs. The company has agreed not to charge interest on this loan to help the supplier's short -term cash flow but expected the supplier to repay ₹ 2.40 crores on 31st March 2019. As calculated by the finance team of the company, the effective annual rate of interest on this loan is 6.9% On 28th February 2018, the company received the information that poor economic climate has caused the supplier significant problems and in order to help them, the company agreed to reduce the amount repayable by

them on 31st March 2019 to ₹ 2.20 crores. Suggest the accounting entries as per applicable Ind AS **[RTP Nov 2018]**

Ans: The loan to the supplier would be regarded as a financial asset. The relevant accounting standard Ind AS 109 provides that financial assets are normally measured at fair value.

If the financial asset in which the only expected future cash inflows are the receipts of principal and interest and the investor intends to collect these inflows rather than dispose of the asset to a third party, then Ind AS 109 allows the asset to be measured at amortised cost using the effective interest method.

If this method is adopted, the costs of issuing the loan are included in its initial carrying value rather than being taken to profit or loss as an immediate expense. This makes the initial carrying value ₹ 2,10,00,000.

Under the effective interest method, part of the finance income is recognised in the current period rather than all in the following period when repayment is due. The income recognised in the current period is ₹ 14,49,000 (₹ 2,10,00,000 x 6.9%) evidence that the financial asset suffered impairment at 31st March 2018.

The asset is re-measured at the present value of the revised estimated future cash inflows, using the original effective interest rate. Under the revised estimates the closing carrying amount of the asset would be ₹ 2,05,79,981 (₹ 2,20,00,000 / 1.069). The reduction in carrying value of ₹ 18,69,019 (₹ 2,24,49,000 – 2,05,79,981) would be charged to profit or loss in the current period as an impairment of a financial asset.

Therefore, the net charge to profit or loss in respect of the current period would be ₹ 4,20,019 (18,69,019 – 14,49,000).

Q55: An entity purchases a debt instrument with a fair value of ₹ 1,000 on 15th March, 20X1 and measures the debt instrument at fair value through other comprehensive income. The instrument has an interest rate of 5% over the contractual term of 10 years, and has a 5% effective interest rate. At initial recognition, the entity determines that the asset is not a purchased or original credit-impaired asset.

On 31st March 20X1 (the reporting date), the fair value of the debt instrument has decreased to ₹ 950 as a result of changes in market interest rates. The entity determines that there has not been a significant increase in credit risk since initial recognition and that ECL should be measured at an amount equal to 12 month ECL, which amounts to ₹ 30.

On 1st April 20X1, the entity decides to sell the debt instrument for ₹ 950, which is its fair value at that date.

Pass journal entries for recognition, impairment and sale of debt instruments as per Ind AS 109. Entries relating to interest income are not to be provided. **[RTP May 2019]**

Ans:

On Initial recognition		**Debit (₹)**	**Credit (₹)**
Financial asset-FVOCI	Dr.	1,000	
To Cash			1,000

On Impairment of debt instrument

Impairment expense (P&L)	Dr.	30	
Other comprehensive income	Dr.	20	
To Financial asset-FVOCI			50

The cumulative loss in other comprehensive income at the reporting date was ₹ 20. That amount consists of the total fair value change of ₹ 50 (that is, ₹ 1,000-₹ 950) offset by the change in the accumulated impairment amount representing 12-month ECL, that was recognized (₹ 30).

On Sale of debt instrument

Cash	Dr.	950	
To Financial asset –FVOCI			950
Loss on sale (P&L)	Dr.	20	
To Other comprehensive income			20

Q56: On 1st April, 20X1 an entity granted an interest-free loan of ₹ 5,00,000 to an employee for a period of three years. The market rate of interest for similar loans is 5% per year.

On 31st March, 20X3, because of financial difficulties, the employee asked to extend the interest-free loan for further three years. The entity agreed. Under the restructured terms, repayment will take place on 31st March, 20X7. However, the entity only expects to receive a payment of ₹ 2,50,000, given the financial difficulty of the employee.

Explain the accounting treatment on initial recognition of loan and after giving effect of the changes in the terms of the loan as per Ind AS 109. Support your answer with Journal entries and amortised cost calculation, as on the date of initial recognition and on the date of change in terms of loan. **[RTP Nov 2022]**

Ans: As the loan is not at a market interest rate, hence it is not recorded at the transaction price of ₹ 5,00,000. Instead, the entity measures the loan receivable at the present value of the future cash inflows discounted at a market rate of interest available for a similar loan.

The present value of the loan receivable (financial asset) discounted at 5% per year is ₹ 5,00,000 ÷ (1.05)3 = ₹ 4,32,000. Therefore, ₹ 4,32,000 is recorded on initial measurement of the loan receivable. This amount will accrete to ₹ 5,00,000 over the three-year term using the effective interest method.

The difference between ₹ 5,00,000 and ₹ 4,32,000 i.e., ₹ 68,000 is accounted for as prepaid employee cost in accordance with Ind AS 19 'Employee Benefits', which will be deferred and amortised over the period of loan on straight line basis.

The journal entries on initial recognition are:

		₹	₹
Loan receivable (financial asset)	Dr.	4,32,000	
Prepaid employee cost (asset)	Dr.	68,000	

To Cash / Bank (financial asset) (Being loan granted to the employee recognised)		5,00,000

The amortised cost calculation at 1st April, 20X1 is as follows:

Period	Carrying amount at 1st April	Interest at 5%	Cash inflow	Carrying amount at 31st March
20X1-20X2	4,32,000	21,600	–	4,53,600
20X2-20X3	4,53,600	22,680	–	4,76,280
20X3-20X4	4,76,280	23,720*	(5,00,000)	–

*Difference of ₹ 94 (₹ 23,814 – ₹ 23,720) is due to approximation.

On 31st March, 20X3, the carrying amount of the loan receivable is ₹ 4,76,280.

As a result of that modification, on 31st March, 20X3, the present value of estimated cash flows is recalculated to be ₹ 2,05,750 using the asset's original effective interest rate of 5% (₹ 2,50,000 ÷ (1.05)4). An impairment loss of ₹ 2,70,530 (₹ 4,76,280 – ₹ 2,05,750) is recognised in profit or loss in the year 20X2-20X3. The carrying amount of the loan receivable may be reduced directly, as follows:

		₹	₹
Profit or loss - impairment loss	Dr.	2,70,530	
To Loan receivable			2,70,530
(Being impairment loss recognised)			

In this case, the loan receivable will be measured at ₹ 2,05,750 at 31st March, 20X3. The revised amortised cost calculation at 1st April, 20X3 is as follows:

Period	Carrying amount at 1st April	Interest at 5% (the original effective interest rate)	Cash inflow	Carrying amount at 31st March
20X3-20X4	2,05,750	10,288	–	2,16,038
20X4-20X5	2,16,038	10,802	–	2,26,840
20X5-20X6	2,26,840	11,342	–	2,38,182
20X6-20X7	2,38,182	11,818	(2,50,000)	–

DERIVATIVES HELD FOR TRADING

Q57:

A) On 1st January 20X1, SamCo. Ltd. agreed to purchase USD ($) 20,000 from JT Bank in future on 31st December 20X1 for a rate equal to ₹ 68 per USD. SamCo. Ltd. did not pay any amount upon entering into the contract. SamCo Ltd. is a listed company in India and prepares its financial statements on a quarterly basis.

Following the principles of recognition and measurement as laid down in Ind AS 109, you are required to record the entries for each quarter ended till the date of actual purchase of USD.

For the purposes of accounting, please use the following information representing marked to market fair value of forward contracts at each reporting date:

As at 31st March 20X1 – ₹ (25,000)

As at 30th June 20X1 - ₹ (15,000)

As at 30th September 20X1 - ₹ 12,000

Spot rate of USD on 31st December 20X1 - ₹ 66 per USD **[May 2018 Exam (8 Marks)]**

Ans:

(i) **Assessment of the arrangement using the definition of derivative included under Ind AS 109.**

Derivative is a financial instrument or other contract within the scope of this Standard with all three of the following characteristics:

a) its value changes in response to the change in a Specified 'underlying'.

b) it requires no initial net investment or an initial net investment that is smaller than would be required for other types of contracts that would be expected to have a similar response to changes in market factors.

c) it is settled at a future date.

Upon evaluation of contract in question it is noted that the contract meets the definition of a derivative as follows:

a) the value of the contract to purchase USD at a fixed price changes in response to changes in foreign exchange rate.

b) the initial amount paid to enter into the contract is zero. A contract which would give the holder a similar response to foreign exchange rate changes would have required an investment of USD 20,000 on inception.

c) the contract is settled in future

The derivative is a forward exchange contract.

As per Ind AS 109, derivatives are measured at fair value upon initial recognition and are subsequently measured at fair value through profit and loss.

(ii) Accounting on 1st January 20X1:

As there was no consideration paid and without evidence to the contrary the fair value of the contract on the date of inception is considered to be zero. Accordingly, no accounting entries shall be recorded on the date of entering into the contract.

(iii) Accounting on 31st March 20X1:

Profit and loss A/c	Dr.	25,000	
To derivative financial liability			25,000

(Being mark to market loss on forward contract recorded)

(iv) Accounting on 30th June 20X1:

The change in value of the derivative forward contract shall be recorded as a derivative financial liability in the books of SamCo Ltd. by recording the following journal entry:

Derivative financial liability A/c	Dr.	10,000	
To Profit and loss A/c			10,000

(being partial reversal of mark to market loss on forward contract recorded)

(v) Accounting on 30th September 20X1:

The value of the derivative forward contract shall be recorded as a derivative financial asset in the books of SamCo Ltd. by recording the following journal entry:

Derivative financial liability A/c	Dr	15,000	
Derivative financial asset A/c	Dr	12,000	
To Profit and loss A/c			27,000

(being gain on mark to market of forward contract booked as derivative financial asset and reversal of derivative financial liability)

(vi) Accounting on 31st December 20X1:

The settlement of the derivative forward contract by actual purchase of USD 20,000 shall be recorded in the books of SamCo Ltd. by recording the following journal entry:

Cash (USD Account) @ 20,000 * 66	Dr.	13,20,000	
Profit and loss A/c	Dr.	52,000	
To Cash @ 20,000 x 68			13,60,000
To Derivative financial asset A/c			12,000

(being loss on settlement of forward contract booked on actual purchase of USD)

Q57:

B) On 1st January 20X1, SamCo. Ltd. entered into a written put option for USD ($) 20,000 with JT Corp to be settled in future on 31st December 20X1 for a rate equal to 68 per USD at the option of JT Corp. SamCo. Ltd. did not receive any amount upon entering into the contract. SamCo Ltd. is a listed company in India and prepares its financial statements on a quarterly basis.

Following the classification principles of recognition and measurement as laid down in Ind AS 109, you are required to record the entries for each quarter ended till the date of actual purchase of USD.

For the purposes of accounting, please use the following information representing marked to market fair value of put option contracts at each reporting date:

As at 31st March 20X1 –	(25,000)
As at 30th June 20X1 -	(15,000)

As at 30th September 20X1 -	NIL
Spot rate of USD on 31st December 20X1 -	66 per USD

[Nov 2024 Exam (10 Marks)]

Ans: Accounting on 1st January 20X1

As there was no consideration paid and without evidence to the contrary the fair value of the contract on the date of inception is considered to be zero. Accordingly, no accounting entries shall be recorded on the date of entering into the contract.

Accounting on 31st March 20X1

The value of the derivative put option contract shall be recorded as a derivative financial liability in the books of SamCo Ltd. by recording the following journal entry:

Profit and loss A/c	Dr.	25,000	
To derivative financial liability			25,000

(Being mark to market loss on the put option contract recorded)

Accounting on 30th June 20X1

The change in value of the derivative put option contract shall be recorded as a derivative financial liability in the books of SamCo Ltd. by recording the following journal entry:

Derivative financial liability A/c	Dr.	10,000	
To Profit and loss A/c			10,000

(Being partial reversal of mark to market loss on the put option contract recorded)

Accounting on 30th September 20X1

The change in value of the derivative option contract shall be recorded as a zero in the books of SamCo Ltd. by recording the following journal entry:

Derivative financial liability A/c	Dr.	15,000	
To Profit and loss A/c			15,000

(Being gain on mark to market of put option contract booked to make the value the derivative liability as zero)

Accounting on 31st December 20X1

The settlement of the derivative put option contract by actual purchase of USD 20,000 shall be recorded in the books of SamCo Ltd. upon exercise by JT Corp. by recording the following journal entry:

Bank (USD Account) @ 20,000 x 66	Dr.	13,20,000	
Profit and loss A/c	Dr.	40,000	
To Bank @ 20,000 x 68			13,60,000

(being loss on settlement of put option contract booked on actual purchase of USD)

Q58: A Ltd. buys the following Equity Stock Options and the seller/writer of the options is B Ltd.

