

Topic 1

Accounting for Financial Instruments

(AS 30, 31 & 32)

1. Meaning of Financial Instruments

Q 1. M/s TS Ltd. has entered into a contract by which it has the option to sell its specified asset to NB Ltd. for ₹ 100 lakhs after 3 years whereas the current market price is ₹ 150 lakhs. Company always settles account by delivery. What type of option is this? Is it a financial instrument? Explain with reference to the relevant accounting standard.

(November 2010 New Course: 4 Marks)

Q 2. Is gold bullion a financial instrument (like cash) or is it a commodity?

(Ind AS 39)

Tutorial Note

It is a commodity. Although bullion is highly liquid, there is no contractual right to receive cash or another financial asset inherent in bullion.

Q 3. BEE Ltd. has entered into a contract by which it has the option to sell its identified property, plant and equipment (PPE) to AXE Ltd. for ₹100 lakhs after 3 years whereas its current market price is ₹150 lakhs. Is the put option of BEE Ltd. a financial instrument? Explain.

(November 2011, 4 marks)

2. Hedge Accounting Fair Value Hedge through Forwards

Q 4. On 24 January, 2006 Chinnaswamy of Chennai sold goods to Watson of Washington, USA for an invoice price of \$40,000 when the spot market rate was ₹44.20 per U.S.\$. Payment was to be received after three months on 24th April, 2006 To mitigate the risk of loss from decline in the exchange rate on the date of receipt of payment, Chinnaswamy immediately acquired a forward contract to sell on 24th April, 2006 US\$ 40,000 @ ₹ 43.70. Chinnaswamy closed his books of account on 31st march, 2006 when the spot rate was ₹ 43.20 per US \$. On 24th

April, 2006 the date of receipt of money by Chinnaswamy, the spot rate was ₹42.70 per US\$.

Pass Journal entries in the books of Chinnaswamy to record the effect of all the above mentioned events.
(May 2006; Marks 8)

Comments

Accounting for Financial Instruments: The candidates exhibited poor knowledge on this topic. Except few, no candidate was able to give correct journal entries required in this part of the question.

Q 5. XYZ Ltd. needs \$ 3,00,000 on May 1, 2000 for repayment of loan installment and interest. As on December 1, 1999, it appears to the company that the dollar may be dearer as compared to the exchange rate prevailing on that date, \$ 1 = ₹ 43.50. Accordingly, XYZ Ltd. enter into a forward contract with a banker for \$ 3,00,000. Assume forward rate as on December 1, 1999 was \$ 1 = ₹ 44 as against the spot rate of ₹ 43.50. Assume the spot rate as on 1st May, 2000 is \$ 1 = ₹ 44.80. Journalize in the books of XYZ Ltd.

Q 6. On 1st February, 2008, an Indian Company sold goods to an American Company at an invoice price of US \$20,000 when the spot market rate was ₹48.10 to a U.S. dollar. Payment was to be made in three months time, namely, by 1st May, 2008.

To avoid the risk of foreign exchange fluctuations the Indian exporter acquired a forward contract to sell U.S. \$20,000 at ₹47.90 per U.S. dollar on 1st May, 2008.

The Indian company's accounting year ended on 31st March, 2008 and the spot rate on this date was ₹47.20 per U.S. dollar. The spot rate on 1st May, 2008, the date by which the money was due from the American buyer, was ₹50 per dollar.

Show what accounting entries will have to be made in the books of the Indian exporter at the relevant period of time.
(June - 2009; Marks 10)

Ans.:

(b) Journal Entries in the books of Indian Exporter

Date	Particulars	Dr. (₹)	Cr. (₹)
1st February, 2008			
	Sundry Debtors (American Company) A/c	Dr. 9,62,000	
	To Sales A/c		9,62,000
	(Being sales recorded at ₹ 9,62,000 [US\$ 20,000 × ₹48.10]) Forward (₹)		
	Contract Receivables A/c		
	(20,000 US \$ × ₹47.9)	Dr. 9,58,000	
	Deferred Discount A/c (20,000 US \$ × ₹ .20)	Dr. 4,000	
	To Forward (\$) Contract Payable A/c		
	(20,000 US \$ × ₹48.10)		9,62,000

Date	Particulars	Dr. (₹)	Cr. (₹)
	(Being forward exchange cover purchased and deferred discount amounting ₹4,000 recorded)		
31st March, 2008			
Profit and Loss A/c	Dr.	18,000	
To Sundry Debtors (American Company) A/c		18,000	
	(Being transaction loss recorded (20,000 US \$ × [₹48.10 less ₹ 47.2]) that occurred between the date of transaction and the date of closing of accounts)		
Forward (\$) Contract Payable A/c	Dr.	18,000	
To Profit and Loss A/c			18,000
	(Being exchange gain recorded (20,000 US \$ × [₹48.10 less ₹ 47.2]) as less rupees becoming payable to the exchange dealer on the basis of the spot rate at the end of the year)		
Discount A/c	Dr.	2,666	
To Deferred Discount A/c			2,666
	(Being proportionate discount [two-third of ₹4,000] charged as discount expenses)		
1st May, 2008			
Bank A/c (20,000 US\$ × ₹ 50)	Dr.	10,00,000	
To Sundry Debtors A/c (20,000 US \$ × ₹ 47.2)			9,44,000
To Profit and Loss A/c (20,000 US \$ × ₹ 2.8)			56,000
	(Being actual receipt of money from the buyer recorded)		
Forward (\$) Contract Payable (20,000 US \$ × ₹ 47.2)	Dr.	9,44,000	
Profit and Loss A/c (20,000 US \$ × ₹ 2.8)	Dr.	56,000	
To Bank A/c (20,000 US \$ × ₹ 50)			10,00,000
	(Being delivery of 20,000 Dollars against forward contract at spot rate on 1st May)		
Bank A/c	Dr.	9,58,000	
To Forward (₹) Contract Receivable A/c			9,58,000
	(Being forward contract settled)		
Discount A/c (4,000- 2,666)	Dr.	1,334	
To Deferred Discount A/c			1,334
	(Being balance amount of discount recognized)		

3. Hedge Accounting Fair Value Hedge through Swaps

P264 Q 7. B Ltd. took loan of ₹10,00,000 at floating Interest rate of 6%pa on 1-4-2010 Interest was payable half yearly. B Ltd. entered into Interest Rate Swaps for converting Floating rate Liability into 7% fixed rate.

Rates	Floating	Fixed
30/9/2010	6.25%	7%
31/3/2011	7.25%	7%

Value of IRS on 30-9-2010 was ₹10,000 Liability. Again it was ₹15,000 Asset on 31-3-2011

Journalise.

Q 8. On 1st April, 2006, A Ltd. borrowed ₹ 10 lakh at annual fixed interest rate of 7 % payable half-yearly. The life of the loan is 4 years with no pre-payment permitted. The company expected the interest rate to fall and on the same day, it entered into an interest rate swap arrangement, whereby the company would pay 6-month LIBOR and would receive annual fixed interest of 7% every half-year. The swap effectively converted the company's fixed rate obligation to floating rate obligation.

The follow value of swap and debt are available:

	Value of swap ₹ lakh	value of debt ₹ lakh
30th September 2006	+ 0.2	10.2
31st March 2007	- 0.1	9.9

Six-month LIBOR on April 1, 2006 was 6% and that on October 1, 2006 was 8% Show important accounting entries in respect of the swap arrangement

P271 Q 9. Aakshaya Ltd. has given 12.50% fixed rate loan to its subsidiary Shaya Ltd. Aakshaya Ltd. measures this loan at an amortised cost of ₹ 2,50,000.

Over the following months market interest rates increase and Aakshaya Ltd. earns interest income of ₹ 25,000 on the loan and ₹ 1,000 as net interest payments on the swap. The Fair value of the Loan Assets decreases by ₹ 5,000 while that of the interest rate swap increases by 5,000. You are informed that all conditions required for the Hedge Accounting are satisfied. You are required to pass Journal Entries, with suitable narrations, in the books of Aakshaya Ltd. to record the above transactions.

(May 2010-Old Course, 6 marks)

4. Securitizations

P273 Q 10. B Ltd has given 10% Loan to X ltd for ₹10,00,000. B Ltd securitised it for 9% Rate of Interest (Arcil). Term of loan is 5 Years

Journalise

R273 Q 11. B Ltd has advanced

10% Loan for 10,00,000

Term outstanding 3 Years

Rate of Interest used by Arcil 12%

B Ltd securitised only Interest strip.

Journalise

R279 Q 12. B Ltd has advanced

11% Loan 10,00,000

Term outstanding 3 Years

Discount Rate by Arcil 8%

Interest strip. was sold to Arcil

Journalise, Prepare Ledger of Loan, Interest strip and Principal strip.

R275 Q 13. B Ltd has advanced

15% Loan 10,00,000

Term outstanding 3 Year

Discount Rate 12%

B Ltd securitised 40% Interest strip and 30% Principal strip. B Ltd will perform function of collection and its service collection cost will be ₹5,000 P.a

Journalise:

R277 Q 14. B Ltd has advanced

13% Loan 10,00,000

Term outstanding 3 Year

Discount Rate 10%

Service Cost 1000 p.a

Interest strip on 80% Loan was securitised. Balance Interest strip of 50% was retained without service cost.

Interest strip 50% on 20% Loan with service cost was securitised. B Ltd received ₹10,000 more than fair value. 40% Principal strip was also securitized alongwith.

Journalise

R281 Q 15. A Ltd. has Loan of ₹10,00,000 on interest Rate of 10% p.a It securitized 40% of principal and 7% Interest strip on remaining principal(with Interest there on). Period of Loan is 3 Years. Discount rate used by Arcil is 15%. Prepare necessary account.

Q 16. A company has 12% Loan ₹7,00,000 whose remainder period is 3 years. Company securitized 30% principal with Interest there on and Interest strip of 7% with cost of recovery (₹ 500 p.a) ,was securitized. Interest strip of 5% was retained . Journalise Entry assuming rate of discount as per Arcil is 15% Year 3.

R283 **Q 17.** 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.

R284 **Q 18.** Parikshit Ltd. holds ₹1,00,000 of loans yielding 18 per cent interest per annum for their estimated lives of 9 years. The fair value of these loans, after considering the interest yield, is estimated at ₹1,10,000.

The company securities the principal component of the loan plus the right to receive interest at 14% to Susovana Corporation, a special purpose vehicle, for ₹1,00,000.

Out of the balance interest of 4 percent, it is stipulated that half of such balance interest, namely 2 per cent, will be due to Parikshit Ltd. as fees for continuing to service the loans. The fair value of the servicing asset so created is estimated at ₹3,500. The remaining half of the interest is due to Parikshit Ltd. as an interest strip receivable, the fair value of which is estimated at ₹6,500.

Give the accounting treatment of the above transactions in the form of journal entries in the books of originator.