Date of Purchase	Type of Options	Expiry date	Market Lot	Premium per unit	Strike Price (₹)
29 June, 2001	XYZ Co. Ltd. Call	Aug. 30, 2001	100	30	460
30 June, 2001	ABC Co. Ltd. Put	Aug. 30, 2001	200	40	550

Journalize assuming price of XYZ Co. Ltd. and ABC Co. Ltd. on 30th August, 2001 is ₹ 470 and 500 respectively. **[Other Source]**

Ans: Journal Entries

Date	Books of A Ltd.		Books of B Ltd.	
29/06/01	Derivative Financial Asset Dr. To Bank account (Being premium paid to buy a call option)	3,000 3,000	Bank account Dr. To Derivative Financial Liability (Being premium received to sell a call option)	3,000 3,000
30/06/01	Derivative Financial Asset Dr. To Bank account (Being premium paid to buy a put option)	8,000 8,000	Bank account Dr. To Derivative Financial Liability (Being premium received to sell a put option)	8,000 8,000
30/08/01	Cash Dr. Fair Value Loss (PL) Dr. To Derivative Financial Asset (Being Call option settled at its Fair Value)	1,000 2,000 3,000	Derivative Financial Liability Dr. To Fair Value Gain (PL) To Cash (Being Call option settled at its Fair Value)	3,000 2,000 1,000
	Fair Value as 30/08/01 (470 -460) x 100 Lot Fair Value as 29/06/01 (Premium Paid) Fair Value Loss for Holder			1,000 3,000 2,000

30/08/01	Cash Dr. To Fair Value Gain (PL) To Derivative Financial Asset (Being Put option settled at its Fair Value)	10,000 2,000 8,000	Derivative Financial Liability Dr. Fair Value loss (PL) To Cash (Being Call option settled at its Fair Value)	8,000 2,000 10,000
	Fair Value as 30/08/01 (550 -500) x 200 Lot Fair Value as 30/06/01 (Premium Paid) Fair Value Gain for Holder			10,000 8,000 2,000

DERIVATIVES HELD FOR HEDGING

Q59: Entity A has the INR as its functional currency. **It expects** to purchase a machine for $ 10,000 on October 31, 20X6. Accordingly, it is exposed to the risk of increases in the dollar rate. If the dollar rate increases before the purchase takes place, the entity will have to pay more INR to obtain the $10,000 that it will have to pay for the machine. To offset the risk of increases in the dollar rate, the entity enters into a forward contract on April 30, 20X6, to purchase $10,000 in six months for a fixed amount (₹ 60,000). Entity A designates the forward contract as a hedging instrument in a cash flow hedge of its exposure to increases in the dollar rate.

On July 31 the dollar has appreciated, such that $10,000 for delivery on October 31, 20X6, costs ₹ 65,000 on the market. Therefore, the forward contract has increased in fair value to ₹ 5,000 (i.e., the difference between the committed price of ₹ 60,000 and the current price of ₹ 65,000. Entity A still expects to purchase the machine for $10,000, so it concludes that the hedge is 100% effective.

On October 31, 20X6, the dollar rate has further increased, such that $10,000 cost ₹ 66,000 in the spot market. Therefore, the fair value of the forward contract has increased to ₹ 6,000 (i.e., the difference between the committed price of ₹ 60,000 and the spot price of ₹ 66,000. It still expects to purchase the machine for $10,000. Give necessary journal entry. **[Other Sources]**

Ans: **On 30 April, 2016**

At inception, the forward contract has a fair value of zero, so no journal entry is required.

On 31st July 2016

Because the hedge is fully effective, the entire change in the fair value of the hedging instrument is recognized directly in equity. Entity A makes this entry:

Dr Forward asset	5,000
Cr OCI	5,000

On 31st Oct 2016

As entity still expects to purchase the machine for $10,000, Entity A makes following entry

Dr Forward asset	1000
Cr OCI	1000

The forward contract is settled and Entity A makes this entry:

Dr Cash	6,000
Cr Forward asset	6,000

Entity A purchases the machine for $10,000 (₹ 66,000) and makes this journal entry:

Dr Machine	66,000
Cr Accounts Payable	66,000

Depending on Entity A's accounting policy, the deferred gain or loss remaining in equity of ₹ 6,000 should either (1) remain in equity and be released from equity as the machine is depreciated or otherwise affects profit or loss or (2) be deducted from the initial carrying amount of the machine. Assuming the latter treatment, Entity A would make this journal entry:

Dr Equity	6,000
Cr Machine	6,000

The net effect of the cash flow hedge is to lock in a price of ₹ 60,000 for the machine.

Q60. Besides construction activity, Buildings & Co. Limited is also engaged in the trading of Copper. On 1st April, 20X1, it had 100 kg of copper costing Rs. 70 per kg - totalling Rs. 7000. The Company has a scheduled delivery of these 100 kgs of copper to its customer on 30th September, 20X1 at the rate of USD 100 on that date. To protect itself from decline in currency exchange rate (USD to Rs.), the entity hedges its position by entering into currency futures contract for equivalent currency units at Rs. 76 / USD. The future contract mature on 30th September, 20X1. The management performed an assessment of hedge effectiveness and concluded that the hedging relationship qualifies for cash flow hedge accounting. The entity determines and documents that changes in fair value of the currency futures contract will be highly effective in offsetting variability in cash flow of currency exchange. On 30th September, 20X1, the entity closes out its currency futures contract. On the same day, it also sells its inventory of copper at USD 100 when the spot rate is Rs. 72 / USD.

You are required to prepare detailed working and pass necessary journal entries for the sale of copper and the corresponding hedge instrument taken by the company. Pass the journal entries as on the initial date (i.e. 1st April 20X1), first quarter end reporting (i.e. 30th June 20X1) and date of sale of copper and settlement of forward contract (i.e. 30 th September 20X1).

Assume the exchange rates as follows and yield @ 6% per annum.

Date	Future price for 30th September 20X1 delivery (Rs. / USD)
1st April, 20X1	76
30th June, 20X1	74

30th September, 20X1 71

[MTP May 2021]

Ans: Calculation of discounting factor based on yield @ 6% p.a.

Date	Spot rate at indicated date	Forward rate for 30th September 20X1	Discount factor @ 6% p.a. on quarter basis
1st April, 20X1		76	0.971
30th June 20X1		74	0.985
30th September, 20X1	72	71	1

Determination of fair value change

		1st April, 20X1	30th June, 20X1	30th September, 20X1
a	Nominal value in Rs. @ Rs. 76 / USD	7,600	7,600	7,600
b	Nominal value in USD (100 kg for USD 100)	100	100	100
c	Forward rate for 30th September, 20X1	76	74	71
d	Value in Rs. (b x c)	7,600	7,400	7,100
e	Difference (a-d)	0	200	500
f	Discount factor (as calculated in the above table)	0.971	0.985	1
g	Fair value (e x f)	0	197	500
h	Fair value change for the period	0	197	303*

* 500 – 197= 303

Journal Entries

Date	Particulars	Dr.	Cr.
1st April, 20X1	No entry as initial fair value is zero		
30th June, 20X1	Future Contract Dr.	197	
	To Cash Flow Hedge Reserve (Other Equity)- OCI		197
	(Being Change in Fair Value of Hedging Instrument recognised in OCI accumulated in a separate component in Equity)		
30th September, 20X1	Future Contract Dr.	303	
	To Cash Flow Hedge Reserve (Other Equity) - OCI		303
	(Being change in fair value of the hedging instrument recognised in OCI)		

30th September, 20X1	Bank/Trade Receivable Dr. To Revenue from Contracts with Customers (Being sale of 100 kgs. of copper for USD 100 recognised at spot rate of Rs. 72 for USD 1)	7,200	 7,200
30th September, 20X1	Cash Flow Hedge Reserve (Other Equity) – OCI Dr. To Revenue from Contracts with Customers (Being fair value change in forward contract reclassified to profit and loss and recognised in the line item affected by the hedge item)	500	 500
30th September, 20X1	Bank / Cash Dr. To Future Contract	500	 500

SEPARATION OF NON-EQUITY EMBEDDED DERIVATIVES

Q61: D Ltd. issues callable preference shares to G Ltd. for a consideration of ₹ 10 lakhs. The holder has an option to convert these preference shares to a fixed number of equity instruments of the issuer anytime up to a period of 3 years. If the option is not exercised by the holder, the preference shares are redeemed at the end of 3 years. The preference shares carry a coupon of RBI base rate plus 1% p.a. The prevailing market rate for similar preference shares, without the conversion feature or issuer's redemption option, is RBI base rate plus 4% p.a. On the date of contract, RBI base rate is 9% p.a. The value of call as determined using Black and Scholes model for option pricing is is ₹ 29,165. Calculate the value of the liability and equity components.

Ans: The values of the liability and equity components are calculated as follows:

Present value of principal payable at the end of 3 years (₹ 10 lakhs discounted at 13% for 3 years) = ₹ 6,93,050

Present value of interest payable in arrears for 3 years (₹ 100,000 discounted at 13% for each of 3 years) = ₹ 2,36,115

The issuer's right to call the instrument in the event that interest rates go up makes a callable instrument less attractive to the holder than a plain vanilla instrument. This results in a derivative asset. The value of that early redemption option is ₹ 29,165

Net financial liability (A + B – C) = ₹ 9,00,000

Therefore, equity component = fair value of compound instrument, say, ₹ 1,000,000 less net financial liability component i.e. ₹ 9,00,000 = ₹ 1,00,000.

In subsequent years, the profit and loss account is charged with interest of RBI base rate plus 4% p.a. on the liability component at (A) above.

Q62: Certain callable convertible debentures are issued at ₹ 60. The value of similar debentures without call or equity conversion option is ₹ 57. The value of call as determined using Black and Scholes model for option pricing is ₹ 2.Determine values of liability and equity component.

[ICAI SM – Old Syllabus]

Ans: A callable bond is one that gives the issuer a right to buy the bond from the bondholders at a specified price. This feature in effect is a call option written by the bondholder. The option premium (value of call) is payable by the issuer.

Liability component (disregarding the call) = ₹ 57

Value of call payable by issuer = ₹ 2

Liability component = ₹ 57 – ₹ 2 = ₹ 55

Equity component = ₹ 60 – ₹ 55 = ₹ 5

Q63: Company A, an Indian company whose functional currency is ₹, enters into a contract to purchase machinery from an unrelated local supplier, company B. The functional currency of company B is also ₹ However, the contract is denominated in USD, since the machinery is sourced by company B from a US based supplier. Payment is due to company B on delivery of the machinery. Key terms of the contract:

Contractual features	Details
Contract/order date	9 September 20X1
Delivery/payment date	31 December 20X1
Purchase price	USD 1,000,000
USD/₹ Forward rate on 9 September 20X1 for 31 December 20X1 maturity	67.8
USD/₹ Spot rate on 9 September 20X1	66.4
USD/₹ Forward rates for 31 December, on: 30 September	67.5
31 December (spot rate)	67.0

Company A is required to analyse if the contract for purchase of machinery (a capital asset) from company B contains an embedded derivative and whether this should be separately accounted for on the basis of the guidance in Ind AS 109. Also give necessary journal entries for accounting the same. **[MTP Nov 2023; MTP May 2024; May 25]**

Ans:

- Based on the guidance above, the USD contract for purchase of machinery entered into by company A includes an embedded foreign currency derivative due to the following reasons:
- The host contract is a purchase contract (non-financial in nature) that is not classified as, or measured at FVTPL.
- The embedded foreign currency feature (requirement to settle the contract by payment of USD at a future date) meets the definition of a stand-alone derivative – it is akin to a USD-₹ forward contract maturing on 31 December 20X1.
- USD is not the functional currency of either of the substantial parties to the contract (i.e., neither company A nor company B).

- Machinery is not routinely denominated in USD in commercial transactions around the world. In this context, an item or a commodity may be considered 'routinely denominated' in a particular currency only if such currency was used in a large majority of similar commercial transactions around the world. For example, transactions in crude oil are generally considered routinely denominated in USD. A transaction for acquiring machinery in this illustration would generally not qualify for this exemption.
- USD is not a commonly used currency for domestic commercial transactions in the economic environment in which either company A or B operate. This exemption generally applies when the business practice in a particular economic environment is to use a more stable or liquid foreign currency (such as the USD), rather than the local currency, for a majority of internal
- or cross-border transactions, or both. In the illustration above, companies A and B are companies operating in India and the purchase contract is an internal/domestic transaction. USD is not a commonly used currency for internal trade within this economic environment and therefore the contract would not qualify for this exemption.
- Accordingly, company A is required to separate the embedded foreign currency derivative from the host purchase contract and recognise it separately as a derivative.
- The separated embedded derivative is a forward contract entered into on 9 September 20X1, to exchange USD 10,00,000 for ₹ at the USD/₹ forward rate of 67.8 on 31 December 20X1. Since the forward exchange rate has been deemed to be the market rate on the date of the contract, the embedded forward contract has a fair value of zero on initial recognition.
- Subsequently, company A is required to measure this forward contract at its fair value, with changes in fair value recognised in the statement of profit and loss. The following is the accounting treatment at quarter-end and on settlement: Accounting treatment:

Date	Particulars	Amount (₹)	Amount (₹)
09-Sep-X1	**On initial recognition of the forward contract**		
	(No accounting entry recognised since initial fair value of the forward contract is considered to be nil)	Nil	Nil
30-Sep-X1	**Fair value change in forward contract**	3,00,000	
	Derivative asset (company B) Dr.		
	[(67.8-67.5) x10,00,000]		
	To Profit or loss		3,00,000
31-Dec-X1	**Fair value change in forward contract**		

	Forward contract asset (company B) Dr.	5,00,000	
	[{(67.8-67) x 10,00,000} - 3,00,000]		
	To Profit or loss		5,00,000
31-Dec-X1	**Recognition of machinery acquired and on settlement**		
	Property, plant and equipment Dr. (at forward rate)	6,78,00,000	
	To Forward contract asset (company B)		8,00,000
	To Creditor (company B) / Bank		6,70,00,000

Q64: Entity A (an INR functional currency entity) enters into a USD 1,000,000 sale contract on 1 January 20X1 with Entity B (an INR functional currency entity) to sell equipment on 30 June 20X1.