(June-09, old 16 Marks)

R284 **Q 19.** A Ltd. lent ₹ 20,000 for 8 years at 10% interest payable annually. At the time, the fair value of the loan at effective annual interest rate of 10.2% was ₹17,670. The borrower had the option to pre-pay the loan. After 3 years, when amortised cost of the loan was ₹ 18,100, the company transferred its right to receive principal to the extent of 90% and interest to the extent of 9.5% in favour of B Ltd. The consideration for the transaction was ₹ 16,700. The other particulars of the transaction were as below:

- Fair value of the loan at the time of transaction at effective interest rate of 10% was ₹ 18,484. A Ltd. retained the excess spread of 0.5% principal transferred.
- A Ltd. retained the right to receive collections of principal to the extent of ₹2,000 plus interest thereon. Defaults if any, are deductible from the company's claim on the principal, subject to maximum ₹2,000.
- The estimated fair value of the excess spread of 0.5% is ₹ 38.
- Collections from pre-payments are to be allocated between A Ltd. and the transferee proportionately in the ratio of 1: 9.

Show Journal entry to record the transfer.

5. Impairment of Debtors/Advances

Q 20. If Entity A lends ₹ 1,000 to Customer B, can it recognise an immediate impairment loss of ₹ 10 if Entity A, based on historical experience, expects that 1 per cent of the principal amount of loans given will not be collected?

(Ind AS 39)

Tutorial Note

No. Paragraph 47 of AS 30 requires a financial asset to be initially measured at fair value. For a loan asset, the fair value is the amount of cash lent adjusted for any fees and costs (unless a portion of the amount lent is compensation for other stated or implied rights or privileges). In addition, paragraph 64 of AS 30 requires that an impairment loss is recognised only if there is objective evidence of impairment as a result of a past event that occurred after initial recognition. Accordingly, it is inconsistent with paragraphs 47 and 64 of AS 30 to reduce the carrying amount of a loan asset on initial recognition through the recognition of an immediate impairment loss.

Q 21. Because of Customer B's financial difficulties, Entity A is concerned that Customer B will not be able to make all principal and interest payments due on a loan in a timely manner. It negotiates a restructuring of the loan. Entity A expects that Customer B will be able to meet its obligations under the restructured terms. Would Entity A recognise an impairment loss if the restructured terms are as reflected in any of the following cases?

- (a) Customer B will pay the full principal amount of the original loan five years after the original due date, but none of the interest due under the original terms.
- (b) Customer B will pay the full principal amount of the original loan on the original due date, but none of the interest due under the original terms.
- (c) Customer B will pay the full principal amount of the original loan on the original due date with interest only at a lower interest rate than the interest rate inherent in the original loan.
- (d) Customer B will pay the full principal amount of the original loan five years after the original due date and all interest accrued during the original loan term, but no interest for the extended term.
- (e) Customer B will pay the full principal amount of the original loan five years after the original due date and all interest, including interest for both the original term of the loan and the extended term.

(Ind AS 39)

Tutorial Note

Paragraph 64 of AS 30 indicates that an impairment loss has been incurred if there is objective evidence of impairment. The amount of the impairment loss for a loan measured at amortised cost is the difference between the carrying

amount of the loan and the present value of future principal and interest payments discounted at the loan's original effective interest rate. In cases (a)-(d) above, the present value of the future principal and interest payments discounted at the loan's original effective interest rate will be lower than the carrying amount of the loan. Therefore, an impairment loss is recognised in those cases. (i.e. a to d)

In case (e), even though the timing of payments has changed, the lender will receive interest on interest, and the present value of the future principal and interest payments discounted at the loan's original effective interest rate will equal the carrying amount of the loan. Therefore, there is no impairment loss. However, this fact pattern is unlikely given Customer B's financial difficulties.

6. Derivative Accounting Meaning

Q 22. Entity XYZ enters into a fixed price forward contract to purchase one million kilograms of copper in accordance with its expected usage requirements. The contract permits XYZ to take physical delivery of the copper at the end of twelve months or to pay or receive a net settlement in cash, based on the change in fair value of copper. Is the contract accounted for as a derivative?

(Ind AS 39)

Tutorial Note

While such a contract meets the definition of a derivative, it is not necessarily accounted for as a derivative. The contract is a derivative instrument because there is no initial net investment, the contract is based on the price of copper, and it is to be settled at a future date. However, if XYZ intends to settle the contract by taking delivery and has no history for similar contracts of settling net in cash or of taking delivery of the copper and selling it within a short period after delivery for the purpose of generating a profit from short-term fluctuations in price or dealer's margin, the contract is not accounted for as a derivative under AS 30. Instead, it is accounted for as an executory contract.

Q 23. Entity XYZ owns an office building. XYZ enters into a put option with an investor that permits XYZ to put the building to the investor for ₹ 150 million. The current value of the building is ₹ 175 million. The option expires in five years. The option, if exercised, may be settled through physical delivery or net cash, at XYZ's option. How do both XYZ and the investor account for the option?

(Ind AS 39)

Tutorial Note

XYZ's accounting depends on XYZ's intention and past practice for settlement. Although the contract meets the definition of a derivative, XYZ does not account for it as a derivative if XYZ intends to settle the contract by delivering the building if XYZ exercises its option and there is no past practice of settling net.

The investor, however, cannot conclude that the option was entered into to meet the investor's expected purchase, sale or usage requirements because the investor does not have the ability to require delivery. In addition, the option may be settled net in cash. Therefore, the investor has to account for the contract as a derivative. Regardless of past practices, the investor's intention does not affect whether settlement is by delivery or in cash. The investor has written an option, and a written option in which the holder has a choice of physical settlement or net cash settlement can never satisfy the normal delivery requirement for the exemption from AS 30 because the option writer does not have the ability to require delivery.

However, if the contract were a forward contract rather than an option, and if the contract required physical delivery and the reporting entity had no past practice of settling net in cash or of taking delivery of the building and selling it within a short period after delivery for the purpose of generating a profit from short-term fluctuations in price or dealer's margin, the contract would not be accounted for as a derivative.

Q 24. Entity A makes a five-year fixed rate loan to Entity B, while B at the same time makes a five-year variable rate loan for the same amount to A. There are no transfers of principal at inception of the two loans, since A and B have a netting agreement. Is this a derivative under AS 30?

(Ind AS 39)

Tutorial Note

Yes. This meets the definition of a derivative (that is to say, there is an underlying variable, 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, and future settlement). The contractual effect of the loans is the equivalent of an interest rate swap arrangement with no initial net investment. Non-derivative transactions are aggregated and treated as a derivative when the transactions result, in substance, in a derivative. Indicators of this would include:

- They are entered into at the same time and in contemplation of one another ~~they~~ have the same counterparty
- They relate to the same risk
- there is no apparent economic need or substantive business purpose for structuring the transactions separately that could not also have been accomplished in a single transaction.

Q 25. An entity enters into a forward contract to purchase shares in one year at the forward price. It prepays at inception based on the current price of the shares. Is the forward contract a derivative?

(Ind AS 39)

Tutorial Note

No. The forward contract fails the "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" test for a derivative.

To illustrate: Entity XYZ enters into a forward contract to purchase one million equity shares of T in one year. The current market price of T is ₹ 50 per share; the one-year forward price of T is ₹ 55 per share. XYZ is required to prepay the forward contract at inception with a ₹ 50 million payment. The initial investment in the forward contract of ₹ 50 million is less than the notional amount applied to the underlying, one million shares at the forward price of ₹ 55 per share, i.e., ₹ 55 million. However, the initial net investment approximates the investment that would be required for other types of contracts that would be expected to have a similar response to changes in market factors because T's shares could be purchased at inception for the same price of ₹ 50. Accordingly, the prepaid forward contract does not meet the initial net investment criterion of a derivative instrument.

Q 26. Many derivative instruments, such as futures contracts and exchange traded written options, require margin accounts. Is the margin account part of the initial net investment?

(Ind AS 39)

Tutorial Note

No. The margin account is not part of the initial net investment in a derivative instrument. Margin accounts are a form of collateral for the counterparty or clearing house and may take the form of cash, securities or other specified assets, typically liquid assets. Margin accounts are separate assets that are accounted for separately.

7. Derivative Accounting Treatment

(a) Margin

Q 27. Mr. X enters into certain Equity Derivative Instruments contracts on March 28, 2003. The initial Margin on these contracts, calculated as per the SPAN, is ₹ 30,000. The Initial Margin for the subsequent days, calculated as per the SPAN, is as follows:

On 29th March, 2003	₹ 35000
On 30th March, 2003	₹ 25000
On 31st March, 2003	₹ 27000

Journalise.

(b) Futures

Q 28. B Ltd acquired Derivative Financial Instrument-Future for X Ltd for 100 shares @ 300 each. It Paid ₹5,000 Initial Margin. Date of contract 27/7/2011 Settlement Date 29/9/2011

Prices of X Ltd shares were

27/7	315
12/8	350
16/8	340
31/8	290
29/9	310

Journalise.

R₂ 43 Q 29. Mr. A purchases the following units of equity Index Futures (EIF).

Date of Purchase	Name of Future	Expiry Date/ Series	Contract Price Per Unit (₹)	Contract Multiplier (No. of Units)
28th Mar., 2003	EF1	May, 2003	1420	200
29th Mar., 2003	EF2	June, 2003	4280	50
29th Mar., 2003	EF1	May, 2003	1416	200

Daily Settlement Prices of the above units of Equity Index Futures were as follows:

Date	EF1 May Series (₹)	EF2 June Series (₹)
28/03/2003	1410	—
29/03/2003	1428	4300
30/03/2003	1435	4270
31/03/2003	1407	4290
01/04/2003	1415	4250
02/04/2003	1430	—
03/04/2003	1442	—

For the sake of convenience, it has been assumed that the above contracts were settled on the following dates:

- EF2 June Series on 1st April, 2003
- A contract of 200 units of EF1 May Series on 2nd April, 2003.
- The other contract of EF1 May series on 3rd April, 2003.

Prepare necessary accounts.

R₂ 54 Q 30. Mr. A purchases the following units of Equity Stock Futures (ESF):

Date of Purchase	ESF (Name of Company)	Expiry Date/ Series	Contract Price per unit (₹)	Contract Multiplier (No. of Units)
28th March, 03	XYZ Ltd.	May, 03	1420	200
29th March, 03	PQR Ltd.	June, 03	4280	50
29th March 03	XYZ Ltd.	May 03	1416	200

The contracts are settled through physical delivery of shares on the Settlement Date, i.e., May 29, 2003 and June 26, 2003 respectively.

Net Mark-to-Market Margin received in respect of the contracts for shares of XYZ Limited (May 2003 Series) till the Settlement Date is ₹ 4000. Net Mark-to-Margin paid in respect of the contract for shares of PQR Limited (June 2003 series) till the Settlement Date is ₹ 3500. Journalise settlement entry.