Spot rate on 1 January 20X1: INR/USD	45
Spot rate on 31 March 20X1: INR/USD	57
Three month forward rate on 31 March 20X1: INR/USD	45
Six month forward rate on 1 January 20X1: INR/USD	55
Spot rate on 30 June 20X1: INR/USD	60

Let's assume that this contract has an embedded derivative that is not closely related and requires separation. Please provide detailed journal entries in the books of Entity A for accounting of such embedded derivative until sale is actually made.

[May 2024 Exams (10 Marks)]

Ans: The contract should be separated using the 6 month USD/INR forward exchange rate, as at the date of the contract (INR/USD = 55). The two components of the contract are therefore:

- A sale contract for INR 55 Million
- Forward contract to receive US Dollars and pay INR i.e. a notional payment in INR. In other words, a six-month currency forward contract to buy US Dollars 1 Million at INR 55 per US Dollar
- This gives rise to a gain or loss on the derivative, and a corresponding derivative asset or liability.

On delivery

1. Entity A records the sales at the amount of the host contract = INR 55 Million
2. The embedded derivative is considered to expire.
3. The derivative asset or liability (i.e. the cumulative gain or loss) is settled by becoming part of the financial asset on delivery.

4. In this case the carrying value of the currency forward at 30 June 20X1 on maturity is = INR (1,000,000*60-55*1,000,000)=₹ 5,000,000 (profit/asset)

Journal Entries to be recorded at every period end

a. 01 January 20X1 – No entry to be made

b. 31 March 20X1 –

Profit and loss A/c	Dr.	10,000,000	
To Derivative financial liability A/c			10,000,000

(being loss on mark to market of embedded derivative booked)

c. 30 June 20X1 –

Derivative financial asset A/c	Dr.	5,000,000	
Derivative financial liability A/c	Dr.	10,000,000	
To Profit and loss A/c			15,000,000

(being gain on embedded derivative based on spot rate at the date of settlement booked)

d. 30 June 20X1 –

Trade receivable A/c	Dr.	55,000,000	
To Sales A/c			55,000,000

(being sale booked at forward rate on the date of transaction)

e. 30 June 20X1 –

Trade receivable A/c	Dr	5,000,000	
To Derivative financial asset A/c			5,000,000

(being derivative asset re-classified as a part of trade receivables, bringing it to spot rate on the date of sale)

NON FINANCIAL CONTRACTS

Q65: Contracts for purchase or sale of non-financial item Key terms of contracts to buy/sell non-financial items Company Z is engaged in the business of importing oil seeds for further processing as well as trading purposes. It enters into the following types of contracts as on 1 October 20X1:

Particulars	Contract 1	Contract 2	Contract 3
Nature of Contract	Import of oil seeds from a foreign supplier	Purchase of oil seeds from a domestic producer /Supplier	Contract to sell oil seeds on the commodity exchange
Quantity and rate	100 MT at USD 400 per MT to be	50 MT at ₹ 30,000 per MT to be	50 MT at USD 450 per MT, maturing as

	delivered as on 31 March 20X2	delivered as on 31 January 20X2	on 15 January 20X2
Net settlement clause included in the contract	Yes	Yes	Yes
Net settlement in practice for similar contracts	There have also been several instances of the oil seeds being sold prior to or shortly after taking delivery. These instances of net settlement constitute approximately 30 per cent of the value of total import contracts.	Yes – company Z has net settled some of the domestic purchase contracts. However, these instances constitute only 1 per cent of the total domestic purchase contracts in value. The remaining contracts are settled by taking delivery of oil seeds which are used for further processing.	Yes – these contracts are required to be net settled with the exchange on the maturity date. Company Z enters into these types of derivative contracts to hedge the risks on its domestic oil seeds purchase contracts

Company Z is required to determine if the contracts entered into for purchase and sale of oil seeds are derivatives within the scope of Ind AS 109 or are executory contracts outside the scope of Ind AS 109. **[MTP Nov 20203]**

Ans: **Contract 1:** The following factors indicate that this contract does not meet the 'own use' exemption:

- The contract permits net settlement, and
- There is a past practice of a significant proportion (30 per cent in this illustration) of similar contracts being settled on a net basis either in cash or by sale of the oil seeds prior to delivery/shortly after taking delivery.

Therefore, this contract would fall within the scope of Ind AS 109 and should be recognised as a derivative instrument as on 1 October 20X1. The contract would be in the nature of a forward contract to buy 100 MT of oil seeds as on 31 March 20X2 at USD 400 per MT. Company Z would have to recognise the fair value changes (based on change in forward purchase rate) on this contract in the statement of profit and loss at each reporting date.

Contract 2: Contract 2 also permits net settlement in cash. Further, there have been some instances of similar domestic purchase contracts being settled net in cash in the past.

However, these have been infrequent in nature and insignificant in proportion to the total value of similar contracts (i.e.1 percent in this illustration).

Company Z is in the practice of taking delivery of the oil seeds purchased under similar contracts and using them for further processing in its plants.

This indicates that the domestic purchase contract meets the criteria for the 'own-use' exemption and should be considered as an executory contract.

Therefore, this contract would not fall within the scope of Ind AS 109.

Contract 3: This contract is in the nature of a derivative contract transacted on a commodity exchange and is required to be net settled in cash on maturity. Therefore, this derivative contract would be covered by Ind AS 109 and required to be classified and measured at FVTPL.

INSTRUMENTS THAT WILL OR MAY BE SETTLED IN OWN EQUITY:

Q66: ST Ltd. purchases an option from AT Ltd. entitling the holder to subscribe to equity shares of issuer at a fixed exercise price of ₹ 50 per share at any time during a period of 3 months. Holder paid an initial premium of ₹ 2 per option. Examine whether the financial instrument will be classified as equity.

Ans: For the issuer AT Ltd., this option is an equity instrument as it will be settled by the exchange of a fixed amount of cash for a fixed number of its own equity instruments.

If, on the other hand, if the exercise price of the option was variable, say benchmarked to an index or a variable, other than the market price of equity shares of AT Ltd., the written option will be classified as a "financial liability" in the books of the issuer, AT Ltd.

In the above illustration, if the instrument is classified as "equity instrument", any consideration received (such as the premium received for a written option or warrant on the entity's own shares) is added directly to equity. It must also be noted that changes in the fair value of an equity instrument are not recognised in the financial statements. (Ind AS 32.22)

On the contrary, if the derivative instrument (i.e. the written option) is classified as "financial liability", any consideration received is measured initially at fair value and subsequently also at fair value, with fair value changes recognised in profit or loss.

Q67: WC Ltd. writes an option in favour of GT Ltd. wherein the holder can purchase issuer's equity instruments at prices that fluctuate in response to the share price of issuer.

As per the terms, if the share price of issuer is less than ₹ 50 per share, option can be exercised at ₹ 40 per share. If the share price is equal to or more than ₹ 50 per share, option can be exercised at ₹ 60 per share. Explain the nature of the financial instrument.

Ans: As the contract will be settled by delivery of fixed number of instruments for a variable amount of cash, it is a financial liability.

Q:68 On 1 January 20X1, NKT Ltd. subscribes to convertible preference shares of VT Ltd. The conversion ratio varies as below:

Conversion upto 31 March 20X1: 1 equity share of VT Ltd. for each preference share held

Conversion upto 30 June 20X1: 1.5 equity share of VT Ltd. for each preference share held

Conversion upto 31 December 20X1: 2 equity share of VT Ltd. for each preference share held.

Examine whether the financial instrument will be classified as equity.

Ans: The convertible preference shares can be classified as "equity instrument" in the books of the issuer, VT Ltd. The conversion ratio doesn't change corresponding to any underlying variable, it only varies in response to passage of time which is a certain event and hence fixed.

Q69: On 1 January 20X1, HT Ltd. subscribes to convertible preference shares of RT Ltd. The preference shares are convertible in the ratio of 1:1.

The terms of the instrument entitle HT Ltd. to proportionately more equity shares of RT Ltd. in case of a stock split or bonus issue. Examine whether the financial instrument will be classified as equity.

Ans: The convertible preference shares can be classified as "equity instrument" in the books of the issuer, RT Ltd. The variability in the conversion ratio is only to protect the rights of the holder of convertible instrument vis-à-vis other equity shareholders.

The conversion was always intended to be in a fixed ratio and hence the holder is exposed to the change in equity value. The variability is brought in to maintain holder's exposure in line with other holders.

Q70: On 1 January 20X1, STAL Ltd. subscribes to convertible preference shares of ATAL Ltd.

The preference shares are convertible as below:

Convertible 1:1 if another strategic investor invests in the issuer within one year

Convertible 1.5:1: if an IPO is successfully completed within 2 years

Convertible 2:1: if a binding agreement for sale of majority stake by equity shareholders is entered into within 3 years

Convertible 3:1: if none of these events occur in 3 years' time.

Examine whether the financial instrument will be classified as equity.

Ans: In this case the four events can be viewed as discrete because the achievement of each one of these can occur independently of the other (as they relate to different periods). The arrangement can therefore be considered to be economically equivalent to four separate contracts. The price per share and the amount of shares to be issued is fixed in each of these discrete periods, with each event relating to a different year and therefore a separate risk. The "fixed for fixed" test is therefore met. The instrument is therefore classified as "equity instrument".

Q71: On 1 January 20X1, RHT Ltd. subscribes to convertible preference shares of RDT Ltd.

The preference shares are convertible as below:

Convertible 1:1 if another strategic investor invests at an enterprise valuation (EV) of USD 100 million.

Convertible 1.5:1: if another strategic investor invests at EV of USD 150 million

Convertible 2:1: if another strategic investor invests at EV of USD 200 million

Convertible 3:1: if no strategic investment is made within a period of 3 years

Examine the nature of the financial instrument.

Ans: The four events are interdependent because the second event cannot be met without also meeting the first event, and the third event cannot be met unless the first two are met.

Therefore, this contract should be treated as a single instrument when applying the "fixed for fixed" test. The test is then failed because the number of shares to be exchanged for cash are variable.

Q72: Entity A issues a bond with face value of USD 100 and carrying a fixed coupon rate of 6% p.a. Each bond is convertible into 1,000 equity shares of the issuer. Examine the nature of the financial instrument.

Ans: While the number of equity shares is fixed, the amount of cash is not. The variability in cash arises on account of fluctuation in exchange rate of INR-USD. Such a foreign currency convertible bond (FCCB) will qualify the definition of "financial liability".

However, Ind AS 32 provides, "the equity conversion option embedded in a convertible bond denominated in foreign currency to acquire a fixed number of the entity's own equity instruments is an equity instrument if the exercise price is fixed in any currency."

Accordingly, FCCB will be treated as an "equity instrument".

Q73: On 1 January 2018, Entity X writes a put option for 1,00,000 of its own equity shares for which it receives a premium of ₹ 5,00,000.

Under the terms of the option, Entity X may be obliged to take delivery of 1,00,000 of its own shares in one year's time and to pay the option exercise price of ₹ 22,000,000. The option can only be settled through physical delivery of the shares (gross physical settlement). Examine the nature of the financial instrument and how it will be accounted assuming that the present value of option exercise price is ₹ 20,000,000? **[ICAI SM]**

Ans: This derivative involves Entity X taking delivery of a fixed number of equity shares for a fixed amount of cash. Even though the obligation for Entity X to purchase its own equity shares for ₹ 22,000,000 is conditional on the holder of the option exercising the option, Entity X has an obligation to deliver cash which it cannot avoid.

As per para 23 of Ind AS 32 'Financial Instruments: Presentation', the accounting for financial instrument will be as below:

- The financial liability is recognised initially at the present value of the redemption amount, and is reclassified from equity. This would imply that a financial liability for an amount of present value of ₹ 22,000,000, say ₹ 20,000,000 will be recognised through a debit to equity. The initial premium received (₹ 5,00,000) is credited to equity.

- Subsequently, the financial liability is measured in accordance with Ind AS 109. While a subsequent paragraph will deal with measurement of financial liabilities. The financial liability of ₹ 20,000,000 will be measured at amortised cost as per Ind AS 109 and finance cost of ₹ 2,000,000 will be recognised over the exercise period.
- If the contract expires without delivery, the carrying amount of the financial liability is reclassified to equity ie. an amount of ₹ 22,000,000 will be reclassified from financial liability to equity.

FINANCIAL GUARANTEE

Q74: On 1 April 20X1, Sun Limited guarantees a ₹10,00,000 loan of Subsidiary – Moon Limited, which Bank STDK has provided to Moon Limited for three years at 8%.