(c) Options

R₂ E6 Q 31. The market received rumour about ABC Corporation's tie-up with a multinational company. This has induced the market price to move up. If the rumour is false, the ABC corporation stock price will probably fall dramatically. To protect from this an investor has bought the call and put options.

He purchased one 3 months call with a striking price of ₹ 42 for ₹ 2 premium, and paid Re. 1 per share premium for a 3 months put with a striking price of ₹ 40.

- Determine the Investor's position if the tie up offer bids the price of ABC Corporation's stock up to ₹ 43 in 3 months.
- Determine the Investor's ending position, if the tie up programme fails and the price of the stock falls to ₹ 36 in 3 months.

(FM, May 2006; Marks 7)

Comments

Most of the candidates failed to answer correctly. Only few students have solved the problem correctly. However, their performance was of above average level.

R₂ S9 Q 32. Mr. Investor buys a stock option of ABC Co. Ltd. in July, 2003 with a strike price on 30.7.2003 ₹ 250 to be expired on 30.8.03. The premium is ₹ 20 per unit and the market lot is 100. The margin to be paid is ₹ 120 per unit.

Show the accounting treatment in the books of Buyer when:

- The option is settled by delivery of the asset, and
- The option is settled in cash and the index price is ₹ 260 per unit.

Ans.: Profit ₹ 1,000

(November 2004, Marks 12)

Q 33. Mr. A buys the following Equity Stock Options and the seller/writer of the options is Mr. B.

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.

Q 34. Dravid Investment Ltd. Deals in equity derivatives. Their current portfolio comprises of the following instruments:

Infosys ₹ 5600 Call Expiry June 2004 2,000 unit bought at ₹ 197 each (cost)

Infosys ₹ 5700 Call Expiry June 2004 3,600 unit bought at ₹ 131 each (cost)

Infosys ₹ 5400 Put Expiry June 2004 4,000 unit bought at ₹ 81 each (cost)

What will the profit or loss to Dravid Investments Ltd. in the following situations?

(i) Infosys closes on the expiry day at ₹ 6,041

(ii) Infosys closes on the expiry day at ₹ 5,812

(iii) Infosys closes on the expiry day at ₹ 5,085

(ICWA June 2004 Exam 10 marks)

Ans.: Profit ₹ 9,20,000, Loss ₹ 362400, Profit ₹ 70400.

Q 35. Accounting for Equity Index Options

Mr. A buys the following equity index options and the seller/writer of these options is Mr. B

Date of Purchase	Type of option	Expiry date	Premium per unit (₹)	Contract Multiplier (No. of units)	Strike Price (₹)
28th March 2003	S&P CNX NIFTY- Call	May 31, 2003	15	200	880
29th March, 2003	S&P CNX NIFTY- Put	May 31, 2003	20	200	885

Mr. A and Mr. B follow the calendar year as the accounting year. Prepare Journal Entries. Assume price of S&P CNX NIFTY on 31st May 2003 ₹ 882.

Q 36. Continuing with above, except the following facts:

(a) Mr. A and Mr. B follow the financial year as the accounting year.

(b) On 31st March, 2003: For Call Option May 2003 Strike Price ₹ 880, closing rate of premium ₹ 6 per unit. For put Option May 2003 Strike Price ₹ 885, closing rate of premium ₹ 28 per unit.

Q 37. Accounting for Equity Index Options

Mr. A Buys the following equity Stock Options and the seller/writer of the options is Mr. B.

Date of Purchase	Type of Options	Expiry Date	Market Lot	Premium Per Unit	Strike Price (₹)
29th June 2003	ACC Co. Ltd. Call option	Aug 30, 2003	100	15	230
30th June 2003	Infosys Ltd. Put Option	Aug 30, 2003	200	20	275

Prepare Journal Entries. Assume price of ACC Co. Ltd. on 30th August is ₹ 240 and Infosys Ltd. is ₹ 290.

R267 Q 38. A buyer buys a stock option of New Light Company Limited on 30th August, 2006 with a strike price of ₹ 150 per unit to be expired on September 30, 2006. The premium is ₹ 10 per unit and the market lot is of 100. The margin to be paid is ₹ 60 per unit.

Show, how the transactions will appear in the books of the seller, when:

- The option is settled by delivery of the Asset, and
- The option is settled in cash and the Index price is ₹ 160 per unit.

Assume market price ₹ 160 in both cases

(May 2007; Marks 8)

(d) Speculative Forwards

R268 Q 39. Mr. A bought a forward contract for three months of US\$ 1,00,000 on 1st December at 1 US\$ = ₹ 47.10 when exchange rate was US\$ 1 = ₹ 47.02. On 31st December when he closed his books, exchange rate was US\$ 1 = ₹ 47.15. On 31st January, he decided to sell the contract at ₹ 47.18 per dollar. Show how the profits from contract will be recognized in the books.

(May 2010, 5 marks)

R269 Q 40. On February 1, 2009, Future Ltd. entered into a contract with Son Ltd. to receive the fair value of 1000 Future Ltd.'s own equity shares outstanding as on 31-01-2010 in exchange for payment of ₹ 1,04,000 in cash i.e. ₹ 104 per share. The contract will be settled in net cash on 31-01-2010.

The fair value of this forward contract on the different dates were:

- | | |
|---|---------|
| (i) Fair value of forward on 01-02-2009 | Nil |
| (ii) Fair value of forward on 31-12-2009 | ₹ 6,300 |
| (iii) Fair value of forward on 31-01-2010 | ₹ 2,000 |

Presuming that Future Ltd. closes its books on 31st December each year, pass entries:

- If net settled is in cash
- If net settled by Son Ltd. by the delivering shares of Future Ltd.

(November 2010 New Course; 8 Marks)

8. Investment Accounting

R2 93 Q 41. On March 30, 2006 fair value per ordinary share of A Ltd. was ₹45. On this date, B Ltd. committed to buy 10,000 of these shares at fair value. B Ltd. paid the price and accepted delivery of these shares on April 3, 2006. B Ltd. closed its annual accounts on March 31, 2006. Fair value of A Ltd. shares was ₹45.40 on March 31, 2006 and ₹45.30 on April 3, 2006.

Show Journal Entries in the books of B Ltd. in respect of above in the following three cases:

- B Ltd. classifies its investments in A Ltd. as 'financial assets held-to-maturity'
- B Ltd. classifies its investments in A Ltd. as 'financial assets available for sale'
- B Ltd. classifies its investments in A Ltd. as 'financial assets at fair value through profit or loss'

Q 42. On 29 December 20x7, an entity commits itself to purchase a financial asset for ₹ 1,000, which is its fair value on commitment (trade) date.

Transaction costs are immaterial. On 31 December 20x7 (financial year-end) and on 4 January 20x8 (settlement date) the fair value of the asset is ₹ 1,002 and ₹ 1,003, respectively. The amounts to be recorded for this asset will depend on how it is classified and whether trade date or settlement date accounting is used.

(Ind AS 39)

R2 94 Q 43. On 29 December 20x8 (trade date) an entity enters into a contract to sell a financial asset for its current fair value of ₹ 1,010. The asset was acquired one year earlier for ₹ 1,000 and its amortised cost is ₹ 1,000. On 31 December 20x8 (financial year-end), the fair value of the asset is ₹ 1,012. On 4 January 20x9 (settlement date), the fair value is ₹ 1,013. The amounts to be recorded will depend on how the asset is classified and whether trade date or settlement date accounting is used

(Ind AS 39)

R2 95 Q 44. Entity A has an investment portfolio of debt and equity instruments. The documented portfolio management guidelines specify that the equity exposure of the portfolio should be limited to between 30 and 50 per cent of total portfolio value. The investment manager of the portfolio is authorised to balance the portfolio within the designated guidelines by buying and selling equity and debt instruments. Is Entity A permitted to classify the instruments as available for sale?

*Answer: Held for Trade if it is purchased at a intention (Ind AS 39)
 does not make profit on sale if not it is treated as Available for sale.*
 Tutorial Note
 It depends on Entity A's intentions and past practice. If the portfolio manager is authorised to buy and sell instruments to balance the risks in a portfolio, but

there is no intention to trade and there is no past practice of trading for short-term profit, the instruments can be classified as available for sale. If the portfolio manager actively buys and sells instruments to generate short-term profits, the financial instruments in the portfolio are classified as held for trading.

9. Loan and Advances Accounting

R238 Q 45. B Ltd gave advance to C Ltd. for ₹10,00,000 on 1-4-2008 at Interest rate of 10%. B Ltd received ₹15,000 as processing charges. B Ltd gave at 31-3-2009 loyalty bonus ₹5,000 and as per contract B Ltd is to receive ₹10,000 on 31-3-2011 for reverification of credit fee. Loan is to be repaid by C Ltd on 31-3-2012

Prepare Loan A/c.

R238 Q 46. 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 rate 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.

(November 2011, 4 marks)

R240 Q 47. A Ltd. borrows ₹ 10 lakh from B Ltd. under the following terms:

- The loan will carry 5% annual rate of interest, payable at the end of each year.
- A Ltd. will make immediate payment of an origination fee of ₹ 70,000 to B Ltd.
- The principal will be repaid in two installments, ₹ 4 lakh at the end of year 3 and 6 lakh at the end of year 5.

Show the Loan A/c in books of B Ltd.

R241 Q 48. Can an equity instrument, such as a preference share, with fixed or determinable payments be classified within loans and receivables by the holder?

Tutorial Note

(Ind AS 39)

Yes. If a non-derivative equity instrument, such as a preference share, is required to be recorded as a liability by the issuer as per the relevant Accounting Standard, and it has fixed or determinable payments and is not quoted in an active market, it can be classified within loans and receivables by the holder, provided the definition is otherwise met. AS31 provide guidance about the classification of a financial instrument as a liability or as equity from the perspective of the issuer of a financial instrument. If an instrument meets the definition of an equity instrument under AS 31, it cannot be classified within loans and receivables by the holder.

10. Staff Advances

- R₂ 3) Q 49. B Ltd gave one of its Employees, staff advance of ₹5,00,000 at 3% on 1-4-2008. Loan is repayable in 4 installments along with Interest. Market Rate of Interest is 10%

Prepare Loan to Employee A/c

- Q 50. Comforts Ltd. granted ₹ 10,00,000 loan to its employees on January 1, 2009 at a concessional interest rate of 4% per annum. Loan is to be repaid in five equal instalments alongwith interest. Market rate of interest for such loan is 10% per annum. Following the principles of recognition and measurement as laid down in AS-30—'Financial Instruments : Recognition and measurements', record the entries for the year ended 31st December, 2009 for the loan transaction, and also calculate the value of loan initially to be recognized and amortised cost for all the subsequent years. The present value of Re. 1 receivable at the end of each year on discount factor of 10% can be taken as:

Year end	1.	0.9090
	2.	0.8263
	3.	0.7512
	4.	0.6829
	5.	0.6208

(May 2010, 4 marks)

- R₂ 3) Q 51. Friendly Ltd. granted ₹ 100 lakhs as loan to its employees on 1st January, 2009 at a concessional rate of interest of 4 per cent per annum on the condition that the loan is to be repaid in five equal annual instalments alongwith interest thereon. You are informed that the prevailing lending rate for such risk profiles is 10% p.a. You are required to find out at what value the loan should be recognized initially and the amount of annual amortization till closure thereof. Show Journal Entries with appropriate narrations that will be recorded in the company's Books in the year 2009.