Interest payments are made at the end of each year and the principal is repaid at the end of the loan term.

If Sun Limited had not issued a guarantee, Bank STDK would have charged Moon Limited an interest rate of 11%. Sun Limited does not charge Moon Limited for providing the guarantee.

On 31 March 20X2, there is 1% probability that Moon Limited may default on the loan in the next 12 months. If Moon Limited defaults on the loan, Sun Limited does not expect to recover any amount from Moon Limited.

On 31 March 20X3, there is 3% probability that Moon Limited may default on the loan in the next 12 months. If Moon Limited defaults on the loan, Sun Limited does not expect to recover any amount from Moon Limited.

Provide the accounting treatment of financial guarantee as per Ind AS 109 in the books of Sun Ltd., on initial recognition and in subsequent periods till 31 March 20X3.

[RTP MAY 21; MTP NOV 2021; Nov 2022; Nov 2023]

Ans: **1 April 20X1**

A financial guarantee contract is initially recognised at fair value. The fair value of the guarantee will be the present value of the difference between the net contractual cash flows required under the loan, and the net contractual cash flows that would have been required without the guarantee.

Particulars	Year 1 (₹)	Year 2 (₹)	Year 3 (₹)	Total (₹)
Cash flows based on interest rate of 11% (A)	1,10,000	1,10,000	1,10,000	3,30,000
Cash flows based on interest rate of 8% (B)	80,000	80,000	80,000	2,40,000
Interest rate differential (A-B)	30,000	30,000	30,000	90,000
Discount factor @ 11%	0.901	0.812	0.731	

Interest rate differential discounted at 11%	27,030	24,360	21,930	73,320
Fair value of financial guarantee contract (at inception)				73,320

Journal Entry

Particulars		Debit (₹)	Credit (₹)
Investment in subsidiary	Dr.	73,320	
To Financial guarantee (liability)			73,320
(Being financial guarantee initially recorded)			

31 March 20X2

Subsequently at the end of the reporting period, financial guarantee is measured at the higher of:

- the amount of loss allowance; and
- the amount initially recognised less cumulative amortization, where appropriate.

At 31 March 20X2, there is 1% probability that Moon Limited may default on the loan in the next 12 months. If Moon Limited defaults on the loan, Sun Limited does not expect to recover any amount from Moon Limited. The 12-month expected credit losses are therefore ₹10,000 (₹10,00,000 x 1%).

The initial amount recognised less amortisation is ₹51,385 (₹73,320 + ₹8,065 (interest accrued based on EIR)) – ₹30,000 (benefit of the guarantee in year 1) Refer table below. The unwound amount is recognised as income in the books of Sun Limited, being the benefit derived by Moon Limited not defaulting on the loan during the period.

Year	Opening balance	EIR @ 11%	Benefits provided	Closing balance
	₹		₹	₹
1	73,320	8,065	(30,000)	51,385
2	51,385	5,652	(30,000)	27,037
3	27,037	2,963*	(30,000)	-

* Difference is due to approximation

The carrying amount of the financial guarantee liability after amortisation is therefore ₹ 51,385, which is higher than the 12-month expected credit losses of ₹ 10,000. The liability is therefore adjusted to ₹ 51,385 (the higher of the two amounts) as follows:

Particulars		Debit (₹)	Credit (₹)
Financial guarantee (liability)	Dr.	21,935	

To Profit or loss		21,935
(Being financial guarantee subsequently adjusted)		

31 March 20X3

At 31 March 20X3, there is 3% probability that Moon Limited will default on the loan in the next 12 months. If Moon Limited defaults on the loan, Sun Limited does not expect to recover any amount from Moon Limited. The 12-month expected credit losses are therefore ₹ 30,000 (₹ 10,00,000 x 3%).

The initial amount recognised less accumulated amortisation is ₹ 27,037, which is lower than the 12-month expected credit losses (₹ 30,000). The liability is therefore adjusted to ₹ 30,000 (the higher of the two amounts) as follows:

Particulars		Debit (₹)	Credit (₹)
Financial guarantee (liability)	Dr.	21,385*	
To Profit or loss (Note)			21,385
(Being financial guarantee subsequently adjusted)			

* The carrying amount at the end of 31 March 20X2 = ₹ 51,385 less 12-month expected credit losses of ₹ 30,000.

Q75: On 1st April, 2021 "Fortunate Bank" has provided a loan of ₹ 25,00,000 to Mohan Limited for 4 years at 10% p.a. and the loan has been guaranteed by Surya Limited, which is a holding company for Mohan Limited. Interest payments are made at the end of each year and the principal is repaid at the end of the loan term. If Surya Limited had not issued a guarantee, 'Fortunate Bank' would have charged Mohan Limited an interest rate of 14% p.a. Surya Limited does not charge Mohan Limited for providing the guarantee.

On 31st March 2022, there is 2% probability that Mohan Limited may default on the loan in the next 12 months. If Mohan Limited defaults on the loan, Surya Limited does not expect to recover any amount from Mohan Limited.

On 31st March 2023, there is 4% probability that Mohan Limited may default on the loan in the next 12 months. If Mohan Limited defaults on the loan, Surya Limited does not expect to recover any amount from Mohan Limited.

On 31st March 2024, there is 5% probability that Mohan Limited may default on the loan in the next 12 months. If Mohan Limited defaults on the loan, Surya Limited does not expect to recover any amount from Mohan Limited.

You are required to provide accounting treatment of financial guarantee as per Ind AS 109 in the books of Surya Limited on initial recognition and in subsequent periods till 31st March, 2024.

[Exam Nov 22 (12 Marks)]

Ans: **1st April 2021**

A financial guarantee contract is initially recognised at fair value. The fair value of the guarantee will be the present value of the difference between the net contractual cash flows required under the loan, and the net contractual cash flows that would have been required without the guarantee.

Particulars	Year 1 (₹)	Year 2 (₹)	Year 3 (₹)	Year 4 (₹)	Total (₹)
Cash flows based oninterest rate of 14% (A)	3,50,000	3,50,000	3,50,000	3,50,000	14,00,000
Cash flows based oninterest rate of 10% (B)	2,50,000	2,50,000	2,50,000	2,50,000	10,00,000
Interest on differential rate (C) = (A-B)	1,00,000	1,00,000	1,00,000	1,00,000	4,00,000
Discount factor @ 14%	0.877	0.769	0.675	0.592	
Interest on differential ratediscounted @ 14%	87,700	76,900	67,500	59,200	2,91,300
Fair value of financial guaranteed contract (at inception)					2,91,300

Journal Entry

Particulars		Debit (₹)	Credit (₹)
Investment in subsidiary	Dr.	2,91,300	
To Financial guarantee (liability)			2,91,300
(Being financial guarantee initially recorded)			

31st March 2022

Subsequently at the end of the reporting period, financial guarantee is measured at the higher of:

- the amount of loss allowance; and
- the amount initially recognised less cumulative amortization, where appropriate.

At 31st March 2022, there is 2% probability that Mohan Limited may default on the loan in the next 12 months. If Mohan Limited defaults on the loan, Surya Limited does not expect to recover any amount from Mohan Limited. The 12-month expected credit losses are therefore ₹ 50,000 (₹ 25,00,000 x 2%).

The initial amount recognised less amortisation is ₹ 2,32,082 (Refer table below). The unwound amount is recognised as income in the books of Surya Limited, being the benefit derived by Mohan Limited not defaulting on the loan during the period.

Year ended on 31st March	Opening balance (a)	EIR @ 14% (b) = (a x 14%)	Benefits provided (c)	Closing balance (d) = (a) + (b) -(c)
	₹		₹	₹
2022	2,91,300	40,782	(1,00,000)	**2,32,082**
2023	2,32,082	32,491	(1,00,000)	1,64,573
2024	1,64,573	23,040	(1,00,000)	87,613
2025	87,613	12,387*	(1,00,000)	-

* Difference of ₹ 121 (₹ 12,387 – ₹ 12,266) is due to approximation.

The carrying amount of the financial guarantee liability after amortisation is therefore ₹ 2,32,082, which is higher than the 12-month expected credit losses of ₹ 50,000. The liability is therefore adjusted to ₹ 2,32,082 (the higher of the two amounts) as follows

Particulars		Debit (₹)	Credit (₹)
Financial guarantee (liability)	Dr.	59,218	
To Profit and loss			59,218
(Being financial guarantee subsequently adjusted)			

31st March 2023

At 31st March 2023, there is 4% probability that Mohan Limited will default on the loan in the next 12 months. If Mohan Limited defaults on the loan, Surya Limited does not expect to recover any amount from Mohan Limited. The 12-month expected credit losses are therefore ₹ 1,00,000 (₹ 25,00,000 x 4%).

The carrying amount of the financial guarantee liability after amortisation is ₹ 1,64,573, which is higher than the 12-month expected credit losses of ₹ 1,00,000. The liability is therefore adjusted to ₹ 1,64,573 (the higher of the two amounts) as follows:

Particulars		Debit (₹)	Credit (₹)
Financial guarantee (liability)	Dr.	67,509	
To Profit and loss			67,509
(Being financial guarantee subsequently adjusted)			

31st March 2024

At 31st March 2024, there is 5% probability that Mohan Limited will default on the loan in the next 12 months. If Mohan Limited defaults on the loan, Surya Limited does not expect to recover any amount from Mohan Limited. The 12-month expected credit losses are therefore ₹ 1,25,000 (₹ 25,00,000 x 5%).

The initial amount recognised less accumulated amortisation is ₹ 87,613, which is lower than the 12-month expected credit losses (₹ 1,25,000). The liability is therefore adjusted to ₹ 1,25,000 (the higher of the two amounts) as follows:

Particulars		Debit (₹)	Credit (₹)
Financial guarantee (liability)	Dr.	39,573*	
To Profit and loss (Refer Note below)			39,573*
(Being financial guarantee subsequently adjusted)			

* Note: The carrying amount at the end of 31st March 2023 will be ₹ 1,25,000 (i.e. ₹ 1,64,573 less 12-month expected credit losses of ₹ 39,573).

QUESTIONS FROM ICAI RTP/MTP/EXAMS/GFRS

Q76: Blueberry Ltd entered into the following transactions during the year ended 31st March,20X2: Entered into a speculative interest rate option costing ₹ 10,000 on 1stApril,20X0 to borrow ₹ 6,000,000 from Exon Bank commencing 30th June,20X2 for 6 months at 4%.

The value of the option at 31stMarch.20X2 was ₹15,250.

Purchased 6% debentures in Fox Ltd on 1stApril,20X1 (their issue date) for ₹ 150,000 as an investment. Blueberry Ltd. intends to hold the debentures, until their redemption at a premium, in 5 years' time. The effective rate of interest of the bond is 8%.

Purchased 50,000 shares in Cox Ltd on 1stOctober,20X2 for ₹3.50 each as an investment. The share price on 31st March,20X2 was ₹ 3.75.

Show the accounting treatment and relevant extracts from the financial statements for the year ended 31st March,20X2 of transactions related to financial instruments. Blueberry Ltd designates financial assets at fair value through Profit or loss only when this is unavoidable.

[MTP May 2020; May 2025]

Ans: Balance Sheet as at 31st March, 20X2 (Extracts)

Interest rate option (W.N.1)	15,250
6% Debentures in Fox Ltd. (W.N.2)	1,53,000
Shares in Cox Ltd. (W.N.3)	1,87,500
Statement of Profit and Loss (Extracts)	
Finance Income:	
Gain on interest rate option (W.N.1)	5,250
Effective interest on 6% Debentures (W.N.2)	12,000

Working Notes:

1. **Interest rate option**

This is a derivative and so it must be treated as at fair value through profit or loss

Particulars		₹	₹
Initial measurement (at cost) Financial Asset	Dr.	10,000	
To Cash A/c			10,000

At 31st March, 20X2

Particulars		₹	₹
(Re-measured to fair value) Financial Asset (₹ 15,250 - ₹10,000)	Dr.	5,250	
To Profit and loss A/c			5,250

Financial Assets (₹10,000 + ₹5,250)= **₹15,250 (Balance Sheet)**

Gain on interest option= **₹5,250 (Statement of Profit and Loss)**

2. Debentures

On the basis of information provided, this can be treated as a held-to-maturity investment

Particulars		₹	₹
Initial measurement (at cost) Financial Asset	Dr.	1,50,000	
To Cash A/c			1,50,000

At 31st March, 20X2 (Amortized cost)

Particulars		₹	₹
Financial Asset (₹1,50,000 x 8%)	Dr.	12,000	
To Finance Income			12,000

Cash (₹ 1,50,000 x 6%)	Dr.	9,000	
To Financial asset			9,000

Amortized cost at 31st March, 20X2

(₹ 150,000 + ₹ 12,000 – ₹ 9,000)= **₹ 153,000 (Balance Sheet)**

Effective interest on 6% debenture= **₹ 12,000 (Statement of Profit and Loss)**

3. Shares in Cox Ltd.

These are treated as an available for sale financial asset (shares cannot normally be held to maturity and they are clearly not loans or receivables)

Particulars	₹	₹

Initial measurement (at cost) Financial Asset (₹50,000 x ₹3.50)	Dr.	1,75,000	
To Cash A/c			1,75,000

At 31st March, 20X2 (Re-measured at fair value)

Particulars		₹	₹
Financial Asset [(₹50,000 x 3.75) – 1,75,000]	Dr.	12,500	
To Other Equity A/c			12,500

Shares in Cox Ltd (₹1,75,000 + ₹12,500) = **₹1,87,500 (Balance Sheet)**

Q77: On 1st April, 2016, QA Ltd. purchased 10 Lakhs options to acquire shares in KS Ltd., a listed entity. The Company paid ₹ 0.25 per option which allows the Company to purchase shares in KS Ltd. for a price of ₹ 2 per share. The exercise date for the option was 31st December, 2016. On 31st December, 2016, when the market value of a share in KS Ltd. was ₹ 2.6 per share, the Company exercised all its options to acquire shares in KS Ltd.

In addition to the purchase price, the Company has also incurred directly attributable cost of ₹ 1,00,000 for purchase of 10 lakhs shares in KS Ltd. The Company has classified these shares as trading portfolio. However, the Company has not disposed of any of the shares in KS Ltd. between 31st December, 2016 to 31st March, 2017.

The market value of the shares of KS Ltd. as on 31st March, 2017 is ₹ 2.90 per share.

The Company has requested you to suggest the accounting treatment of the above arrangement and transaction of acquisition of shares in KS Ltd. **[GFRS]**

Ans: The option to acquire shares in KS Ltd. would be regarded as a derivative financial instrument. This is because the value of the option depends on the value of an underlying variable (KS Ltd.'s share price). As per paragraph 4.1.4 and 4.2.1 of IND AS 109 'Financial Instruments', all derivatives are measured at fair value. On 1 April 2016, when QA purchased 10 lakh options to acquire shares in KS Ltd. at ₹ 0.25 per option, QA will recognise Option Asset for ₹ 2.5lac by passing the following journal entry:

Option on KS Ltd. shares	Dr.	₹ 2.5 lakhs	
To Bank			₹ 2.5 lakhs

QA shall measure the option at fair value at the end of every reporting period and also before exercise. The increase in share price on exercise date represents fair value of the option as the time value is zero on exercise date. Therefore, QA will measure the option at ₹ 6 lac (10 lac option x (2.6 – 2)) and recognise fair value gain of ₹ 3.5 lac in profit or loss.

The following journal entry will be passed:

Option on KS Ltd. shares	Dr.	₹ 3.5 lakhs	

To Fair value gain			₹ 3.5 lakhs

On exercise of the option on 31st December, 2016, QA will pay ₹20 lac for 10 lac shares of KS Ltd and the option derivative will be converted to shares of KS Ltd. Therefore, QA will pass the following entry:

Investment in KS Ltd. Equity shares	Dr.	₹ 26 lakhs	
To Bank			₹ 20 lakhs
To Option on KS Ltd. shares			₹ 6 lakhs

Paragraph 5.1.1 of IND AS 109 Financial Instruments requires that the transaction costs shall be added to fair value if the financial asset is measured at other than fair value through profit or loss.

In the given case, ₹ 1 lac incurred by QA for acquiring equity shares of KS Ltd. will not be added to the fair value of the equity shares of KS Ltd. This is because equity shares of KS Ltd. are classified at fair value through profit or loss in accordance with paragraph 4.1.4 of IND AS 109 Financial Instruments. Therefore, QA shall recognise ₹ 1 lac incurred on acquisition of equity shares of KS Ltd. in profit or loss as on 31st March, 2017.

The investment is included in the statement of financial position at 31st March, 2017 as a current asset at its fair value of ₹ 29 lac. The increase in fair value of ₹ 3 lac is taken to the profit and loss.

Q78 Jewels Ltd. entered into a transaction to purchase 1,000 gms of platinum on 15th January, 2020. The transaction provides for a price payable which is equal to market value of 1,000 gms of platinum on 15th April 2020 and shall be settled by issue of such number of equity shares as is required to settle the aforementioned transaction, at a price of ₹ 100 per share on 15th April 2020. Whether this is to be classified as liability or equity as on 31st March 2020 as per Ind AS 109?

You are required to explain with reasons. **[Exam Jan 2021 (5 Marks)]**

Ans: There is a contract for purchase of 1,000 gms of platinum whose consideration varies in response to changing value of platinum. Analysing this contract as a derivative with all three of the following characteristics:

(a) Value of contract changes in response to change in market value of platinum ;

(b) There is no initial net investment

(c) It will be settled at a future date, i.e. 15th April 2020.

Since the above criteria are met, this is a derivative contract.

Now, a derivative contract that is settled in own equity other than exchange of fixed amount of cash for fixed number of shares is classified as 'liability'. In this case, since the contract results in

issue of variable number of shares based on transaction price to be determined in future, hence, this shall be classified as 'derivative financial liability' as per Ind AS 109.

Q79: On 1st October, 2017 Axe Limited issues preference shares to B Limited for a consideration of ₹ 18 lakh. The holder has an option to convert these preference shares to a fixed number of equity instruments of the issuer any time up to a period of 4 years. If the holder does not exercise the option, the preference shares are redeemable at the end of 4 years. The preference shares carry a fixed coupon of 5.5% per annum and is payable every year. The prevailing market rate for similar preference shares without the conversion feature is 8% per annum.

Axe Limited has an early redemption option to prepay the instrument at ₹ 20 lakh and on 30th September, 2020, it exercised that option. The interest rate has changed on that date.

At that time, Axe Limited could have issued a 1 year (that is maturity 30th September, 2021) non-convertible instrument at 6%.

Calculate the value of liability and equity components at the date of initial recognition. Also give amortization schedule. (Limit discounting factor to 3 decimal places for calculation purpose).

[Exam July 2021 (5 Marks)]

Ans: The values of the liability and equity components are calculated as follows:

Present value of principal payable at the end of 4 years (₹ 18,00,000 discounted at 8% for 4 years i.e. ₹ 18,00,000 x 0.735)	₹ 13,23,000
Present value of interest payable in arrears for 4 years (₹ 99,000 (₹ 18,00,000 x 5.5%) discounted at 8% for each of 4 years (i.e. ₹ 99,000 x 3.312))	₹ 3,27,888
Total financial liability	₹ 16,50,888
Consideration amount	(₹ 18,00,000)
Residual – equity component	₹ 1,49,112

Therefore, equity component = fair value of compound instrument, say, ₹ 18,00,000 less financial liability component i.e. ₹ 16,50,888 = ₹ 1,49,112.

The amortisation schedule of the instrument is set out below:

Dates	Cash flows	Finance cost at effective interest rate	Liability
1st October 2017	18,00,000	-	16,50,888
30th September 2018	(99,000)	1,32,071	16,83,959
30th September 2019	(99,000)	1,34,717	17,19,676
30th September 2020	(99,000)	1,37,574	17,58,250
30th September 2021	(18,99,000)	1,40,750*	-

*Note: The difference in amount of finance cost is due to approximation of discounting factor to 3 decimal places.

Q80: KUPA Ltd. borrowed ₹ 95 lakh as loan from XYZ Bank on 1st April, 2018 at an interest rate of 10% p.a. KUPA Ltd. spent ₹ 1,80,912 as loan processing charges. Principal amount of loan is to be repaid in 5 equal instalments and the interest to be paid annually on accrual basis. Effective interest rate on loan is 10.8%.

On 31st March, 2020, KUPA Ltd. faced challenges in business because of sudden change in the technology. It approached XYZ Bank and renegotiated the terms of the loan. Interest rate changed to 15% p.a. Principal amount of loan is to be repaid in 8 equal instalments payable annually starting 31st March, 2021 and the interest is to be paid annually on accrual basis. Before approaching bank, KUPA Ltd. made the interest payment on 31st March, 2020.

You are required to record Journal entries in the books of KUPA Ltd. till 31 st March, 2021, after giving effect of the changes in the terms of the loan on 31st March, 2020. Workings should form part of the answer.

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8
10%	0.909	0.826	0.751	0.683	0.621	0.564	0.513	0.467
10.8%	0.903	0.815	0.735	0.664	0.599	0.540	0.488	0.440
15%	0.870	0.756	0.658	0.572	0.497	0.432	0.376	0.327

[Exam Dec 21 (12 Marks); MTP May 2023]

Ans: The following table shows the amortisation of loan based on effective interest rate:

Date (1)	Opening Amortised cost (2)	Cash flows (Principal) (3)	Cash outflows (Interest @ 10% and fee) (4)	Total cash flows (3 + 4 = 5)	Interest @ EIR 10.80% (2 x 10.80% = 6)	Closing Amortised cost (2- 5 + 6 = 7)
1st April, 2018		(95,00,000)	1,80,912			93,19,088
31st March, 2019	93,19,088	19,00,000	9,50,000	28,50,000	10,06,462	74,75,550
31st March, 2020	74,75,550	19,00,000	7,60,000	26,60,000	8,07,359	56,22,909
31st March, 2021	56,22,909	19,00,000	5,70,000	24,70,000	6,07,274	37,60,183
31st March, 2022	37,60,183	19,00,000	3,80,000	22,80,000	4,06,100	18,86,283
31st March, 2023	18,86,283	19,00,000	1,90,000	20,90,000	2,03,717*	

* Difference of ₹ 2 (2,03,719 – 2,03,717) is due to approximation

(i) On 1st April, 2018

Particulars		Dr. (₹)	Cr. (₹)
Bank A/c	Dr.	93,19,088	

To Loan from bank A/c (Being loan recorded at its fair value less transaction costs on the initial recognition date)		93,19,088

(ii) On 31st March, 2019

Particulars		Dr. (₹)	Cr. (₹)
Loan from bank A/c	Dr.	18,43,538	
Interest expense	Dr.	10,06,462	
To Bank A/c			28,50,000
(Being first instalment of loan and payment of interest accounted for as an adjustment to the amortised cost of loan)			

(iii) On 31st March, 2020– Before KUPA Ltd. approached the bank

Particulars		Dr. (₹)	Cr. (₹)
Interest expense	Dr.	8,07,359	
To Loan from bank A/c To Bank A/c			47,359 7,60,000
(Being loan payment of interest recorded by the Company before it approached the Bank for deferment of principal)			

Reason for treating the modification as a fresh loan:

Upon receiving the new terms of the loan, KUPA Ltd., re-computed the carrying value of the loan by discounting the new cash flows with the original effective interest rate and comparing the same with the current carrying value of the loan. As per requirements of Ind AS 109, any change of more than 10% shall be considered a substantial modification, resulting in fresh accounting for the new loan.

The following table shows the present value (PV) of new contractual cash flows and percentage of variation:

Date	Cash flows (principal)	Interest outflow @ 15%	Total cash outflow	Discounting factor @ 10.80%	PV of cash flows
31st March, 2020	(76,00,000)				
31st March, 2021	9,50,000	11,40,000	20,90,000	0.903	18,87,270
31st March, 2022	9,50,000	9,97,500	19,47,500	0.815	15,87,213
31st March, 2023	9,50,000	8,55,000	18,05,000	0.735	13,26,675
31st March, 2024	9,50,000	7,12,500	16,62,500	0.664	11,03,900
31st March, 2025	9,50,000	5,70,000	15,20,000	0.599	9,10,480
31st March, 2026	9,50,000	4,27,500	13,77,500	0.540	7,43,850
31st March, 2027	9,50,000	2,85,000	12,35,000	0.488	6,02,680
31st March, 2028	9,50,000	1,42,500	10,92,500	0.440	4,80,700
PV of new contractual cash flows discounted @ 10.80%					86,42,768
Carrying amount of loan (93,19,088 - 18,43,538 + 47,359)					(75,22,909)
Difference					11,19,859

Percentage of carrying amount	14.89%

Decision Making:

Considering a more than 10% change in PV of cash flows compared to the carrying value of the loan, the existing loan shall be considered to have been extinguished and the new loan shall be accounted for as a separate financial liability.

The accounting entries for the same are included below:

On 31st March, 2020 – Accounting for extinguishment

Particulars		Dr. (₹)	Cr. (₹)
Loan from bank (old) A/c	Dr.	75,22,909	
Finance cost	Dr.	77,091	
To Loan from bank (new) A/c			76,00,000
(Being new loan accounted for at its principal amount in absence of any transaction costs directly related to such loan and corresponding derecognition of existing loan)			

(iv) On 31st March, 2021

Particulars		Dr. (₹)	Cr. (₹)
Loan from bank A/c	Dr.	9,50,000	
Interest expense	Dr.	11,40,000	
To Bank A/c			20,90,000
(Being first instalment of the new loan and payment of interest accounted for as an adjustment to the amortised cost of loan)			

Q81: ABC Ltd. issues 4% 1,00,000 OCPS at a face value of ₹ 100 per share on 1st April, 20X1 and these are redeemable after 5 years, ie, on 31st March, 20X6. Dividend is non-cumulative. Each preference shares entitles the holders to 10 equity shares and the preference shares are optionally convertible by the holder at any time until maturity.