[Present value of an Indian Rupee at a discount rate of 10 per cent per annum will be .9090, .8263, .7512, .6829 and .6208 which is to be adopted for purposes of calculation]

(May 2010-Old Course, 8 marks)

11. CFI: Convertible Instruments without Transactions Costs

- R₂ 16 Q 52. A Ltd. issued 12% Convertible Debentures for ₹15,00,000 on 1-4-2007 which are to be converted on 31-3-2012. Similar Debentures. without conversion right, carry Interest rate of 15% Prepare necessary A/c.
- R₂ 18 Q 53. B Ltd Issued 10% convertible Debentures of ₹100 each for ₹5,00,000 on 1-4-2008. These are to be converted into Equity Shares on 31-3-2011. Debenture without conversions right can be issued at 13%.

Present Debenture is Balance Sheet

R218 Q 54. A Ltd issued 11% Convertible Debentures. ₹20,00,000 on 1-4-2008 50% of Debentures will be converted on 31-3-2011 and balance 50% on 31-3-2012. Rate of Interest for non Compound Financial Instrument is 14% Identity Equity and Financial liability.

R223 Q 55. A Ltd issued 10% convertible Preference Share capital ₹10,00,000 on 1-4-2008 convertible on 31-3-2011 Similar shares, without conversion right, carry interest of 12% Identity Equity and Financial liability

12. CFI: Convertible Instruments with Transactions Costs

R220 Q 56. B Ltd issued 9% Convertible Debentures of ₹7,00,000 at 10% discount on 1-4-2008 convertible on 31-3-2011. These are to be converted at 10% Premium Discount Rate on non Convertible Debentures is 13%.

Calculate Debt. and Equity

R223 Q 57. A Ltd. issued 9% Convertible Debentures. at 10% discount for ₹7,00,000 on 1.4.09. They are to be converted on 31-3-2012 at 5% premium. A Ltd will pay cash bonus of ₹50,000 on 31-3-2011. Debenture holders are required to pay ₹20,000 for credit appraisal of Debentures. Similar Debentures without conversion rights carry rate of Interest of 18%.. Prepare necessary accounts.

R221 Q 58. A Ltd issued 10% Preference share capital on 1-4-2008 for ₹10,00,000. 60% to be repaid in cash at 5% premium on 31-3-2011. Balance will be converted on 31-3-2011 into Equity Shares (at 5% premium) Similar Preference shares can be issued at 15% without any conversion rights. Identity Equity and Financial liability.

Q 59. Mega Ltd. issued ₹ 100,00,000 worth of 8% Debentures of face value ₹ 100/- each on par value basis on 1st Jan, 2011. These debentures are redeemable at 12% premium at the end of 2014 or exchangeable for Ordinary shares of Mega Ltd. on 1 : 1 basis. The interest rate for similar debentures that do not carry conversion entitlement is 12%. You are required to calculate the value of the debt position of the above compound financial instrument. The Present value of the rupee at the end of years 1 to 4 at 8% and 12% are supplied to you as:

	8%	12%
End of year 1	0.926	0.893
End of year 2	0.857	0.797
End of year 3	0.794	0.712
End of year 4	0.735	0.636

(November 2011, 4 marks)

13. CFI: Convertible Instruments with option to holders

R224 Q 60. A Ltd. issued on 1-4-2008 ₹20,00,000 12% Debentures to be converted into Equity Shares at 5% premium at option of Debentures holder on 31-3-2012. Similar Debentures without conversion right, carry interest of 16% Identity Equity and Financial liability.

Q 61. B Ltd issued 10% Debentures for ₹10,00,000 on 1-4-2008. On 31-3-2011 Company will repay 40% of debentures at 10% Premium. On 31-3-2013 company will convert remaining debenture into Equity Shares. Debenture holders will have option to receive cash instead of shares.

Prepare Debentures A/c assuming similar Debentures can be issued, without conversions right at 12%.

Q 62. 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 in to 2 ordinary shares at the end of year 3. The bondholder 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%.

Compute value of Debt and Equity.

Q 63. On 1 April, 2008 Delta Ltd. issued ₹ 30,00,000, 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 portion as on 01-04-2008.

The present value of ₹ 1 receivable at the end of each year for an discount rates of 6% and 10% can be taken as:

	6%	10%
End of year 1	0.94	0.91
End of year 2	0.89	0.83
End of year 3	0.84	0.75
End of year 4	0.79	0.68

(November, 2009, New Course)

Q 64. 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 portion (Debenture amount). The present value is ₹ 1,85,400 for equity portion. Find out the debt portion (Debenture amount). The present value of ₹ 1 receivable at the end of each year based on discount rates of 6% and 10% can be taken as:

By letting x & deb.