How will the preference shares be classified at initial recognition assuming that a comparable instrument carries a market interest rate of 7%? Provide journal entries for year 1. Will this classification be changed subsequently in case there is likelihood that OCPS will be encashed at the end of the maturity period? **[RTP May 2022; MTP May 2025]**

Ans: The OCPS is redeemable at the end of the 5th year. Hence, the preference share contains a liability component. Further the dividend payable on the preference shares is non-cumulative. The holder may also be able to convert the preference shares at his option any time until maturity.

Paragraph AG 37 of Ind AS 32, Financial Instruments: Presentation states that non- cumulative dividends paid at the discretion of the issuer entity is part of equity element.

Paragraph 29 of Ind AS 32, Financial Instruments: Presentation, requires separate recognition of components of a financial instrument that (a) creates a financial liability of the entity; and (b) grants an option to the holder of the instrument to convert it into fixed number of equity instruments of the entity.

From the above paragraphs it is clear that OCPS issued by ABC Ltd. has a financial liability component as well as an equity component, making it a compound financial instrument.

As per paragraph 32, in case of compound financial instruments, the issuer first determines the carrying amount of the financial liability component by measuring the fair value of a similar liability that does not have an associated equity component. The carrying amount of the equity represented by (a) non-cumulative dividend feature and (b) option to convert the preference shares for fixed number of pre-determined ordinary shares is then determined by deducting the fair value of the financial liability component from the fair value of the compound financial instrument as a whole.

Measurement and recognition (Calculations have been done at full scale):

At 7% market rate of interest, the fair value of the financial liability component of the OCPS is ₹ 71,29,862 [100,000 OCPS x ₹ 100 x (1/ (1+7%))5]

The fair value of the equity component is (residual value) ₹ 28,70,138 [₹ 1,00,00,000 - ₹ 71,29,862]

Journal Entries

1st April, 20X1	**On Initial recognition**			
	Bank	Dr.	1,00,00,000	
	To OCPS (Financial liability)			71,29,862
	To OCPS (Equity)			28,70,138
	(Being OCPS issued and recognised)			
31st March, 20X2	**Interest expense – unwinding of discount**			
	Interest expense@7%(Refer W.N.)	Dr.	4,99,090	
	To OCPS (Financial liability)			4,99,090
	(Being interest recorded as per EIR)			
	Interest entry will be passed every year till conversion option is not exercised			
	Whenever the option is exercised by the holder to convert to equity shares			
	OCPS (Financial liability)	Dr.	Balance on date of exercise of the option	
	To OCPS (Equity)			

As per paragraph 30, in case of a convertible financial instrument, the classification of the liability and equity components is not revised as a result of change in the likelihood that a conversion option will be exercised.

In other words, the amount attributable to equity component on initial recognition shall remain in equity and will not be reclassified even if the OCPS are ultimately redeemed in cash by the issuer.

31st March, 20X6	**If redeemed in cash on maturity** OCPS (financial liability) (Refer W.N.) Dr. To Bank (Being OCPS redeemed on maturity)	1,00,00,000	 1,00,00,000

Working Note:

Calculation of the amortised cost of the financial liability (at full scale):

Year	Opening Balance (₹)	Interest @ 7%	Repayment	Closing Balance (₹)
1	71,29,862	4,99,090	-	76,28,952
2	76,28,952	5,34,027		81,62,979
3	81,62,979	5,71,409		87,34,388
4	87,34,388	6,11,407		93,45,795
5	93,45,795	6,54,206	10,000,000	-

Q82: In an arm's length transaction, Entity X buys 10,000 convertible preference shares in Company Z for cash payments of ₹ 40,000, with ₹ 25,000 payable immediately and ₹ 15,000 payable in two years. The market rate of annual interest for a two-year loan to the entity would be 6%.

Explain the accounting treatment for the said transaction. **[RTP May 2023]**

Ans: Since payment of ₹ 15,000 is deferred for two years, the fair value of the consideration given for the shares is equal to ₹ 25,000 plus the present value of ₹ 15,000. The present value of ₹ 15,000 deferred payment is ₹ 13,350 (₹ 15,000 ÷ 1.062).

Entity X will initially measure the shares purchased at ₹ 38,350 (i.e., ₹ 25,000 + ₹ 13,350).

Since this transaction took place at an arm's length, this is considered to be fair value for initial recognition in the absence of evidence to the contrary.

The difference between the ₹ 40,000 cash paid out and the ₹ 38,350, i.e. ₹ 1,650, will be recognised as interest expense in profit or loss over the two year period of deferred payment.

Q83. On 1st April, 20X1, a bank provides an entity with a four-year loan of ₹ 5,000 on normal market terms, including charging interest at a fixed rate of 8% per year. Interest is payable at the end of each year. The figure of 8% is the market rate for similar four - year fixed-interest loans with interest paid annually in arrears. Transaction cost of ₹ 100 is incurred on originating the loan. Effective interest rate in this case is 8.612%.

In 20X1-20X2, the entity experienced financial difficulties. On 31st March, 20X2, the bank agreed to modify the terms of the loan. Under the new terms, the interest payments in 20X2-20X3 to 20X4-20X5 will be reduced from 8% to 5%. The entity paid the bank a fee of ₹ 50 for paperwork relating to the modification.

Analyse whether the modification of the loan terms constitutes an extinguishment of the original financial liability or not. **[RTP Nov 2023; MTP Jan 2026]**

Ans. Since the interest was initially set at the market rate, on 1st April, 20X1 the entity on initial recognition will measure the loan at the transaction price, less transaction costs i.e. at ₹ 4,900.

The following is the original amortised cost calculation at 1st April, 20X1:

Time	Carrying amount at 1st April	Effective Interest @ 8.612%	Cash outflow	Carrying amount at 31st March
	(a)	(b=ax8.612%)	(c=5000x8%)	(d = a + b - c)
20X1-20X2	4,900.00	421.99	(400.00)	4,921.99
20X2-20X3	4,921.99	423.88	(400.00)	4,945.87
20X3-20X4	4,945.87	425.94	(400.00)	4,971.81
20X4-20X5	4,971.81	428.19	(5,400.00)	–

At 31st March, 20X2:

1. The present value of the remaining cash flows of the original financial liability is ₹ 4,921.99 discounted at the original effective interest rate of 8.612%.

2. The present value of the cash flows under the new terms discounted using the original effective interest rate is ₹ 4,537.25 (Refer W.N.). Including the ₹ 50 fee, the present value of the total cash flows is ₹ 4,587.25.

3. The difference between ₹ 4,921.99 and ₹ 4,587.25 is ₹ 334.74 which is only 6.8% (₹ 334.74 ÷ ₹ 4,921.99) of the present value of the remaining cash flows of the original financial liability.

The entity applies its judgement to decide whether the terms of the instruments exchanged are substantially different. Since the difference of the discounted present value of the cash flows under the new terms, including any fees paid net of any fees received and discounted using the original effective interest rate, is less than 10% of the present value of the remaining cash flows of the original financial liability, this modification should not be considered a substantial modification of the terms of the existing loan. Therefore, the modification would not be accounted for as an extinguishment of the original financial liability.

Working Note:

The calculation of the present value of the cash flows under the new terms discounted using the original effective interest rate is as follows:

Time	Cash outflow	Discounting factor @ 8.612%	Present value at 31st March
31st March, 20X3	250.00	0.921	230.25

31st March, 20X4	250.00	0.848	212.00
31st March, 20X5	5,250.00	0.780	4,095.00
Total present value			4,537.25

Q84: Autumn Limited has a policy of providing subsidized loans to its employees for their personal purposes. Mrs. Jama Bai, a senior HR manager in the Company, took a loan of ₹ 12.00 lakhs on the following terms:

- Interest rate 4% per annum
- Loan disbursement date: 1st April, 2019
- The principal amount of the loan shall be recovered in 4 equal annual installments commencing from 31st March, 2020
- The accumulated interest computed on reducing balance at simple interest is collected in 3 equal annual installments after collection of the principal amount
- Mrs. Jama Bai must remain in service till the principal and interest are paid
- The market rate of a comparable loan to Mrs. Jama Bai is 9% per annum
- Under the assumption that no probable future economic benefits except the return of loan has been guaranteed by the employee, you are required to:

(i) Provide the journal entries at the time of initial recognition of loan on 1st April, 2019 and as at 31st March, 2020; and

(ii) Prepare ledger account of 'Loan to Mrs. Jama Bai' from the inception of the loan till its final payment.

[Exam May 23 (14 Marks); MTP May 2024]

Ans: (i) **Journal Entry**

Date	Particulars	Dr.	Cr.
		₹	₹
1/4/2019	Loan to Mrs. Jama Bai A/c Dr. Pre-paid employee cost A/c Dr. To Bank A/c (Being loan to employee recorded at fair value)	10,43,638 1,56,362	 12,00,000
31/3/2020	Loan to Mrs. Jama Bai A/c Dr. To Finance Income A/c (Being finance income @ 9% recorded in the books)	93,927	93,927

31/3/2020	Bank A/c Dr. To Loan to Mrs. Jama Bai A/c (Being installment received at the end of the year)	3,00,000	3,00,000

(ii) In the books of Autumn Ltd. Loan to Mrs. Jama Bai A/c

Date	Particulars	Amount (₹)	Date	Particulars	Amount (₹)
1.4.2019	To Bank A/c	10,43,638	31.3.2020	By Bank A/c	3,00,000
31.3.2020	To Finance income (W.N.3)	93,927	31.3.2020	By Balance c/d	8,37,565
		11,37,565			11,37,565
1.4.2020	To Balance b/d	8,37,565	31.3.2021	By Bank A/c	3,00,000
31.3.2021	To Finance income (W.N.3)	75,381	31.3.2021	By Balance c/d	6,12,946
		9,12,946			9,12,946
1.4.2021	To Balance b/d	6,12,946	31.3.2022	By Bank A/c	3,00,000
31.3.2022	To Finance income (W.N.3)	55,165	31.3.2022	By Balance c/d	3,68,111
		6,68,111			6,68,111
1.4.2022	To Balance b/d	3,68,111	31.3.2023	By Bank A/c	3,00,000
31.3.2023	To Finance income (W.N.3)	33,130	31.3.2023	By Balance c/d	1,01,241
		4,01,241			4,01,241
1.4.2023	To Balance b/d	1,01,241	31.3.2024	By Bank A/c	40,000
31.3.2024	To Finance income (W.N.3)	9,112	31.3.2024	By Balance c/d	70,353
		1,10,353			1,10,353
1.4.2024	To Balance b/d	70,353	31.3.2025	By Bank A/c	40,000
31.3.2025	To Finance income (W.N.3)	6,332	31.3.2025	By Balance c/d	36,685
		76,685			76,685
1.4.2025	To Balance b/d	36,685	31.3.2026	By Bank A/c	40,000
31.3.2026	To Finance income (W.N.3)	3,315*			

		40,000			40,000

***Difference of ₹ 13 (₹ 3,315 – ₹ 3,302) is due to approximation.**

Working Notes:

i) Calculation of initial recognition amount of loan to employee

Year	Estimated Cash Flows	PV Factor @9%	Present Value
	₹		₹
31/3/2020	3,00,000	0.9174	2,75,220
31/3/2021	3,00,000	0.8417	2,52,510
31/3/2022	3,00,000	0.7722	2,31,660
31/3/2023	3,00,000	0.7084	2,12,520
31/3/2024	40,000 (W.N.2)	0.6499	25,996
31/3/2025	40,000 (W.N.2)	0.5963	23,852
31/3/2026	40,000 (W.N.2)	0.5470	21,880
Fair Value of Loan			10,43,638

ii) Computation of Interest to be paid

Year	Opening outstanding balance a	Cash Flows b	Principal outstanding at year end c	Interest @ 4% on a d	Cumulative Interest e
		₹	₹	₹	₹
31/3/2020	12,00,000	3,00,000	9,00,000	48,000	48,000
31/3/2021	9,00,000	3,00,000	6,00,000	36,000	84,000
31/3/2022	6,00,000	3,00,000	3,00,000	24,000	1,08,000
31/3/2023	3,00,000	3,00,000	Nil	12,000	1,20,000
31/3/2024	1,20,000	40,000 (1,20,000/3)			
31/3/2025		40,000 (1,20,000/3)			
31/3/2026		40,000 (1,20,000/3)			

iii) Computation of finance cost as per amortization table

Year	Opening Balance (1)	Interest @ 9% (2)	Repayment (3)	Closing Balance (1+2-3)
	₹	₹	₹	₹
1/4/2019				10,43,638
31/3/2020	10,43,638	93,927	3,00,000	8,37,565
31/3/2021	8,37,565	75,381	3,00,000	6,12,946
31/3/2022	6,12,946	55,165	3,00,000	3,68,111
31/3/2023	3,68,111	33,130	3,00,000	1,01,241
31/3/2024	1,01,241	9,112	40,000	70,353
31/3/2025	70,353	6,332	40,000	36,685
31/3/2026	36,685	3,315*	40,000	Nil

*Difference of ₹ 13 (₹ 3,315 – ₹ 3,302) is due to approximation.