End of year	6%	10%
1	0.94	0.91
2	0.89	0.83
3	0.84	0.75
4	0.79	0.68

(November 2010 New Course; 8 Marks)

14. CFI :Convertible Instruments with option to company.

- R2 28* Q 65. On 1-4-2008 A Ltd. issued 8% Debentures of ₹12,00,000. These are redeemable at 10% premium or to be converted in Equity Shares at choice of company on 31-3-2011 Rate of Interest for Non Compound Financial Instrument is 14% Calculate value of liability and Equity.

15. Non Compound Financial Instruments without Transaction Cost

- R2 30* Q 66. B Ltd issued 9% Debentures. of ₹10,00,000 on 1-4-2008 to be redeemed on 31-3-2011 Prepare Debentures. A/c.

16. Non Compound Financial Instruments with Transaction Cost

- Q 67. A Ltd issued 9% Debentures. at 10% discount ₹10,00,000 on 1-4-2008, redeemable on 31-3-2011 at 5% premium. Prepare debentures Account.
- Q 68. B Ltd issued 8% Debentures. of ₹15,00,000 at 11% discount, Redemption at 7% premium. Term of Debentures 4 years. Prepare Debentures Account
- Q 69. B Ltd issued on 1-4-2008 8% Debentures of ₹20,00,000 at 9% discount which are to be redeemed on 31-3-2013 at 8% premium. Prepare Debentures Account
- Q 70. B Ltd issued on 1-4-2008 9% Debentures whose face value is ₹20,00,000 at discount of 5% .Company is to redeem 50% Debentures on 31-3-2011 at 7% Premium and balance will be redeemed on 31-3-2013 at 10% premium. On 31-3-2012 ₹20,000 will be distributed on cash bonus to debenture holders. Prepare Debentures. A/c

17. Embedded Derivative

- R2 91* Q 71. 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.
- R2 92* Q 72. Certain callable convertible debentures are issued at ₹ 80. The value of similar debentures without call or entity conversion option is ₹ 68. The value of call as determined using Black and Scholes model for option pricing is ₹ 5. Determine values of liability and equity component.

(May 2011, 5 marks)

18. Advance Instruments

- Q 73.** Entity A purchases a debt instrument with five years remaining to maturity for its fair value of ₹ 1,000 (including transaction costs). The instrument has a principal amount of ₹ 1,250 and carries fixed interest of 4.7 per cent that is paid annually ($₹ 1,250 \times 4.7$ per cent = ₹ 59 per year). The contract also specifies that the borrower has an option to prepay the instrument and that no penalty will be charged for prepayment. At inception, the entity expects the borrower not to prepay.

(Ind AS 39)

Tutorial Note

Year	Amortised cost at the beginning of the year	Interest income	Cash flows	Amortised cost at the end of the year
20x6	1,000	100	59	1,041
20x7	1,041	104	59	1,086
20x8	1,086	109	59	1,136
20x9	1,136	113	59	1,188
20y0	1,188	119	1,250+59	-

- Q 74.** If in above problem On the first day of 20x8, the entity revises its estimate of cash flows. It now expects that 50 per cent of the principal will be prepaid at the end of 20x8 and the remaining 50 per cent at the end of 20y0.

(Ind AS 39)

Tutorial Note

In accordance with AS 30, the opening balance of the debt instrument in 20x8 is adjusted. The adjusted amount is calculated by discounting the amount the entity expects to receive in 20x8 and subsequent years using the original effective interest rate (10 per cent). This results in the new opening balance in 20x8 of ₹ 1,138. The adjustment of ₹ 52 ($₹ 1,138 - ₹ 1,086$) is recorded in the statement of profit and loss in 20x8. The table below provides information about the amortised cost, interest income and cash flows as they would be adjusted taking into account the change in estimate.

Year	(a) Amortised cost at the beginning of the year	(b = a x 10%) Interest income	(c) Cash flows	(d = a + b - c) Amortised cost at the end of the year
20x6	1,000	100	59	1,041
20x7	1,041	104	59	1,086
20x8	1,086+52	114	625+59	568
20x9	568	57	30	595
20y0	595	60	625+30	-

If the debt instrument becomes impaired, say, at the end of 20x9, the impairment loss is calculated as the difference between the carrying amount (₹ 595) and the present value of estimated future cash flows discounted at the original effective interest rate (10 per cent).

Q 75. On 1 January 20x6, Entity A issues a debt instrument for a price of ₹ 1,250. The principal amount is ₹ 1,250 and the debt instrument is repayable on 31 December 20y0. The rate of interest is specified in the debt agreement as a percentage of the principal amount as follows: 6.0 per cent in 20x6 (₹ 75), 8.0 per cent in 20x7 (₹ 100), 10.0 per cent in 20x8 (₹ 125), 12.0 per cent in 20x9 (₹ 150), and 16.4 per cent in 20y0 (₹ 205). Calculate amortised cost of debt

(Ind AS 39)

Tutorial Note

In this case, the interest rate that exactly discounts the stream of future cash payments through maturity is 10 per cent. Therefore, cash interest payments are reallocated over the term of the debt instrument for the purposes of determining amortised cost in each period. In each period, the amortised cost at the beginning of the period is multiplied by the effective interest rate of 10 per cent and added to the amortised cost. Any cash payments in the period are deducted from the resulting number. Accordingly, the amortised cost in each period is as follows:

Year	(a) Amortised cost at the beginning of the year	(b = a x 10%) Interest income	(c) Cash flows	(d = a+b-c) Amortised cost at the end of the year
20x6	1,250	125	75	1,300
20x7	1,300	130	100	1,330
20x8	1,330	133	125	1,338
20x9	1,338	134	150	1,322
20y0	1,322	133	1,250+205	—