Q85: Weak Limited, which is a fully owned subsidiary company of Strong Limited approached Strong Limited for an interest free loan for mitigation of its financial difficulties. Strong Limited provided the loan to Weak Limited on the following terms & conditions:

Nature of loan	Interest Free
Amount of loan	₹ 60,00,000
Date of disbursement of loan	1st April, 2021
Loan period	3 years
Loan repayable by Weak Ltd.	On 31st March, 2024
Market rate of interest for similar loan	8% (both for holding and subsidiary) per annum
P.V. factor of ₹ 1 at the end of 3rd year at 8% per annum is	0.7938

Assuming that there are no transaction costs, you are required to pass necessary accounting entries in the books of Weak Limited for all the three years. **[Exam May 23 (15 Marks)]**

Ans: Accounting in the books of Weak Ltd (Subsidiary)

Date	Particulars	Amount	Amount
	On the date of loan		
1.4.2021	Bank A/c Dr.	60,00,000	
	To Loan from Strong Ltd. (Payable)		47,62,800
	To Equity (Deemed capital contribution from ABC Ltd.)		12,37,200
	(Being the loan taken from Strong Ltd. recognised at fair value)		

	At the end of Year 1		
31.3.2022	Interest expense (Finance cost) Dr.	3,81,024	
	To Loan from Strong Ltd. (Payable)		3,81,024
	(Being interest expense recognised)		
	At the end of Year 2		
31.3.2023	Interest expense (Finance cost) Dr.	4,11,506	
	To Loan from Strong Ltd. (Payable)		4,11,506
	(Being interest expense recognised)		
	At the end of Year 3		
31.3.2024	Interest expense (Finance cost) Dr.	4,44,670*	
	To Loan from Strong Ltd. (Payable)		4,44,670
	(Being interest expense recognised)		
	On repayment of loan		
31.3.2024	Loan from Strong Ltd. (Payable) Dr.	60,00,000	
	To Bank A/c		60,00,000
	(Being loan repaid by Weak Ltd.)		

*Difference is due to approximation.

Working Notes:

1) Present Value of Loan = ₹ 60,00,000 x 0.7938 = ₹ 47,62,800

2) Amortisation table for computation of interest:

Year end	Opening balance (1)	Interest @ 8% (2)	Repayment (3)	Closing balance (1) + (2) - (3)
1	47,62,800.00	3,81,024.00	-	51,43,824.00
2	51,43,824.00	4,11,506.00	-	55,55,330.00
3	55,55,330.00	4,44,670.00*	60,00,000.00	-

*Difference is due to approximation.

Q86: Ore Exploration Ltd. is engaged in the manufacturing of drilling and mining equipment for over last 25 years. The management of the company is planning to expand the manufacturing activities for which funds are needed. On 1st April, 2019, to meet out the financial requirement Ore Exploration Ltd. issued 50,000, Compulsory Convertible Cumulative Preference Shares (CCCPS) of ₹ 100 each. These preference shares carry a coupon rate of 12% p.a. and is payable every year. The Company has substantial profits for payment of preference dividend. Under the terms of instrument, every two preference shares are convertible into 1 equity share of ₹ 100 each at the end of 4th year. The prevailing annual market interest rate for a similar debt without conversion option is 15% per annum. The transaction cost of completing the issue process of the instrument is 3% of the proceeds. The effective interest rate is 16.60% per annum.

You are required to:

a) Compute the liability and equity component;

b) Provide the 'liability' ledger account for various years at amortized cost using the effective interest rate;

c) Pass necessary accounting entries for the whole period. **[Exam Nov 23 (14 Marks)]**

Ans: This is a compound financial instrument with two components – liability representing present value of future cash outflows (i.e. dividend) and balance represents equity component.

(i) Computation of Liability & Equity Component

Date	Particulars	Cash Flow	Discount Factor @ 15%	Net present Value
1st April, 2019		0	1	0.00
31st March, 2020	Dividend	6,00,000	0.8696	5,21,760
31st March, 2021	Dividend	6,00,000	0.7561	4,53,660
31st March, 2022	Dividend	6,00,000	0.6575	3,94,500
31st March, 2023	Dividend	6,00,000	0.5718	3,43,080
Total LiabilityComponent				17,13,000
Total Proceeds				50,00,000
Total Equity Component (Bal fig)				32,87,000

Allocation of transaction costs

Particulars	Amount	Allocation of3% transaction cost	Net Amount
Liability Component	17,13,000	51,390	16,61,610
Equity Component	32,87,000	98,610	31,88,390
Total Proceeds	50,00,000	1,50,000	48,50,000

Accounting for liability at amortised cost:

- Initial accounting = Present value of cash outflows less transaction costs
- Subsequent accounting = At amortised cost, ie, initial fair value adjusted for interest and repayments of the liability.

	Opening Financial Liability A	Interest @ 16.60% B	Cash Flow C	Closing Financial Liability A+B-C

1st April, 2019	16,61,610	-	-	16,61,610
31st March, 2020	16,61,610	2,75,827	6,00,000	13,37,437
31st March, 2021	13,37,437	2,22,015	6,00,000	9,59,452
31st March, 2022	9,59,452	1,59,269	6,00,000	5,18,721
31st March, 2023	5,18,721	81,279*	6,00,000	-

* Difference of ₹ 4,829 (i.e. 86,108 – 81,279) is due to approximation.

(ii) Preference Shares (Liability) Account

Date	Particulars	Amount	Date	Particulars	Amount
31.3.2020	To Bank	6,00,000.00	1.4.2019	By Bank	16,61,610.00
31.3.2020	To Balance c/d	13,37,437.00	31.3.2020	By Finance Cost	2,75,827.00
		19,37,437.00			19,37,437.00
31.3.2021	To Bank	6,00,000.00	1.4.2020	By Balance b/d	13,37,437.00
31.3.2021	To Balance c/d	9,59,452.00	31.3.2021	By Finance Cost	2,22,015.00
		15,59,452.00			15,59,452.00
31.3.2022	To Bank	6,00,000.00	1.4.2021	By Balance b/d	9,59,452.00
31.3.2022	To Balance c/d	5,18,721.00	31.3.2022	By Finance Cost	1,59,269.00
		11,18,721.00			11,18,721.00
31.3.2023	To Bank	6,00,000.00	1.4.2022	By Balance b/d	5,18,721.00
			31.3.2023	By Finance Cost	81,279.00
		6,00,000.00			6,00,000.00

(iii) Journal Entries to be recorded for entire term of arrangement

Date	Particulars	Debit	Credit
1.4.2019	Bank A/c Dr.	48,50,000	
	To Preference Shares (Liability) A/c		16,61,610
	To Equity Component of Preference shares A/c		31,88,390
	(Being compulsorily convertible preference shares issued. The same are divided into equity component and liability component as per the calculation)		
31.3.2020	Preference Shares (Liability) A/c Dr.	6,00,000	
	To Bank A/c		6,00,000
	(Being dividend at the coupon rate of 12% paid to the shareholders)		
31.3.2020	Finance cost A/c Dr.	2,75,827	
	To Preference Shares (Liability) A/c		2,75,827
	(Being interest as per EIR recorded)		
31.3.2021	Preference Shares (Liability) A/c Dr.	6,00,000	
	To Bank A/c		6,00,000

	(Being dividend at the coupon rate of 12% paid to the shareholders)		
31.3.2021	Finance cost A/c Dr.	2,22,015	
	Preference Shares (Liability) A/c		2,22,015
	(Being interest as per EIR recorded)		
31.3.2022	Preference Shares (Liability) A/c Dr.	6,00,000	
	To Bank A/c		6,00,000
	(Being dividend at the coupon rate of 12% paid to the shareholders)		
31.3.2022	Finance cost A/c Dr.	1,59,269	
	Preference Shares (Liability) A/c		1,59,269
	(Being interest as per EIR recorded)		
31.3.2023	Preference Shares (Liability) A/c Dr.	6,00,000	
	To Bank A/c		6,00,000
	(Being dividend at the coupon rate of 12% paid to the shareholders)		
31.3.2023	Finance cost A/c Dr.	81,279	
	To Preference Shares (Liability) A/c		81,279
	(Being interest as per EIR recorded)		
31.3.2023	Equity Component of Preference shares A/c Dr.	31,88,390	
	To Equity Share Capital A/c		25,00,000
	To Securities Premium A/c		6,88,390
	(Being Preference shares converted in equity shares and remaining equity component is recognised as securities premium)		

Q87: Poor Limited borrowed 120 Lakhs from a Scheduled Bank. The terms of loan are as under:

- Rate of Interest @ 10% per annum, payable yearly
- Tenure of Loan 12 Years.
- Principal to be paid at the end of tenure i.e. 12th Year.

Poor Limited defaulted in payment of Interest in year 5, 6, 7 and 8. A loan reschedule agreement took place at the end of 9th year with the Bank. As per the agreement, Poor Limited is required to pay ₹ 220 Lakhs at the end of 10th year. The default continued till the end of 10th year.

You are required to calculate as per relevant Ind AS:

- Book Value of the Loan at the end of the 10th Year.
- Additional amount to be paid to the Bank on Account of Rescheduling.

(assume interest is compounded in the case of default). **[Exam Nov 23 (5 Marks)]**

Ans: (i) Computation of book value of the loan at the end of 10th year

= ₹ 1,20,00,000 x 1.10 x 1.10 x 1.10 x 1.10 x 1.10 x 1.10

= ₹ 2,12,58,732 (i.e. adding interest for 5th to 10th year)

(ii) Computation of additional amount to be paid to bank on rescheduling Rescheduled amount to be paid at the end of the 10th year = ₹ 2,20,00,000 Additional amount to be paid on rescheduling = ₹ 2,20,00,000 - ₹ 2,12,58,732 = ₹ 7,41,268

Q88: The company has made sales of ₹ 60,00,000 to a customer SS LLP on 31st December 20X2. The normal credit is for one month. However, sometimes, it goes upto 2 months. The company expects to receive the payment by 28th February 20X3. However, no payment has been received till 31st March 20X3. On 15th April 20X3, the sales department of the company became aware that the customer is passing through financial crisis and has major cash flow problems.

The company has agreed to allow the customer to settle the debt by 31st March 20X4, by which time the customer is confident that the cashflow problem will be resolved.

The company expects that an annual interest of 9% (i.e. effective interest rate) can be received against any money lent out, yet it allowed the customer an interest-free payment period.

Determine the amount to be shown as 'trade receivable' from SS LLP in the books of the company as on 31st March 20X3. **[RTP May 2024; MTP May 25]**

Ans: Ind AS 10 'Events after the Reporting Date', classify an event as adjusting if it provides additional evidence of conditions existing at the reporting date. In this case the additional information relates to evidence of impairment of a financial asset, since the customer had financial difficulties prior to 31st March 20X3.

Ind AS 109 'Financial Instruments' requires financial assets to be reviewed at each reporting date for evidence of impairment. Such evidence exists here because although the customer is expected to pay the amount due the payment date has been deferred. As per para B5.5.33 of Ind AS 109, for a financial asset that is credit-impaired at the reporting date, but that is not a purchased or originated credit- impaired financial asset, an entity shall measure the expected credit losses as the difference between the asset's gross carrying amount and the present value of estimated future cash flows discounted at the financial asset's effective interest rate. Any adjustment is recognized in the profit or loss as an impairment gain or loss. Further, para B5.5.44 of Ind AS 109 provides that expected credit losses shall be discounted to the reporting date, not to the expected default or some other date, using the effective interest rate determined at initial recognition or an approximation thereof.

In such circumstances, Ind AS 109 requires that the financial asset be re-measured at the present value of the expected future receipt, discounted (in the case of a trade receivable) using effective interest rate. Therefore, in the financial statements for the year ended 31st March 20X3, asset should be measured at ₹ 55,04,587 (₹ 60,00,000 / 1.09) and an impairment loss of ₹ 4,95,413 (₹ 60,00,000 – ₹ 4,95,413) recognised in profit and loss.

In the year ended 31st March 20X4, interest income of ₹ 4,95,413 (₹ 55,04,587 x 9%) should be recognised in the profit and loss.

Q89. XYZ Ltd. is a company incorporated in India. It provides Rs. 10,00,000 interest free loan to its wholly owned Indian subsidiary, ABC Ltd. There are no transaction costs.

State how the loan be accounted for, in the separate financial statements of XYZ Ltd., individual financial statements of ABC Ltd. and consolidated financial statements of the group when the loan is repayable after 3 years. The current market rate of interest for similarloanis10%p.a.for both holding and subsidiary. **[MTP Nov 2024]**

Ans: Ind AS 109 requires that financial assets and liabilities are recognized on initial recognition at its fair value, as adjusted for the transaction cost. In accordance with Ind AS 113 Fair Value Measurement, the fair value of a financial liability with a demand feature (e.g., a demand deposit) is not less than the amount payable on demand, discounted from the first date that the amount could be required to be paid.

Both parent and subsidiary recognize financial asset and liability, respectively, at fair value on initial recognition. The difference between the loan amount and its fair value is treated as an equity contribution to the subsidiary. This represents a further investment by the parent in the subsidiary.

Accounting in the books of XYZ Ltd (Parent)

Particulars		Amount	Amount
On the date of loan			
Loan to ABC Ltd(Subsidiary)	Dr.	7,51,315	
Deemed Investment (Capital Contribution) in ABC Ltd.	Dr.	2,48,685	
To Bank			10,00,000
(Being the loan is given to ABC Ltd and recognised at fair value)			
Accrual of Interest income			
Loan to ABC Ltd	Dr.	75,131	
To Interest income			75,131
(Being interest income accrued)–Year1			
Loan to ABC Ltd	Dr.	82,645	
To Interest income			82,645
(Being interest income accrued)–Year-2			
Loan to ABC Ltd	Dr.	90,909	
To Interest income			90,909
(Being interest income accrued)–Year-3			
On repayment of loan			
Bank	Dr.	10,00,000	
To Loan to ABC Ltd (Subsidiary)			10,00,000

Q90: On 1st April, 20X1, ABC Ltd. issues a 10- year bond with a par value of ₹ 15,00,000 and an annual fixed coupon rate of 8%, which is consistent with market rates for bonds with similar characteristics. ABC Ltd. uses Secured Overnight Financing Rate (SOFR) as its benchmark interest rate. At the date of inception of the bond, SOFR is 5%. At the end of the first year:

- SOFR has decreased to 4.75%; and
- The fair value of bond is ₹ 15,38,110. This value is consistent with an interest rate of 7.6%.
- The remaining cash flows on bond are ₹ 1,20,000 per year for nine years and ₹ 15,00,000 at the end of nineth year. These cash flows discounted at 7.6% equals ₹ 15,38,110.

ABC Ltd. assumes a flat yield curve, that all changes in interest rates result from a parallel shift in the yield curve, and that the changes in SOFR are the only relevant changes in market conditions.

Following discounting factors may be considered

Discount rate @7.75%	Present value of ₹ 1 payable
At the end of year 9	51.1 paise
Cumulatively for the years 1–9	6.312
At the end of year 10	47.4 paise
Cumulatively for the years 1–10	6.786

Required

What is the amount transferred to the OCI at the end of Year 1 ? **[RTP May 2025]**

Ans: The amount of change in fair value of the bond that is not attributable to changes in market conditions giving rise to market risk is estimated as follows:

Step (a): The bond's IRR at the start of the period is 8%.

Step (b): Because the benchmark interest rate (SOFR) is 5%, the instrument - specific component of the IRR is 3%.

Step (c): The contractual cash flows of the instrument at the end of the period are:

Interest of ₹ 1,20,000 [₹ 15,00,000 x 8%] per year for the next 9 years.

Principal repayment of ₹ 15,00,000 at the end of 9th year.

The present value of these cash flows is calculated using a discount rate of 7.75%. This rate is arrived at as below:

4.75% end of period SOFR, plus 3% instrument - specific component calculated as at the start of the period

This gives a notional present value of ₹ 15,23,670 = [(15,00,000 x 0.511) + (1,20,000 x 6.312)].

Step (d): The fair value of the liability at the end of the period is ₹ 15,38,110. Hence, ABC Ltd. should present ₹ 14,440 [₹ 15,38,110 – ₹ 15,23,670] in the OCI.

Q91: Zx issues a fixed-rate loan for ₹ 500,000 and incurs issue costs of ₹ 20,000, resulting in an initial carrying value of ₹ 480,000. The loan carries an interest rate of 8% per annum, and it is repayable at par at the end of year 10. However, under the contract, Zx can call the loan at any time after year 4 by paying a fixed premium of ₹ 30,000. The fair value of the option is ₹ 10,000 at inception. The effective interest rate amounts to 8.30213%.

Required:

(i) How is the embedded issuer-only call feature accounted for by Zx, the issuer initially?

(ii) Explain the accounting of the loan when

a) In years 1 and 2, there is no change in interest rate since inception for an instrument of similar maturity and credit rating. The option's fair value (time value) at the end of year 2 is ₹ 6,000.

b) At the end of year 3, interest rates have fallen, and the option's fair value increases to ₹ 9,000

c) At the end of year 4, interest rates have fallen further. The option's fair value increases to ₹ 20,000, and the entity decides to repay the loan at the end of year 4.

[RTP SEP 2025]

Ans: It is first necessary to determine whether the call option is closely related to the host debt instrument. Because the fixed premium is required to be paid whenever the call option is exercised after year 4, it is not known if it will be equal to the present value of any interest lost during the remaining term after exercise of the option. Additionally, the call option's exercise price is ₹ 5,30,000 (inclusive of the premium) therefore, it is unlikely to be approximately equal to the debt instrument's amortised cost in year 4, or at any subsequent year. Consequently, the call option shall be separated from the host debt contract and accounted for separately. This assumes that the expected life of the instrument is the full 10-year term. Even if the expected life is assumed to be four years, the 10-year loan with a call option after four years is economically same as a four-year loan with a six-year extension option. Because there is no concurrent adjustment to the interest rate after four years, the term extension option would not be closely related, and it would need to be accounted for separately. Thus, whichever way the loan and option are viewed, the embedded derivative needs to be separated. Even though the option is out of the money at inception, because the option's exercise price is greater than the debt instrument's carrying value, it has a time value. Since the value of a callable bond is equal to the value of a straight bond less the value of the option feature, the accounting entries at inception is:

		Dr (₹)	Cr. (₹)
Embedded option (derivative asset)	Dr.	10,000	
Cash	Dr.	4,80,000	

To Debt instrument (host)		4,90,000

Since the call option will be fair valued and accounted for separately, with fair value movements taken to profit or loss, it has no impact on the entity's estimate of future cash flows; accordingly, the amortisation period will be the debt host's period to original maturity. The amortisation schedule is shown below:

	Opening amortised cost ₹	Interest expense @ 8.30213% ₹	Cash payments ₹	Closing amortised cost ₹
Year 1	490,000	40,680	40,000	490,680
Year 2	490,680	40,737	40,000	491,417
Year 3	491,417	40,798	40,000	492,216
Year 4	492,216	40,864	40,000	493,080
Year 5	493,080	40,936	40,000	494,016
Year 6	494,016	41,014	40,000	495,030
Year 7	495,030	41,098	40,000	496,128
Year 8	496,128	41,189	40,000	497,317
Year 9	497,317	41,288	40,000	498,605
Year 10	498,605	41,395	540,000	-

The entity would recognize interest expense in profit or loss and the loan's amortised cost in the balance sheet each year, in accordance with the above amortisation schedule. In years 1 and 2, there is no change in interest rate since inception for an instrument of similar maturity and credit rating. The option's fair value (time value) at the end of year 2 is ₹ 6,000. The decrease in fair value of ₹ 4,000 since inception will be reported in profit or loss, and the option will be recorded at ₹ 6,000 at the end of year 2. At the end of year 3, interest rates have fallen, and the option's fair value increases to ₹ 9,000. The increase in value of ₹ 3,000 will be recorded in profit or loss, and the option will be recorded at its fair value of ₹ 9,000 at the end of year 3. At the end of year 4, interest rates have fallen further. The option's fair value increases to ₹ 20,000, and the entity decides to repay the loan at the end of year 4. The accounting entries, to reflect the change in the option's fair value and the loan's early repayment at the end of year 4, are as follows:

		Dr (₹)	Cr. (₹)
Embedded option	Dr.	11,000	
To Profit or loss			11,000
(Early repayment of loan)			
Debt instrument (host)	Dr.	4,93,080	
Loss on de- recognition of liability	Dr.	56,920	
To Embedded option (derivative asset)			20,000
To Cash			5,30,000

Q92: A Ltd. has issued Optionally Convertible Debentures (OCD) amounting to ₹300 crores to B Ltd. on following terms:

Tenor: 4 years

Coupon: Nil

IRR: 15% p.a.

During the tenor of OCDs, A Ltd. can call the OCD and redeem it with stated IRR. The market rate for similar debt without conversion features is 17% p.a.

B Ltd. can also ask for conversion at any time before maturity based on following formula:

No of equity shares = (Investment amount + applicable IRR) / (Face value of equity share; i.e. ₹ 10)

If redemption or conversion doesn't happen before maturity, then OCDs will be redeemed mandatorily at maturity in same manner as for conversion.

Required:

How is this instrument accounted for in the books of A Ltd. in the following two scenarios :

Scenario A – When B Ltd. opts for conversion before maturity at the end of year 1

Scenario B – When B Ltd. doesn't opt for conversion and OCDs are redeemed at maturity

[RTP JAN 2026]

Ans: OCD issued by A Ltd. is a compound financial instrument. The host instrument will be classified as liability, since there is contractual obligation to pay cash towards interest (i.e. guaranteed IRR of 15% p.a.) and principal repayment that issuer A Ltd. cannot avoid. The equity conversion option is accounted as equity

Particulars	Debit (₹ Cr.)	Credit (₹ Cr.)	Explanation
Bank	300		Cash received
To Equity component (balancing figure representing residual interest)		20	
To Debentures (liability discounted PV @ 17%)		280	
Narration: Initial recognition of compound financial instrument comprising debt (₹280 Cr.) and equity (₹20 Cr.).			
Particulars	**Debit (₹ Cr.)**	**Credit (₹ Cr.)**	**Explanation**
Interest on Debentures (P&L)	48		
To Debentures – Liability component		48	

Particulars	Debit (₹ Cr.)	Credit (₹ Cr.)	Explanation
Narration: Recognition of interest expense using the effective interest rate (EIR) method @ 17%.			Interest expense @17% (₹280 × 17%)

Scenario A – When B Ltd opts for conversion at end of year 1

Since conversion was allowed under the original terms of instrument, the entity should determine the amortised cost of liability component using the original IRR till the conversion date. It will derecognise the liability component and recognises it as equity.

There is no gain or loss on early conversion.

Date	Particulars		Amount (rounded off in crores)	
End of Year 1	Debentures [280 + 48]	Dr.	328	
	To Equity Share Capital			328
	(Conversion of OCD into equity shares of the Company)			

Scenario B – When B doesn't opt for conversion and OCDs are redeemed at maturity

Date	Particulars		Amount (rounded off in Crores)	
End of Year 1-4	Interest on debentures (cumulative interest for 4 years)	Dr.	245	
	To Debentures			245
	(Interest recognised in P&L @ 17%)			
End of Year 4	Debentures [280 + 245]	Dr.	525	
	To Bank			525
	(Being debentures redeemed)			

Working Note:

Computation of maturity value of OCD as per the formula stated by B Ltd

Year	Opening balance (In crores)	Interest @15% IRR (In crores)	Closing balance (In crores)
1	300	45	345
2	345	51.75	396.75
3	396.75	59.5125	456.2625
4	456.2625	68.439	524.7015 or 525
		224.7015 or 225	

Q93: Vidhi Bank agreed on 15th April, 20X1 to sell USD ($) 60,000 to Satvik Limited in the future date (i.e.) on 31st March, 20X2 for a rate equal to ₹ 82.40 per $. Vidhi Bank did not receive any amount upon entering into the agreement. Satvik Ltd. prepares its financial statements on quarterly basis.

Additional Information: Forward rates and Spot rates:

Forward rates as on	Forward rates (1 $ = ₹) (for 31st March, 20X2 maturity)	SPOT rates (1 $ = ₹)
15th April, 20X1	82.40	82.00
30th June, 20X1	82.10	82.40
30th Sept, 20X1	82.15	82.25
31st December, 20X1	82.50	82.20.
31st March, 20X2	82.00	82.05

Using the definition of derivative included in Ind AS 109 and following the principles of recognition and measurement as laid down in Ind AS 109, you are required to-

a) Analyse with reason whether the agreement to sell USD by Vidhi Bank contains a derivative.

b) Pass the journal entries in the books of Satvik Limited for each quarter ended for financial year 20X1-20X2 till the date of actual purchase of USD. **[MTP Jan 2026]**

Ans: On evaluation of the contract in question, on the basis of definition of derivative, contract for purchase of USD ($) 60,000 from Vidhi Bank contains a derivative.

The reason being - The value of the contract, purchase of USD at fixed price, changes in response to the change in foreign exchange rate;

a) the contract requires zero initial investment;

b) The contract is settled at a future date that is 31st March 20X2.

Journal entries in the books of Satvik Limited

Date	Particulars	₹	₹
15.4.20X1	No entry recognised since initial fair value of the forward contract is zero	Nil	Nil
30.6.20X1	Profit and loss account Dr. To Derivative financial liability account (Being mark to market loss on forward contract recorded)	18,000	18,000
30.9.20X1	Derivative financial liability account Dr. To Profit and loss account (Being partial reversal of mark to market loss on forward contract recorded)	3,000	3,000

31.12.20X1	Derivative financial liability account Dr. Derivative financial asset account Dr. To Profit and loss account (Being profit on mark to market of forward contract booked as derivative financial asset and reversal of derivative financial liability recorded)	15,000 6,000	 21,000
31.3.20X2	Cash (USD account) account Dr. Profit and loss account Dr. To Cash account (USD 60,000 x 82) To Derivative financial asset account (Being loss on settlement of forward contract recorded on actual purchase of USD)	49,23,000 3,000	 49,20,000 6,000

Working Notes:

Sr. No.	Date	Working
1.	30.6.20X1	(82.40 – 82.10) x 60,000 = 18,000
2.	30.9.20X1	(82.15 – 82.10) x 60,000 = 3,000
3.	31.12.20X1	(82.50 – 82.15) x 60,000 = 21,000
4.	31.3.20X2	Cash (USD a/c) 60,000 x 82.05 = 49,23,000