AS 19 – LEASES

Illustration 1 (MTP Nov'21, Oct'22, April'23) (Past Exam May'19)

S. Square Private Limited has taken machinery on finance lease from S.K. Ltd. The information is as under:

Lease term = 4 years

Fair value at inception of lease = ₹ 20,00,000

Lease rent = ₹ 6,25,000 p.a. at the end of year

Guaranteed residual value = ₹ 1,25,000

Expected residual value = ₹ 3,75,000

Implicit interest rate = 15%

Discounted rates for 1st year, 2nd year, 3rd year and 4th year are 0.8696, 0.7561, 0.6575 and 0.5718 respectively.

Calculate the value of the lease liability as per AS-19 and disclose impact of this on Balance sheet and Profit & loss account at the end of year 1 **(5 Marks)**

Solution

According to para 11 of AS 19 "Leases", the lessee should recognise the lease as an asset and a liability at an amount equal to the lower of the fair value of the leased asset at the inception of the finance lease and the present value of the minimum lease payments from the standpoint of the lessee.

In calculating the present value of the minimum lease payments the discount rate is the interest rate implicit in the lease. Present value of minimum lease payments will be calculated as follows:

Year	Minimum Lease Payment ₹	Implicit interest rate (Discount rate @15%)	Present value ₹
1	6,25,000	0.8696	5,43,500
2	6,25,000	0.7561	4,72,563
3	6,25,000	0.6575	4,10,937
4	7,50,000*	0.5718	4,28,850
Total	26,25,000		18,55,850

Present value of minimum lease payments ₹ 18,55,850 is less than fair value at the inception of lease i.e. ₹ 20,00,000, therefore, the asset and corresponding lease liability should be recognised at ₹ 18,55,850 as per AS 19.

Illustration 2

Prakash Limited leased a machine to Badal Limited on the following terms:

	(₹ In lakhs)
(i) ₹Fair value of the machine	28.3
(ii) ₹Lease term	5 years
(iii) ₹Lease rental per annum	8.00
(iv) ₹Guaranteed residual value	1.60
(v) ₹Expected residual value	3.00
(vi) ₹Internal rate of return	15%

Discounted rates for 1st year to 5th year are 0.8696, 0.7561, 0.6575, 0.5718, and 0.4972 respectively.

Ascertain Unearned Finance Income.

Solution

As per AS 19 on Leases, unearned finance income is the difference between (a) the gross investment in the lease and (b) the present value of minimum lease payments under a finance lease from the standpoint of the lessor; and any unguaranteed residual value accruing to the lessor, at the interest rate implicit in the lease.

Where:

(a) Gross investment in the lease is the aggregate of (i) minimum lease payments from the stand point of the lessor and (ii) any unguaranteed residual value accruing to the lessor.

Gross investment = Minimum lease payments + Unguaranteed residual value

= [Total lease rent + Guaranteed residual value (GRV)] + Unguaranteed residual value (URV)

= [(₹ 8,00,000 x 5 years) + ₹ 1,60,000] + ₹ 1,40,000

= ₹ 43,00,000 (a)

(b) Table showing present value of (i) Minimum lease payments (MLP) and

(ii) Unguaranteed residual value (URV).

Year	MLP inclusive of URV ₹	Internal rate of return (Discount factor @ 15%)	Present Value ₹
1	8,00,000	0.8696	6,95,680
2	8,00,000	0.7561	6,04,880
3	8,00,000	0.6575	5,26,000
4	8,00,000	0.5718	4,57,440
5	8,00,000	0.4972	3,97,760
	1,60,000 (GRV)	0.4972	79,552
	41,60,000		27,61,312 (i)
	1,40,000 (URV)	0.4972	69,608 (ii)
	43,00,000	(i)+ (ii)	28,30,920 (b)

Unearned Finance Income (a) - (b) = ₹ 43,00,000 – ₹ 28,30,920= ₹ 14,69,080.

Illustration 3

A Ltd. sold machinery having WDV of ₹ 40 lakhs to B Ltd. for ₹ 50 lakhs and the same machinery was leased back by B Ltd. to A Ltd. The lease back is operating lease.

Comment if –

a) Sale price of ₹ 50 lakhs is equal to fair value.

b) Fair value is ₹ 60 lakhs.

c) Fair value is ₹ 45 lakhs and sale price is ₹ 38 lakhs.

d) Fair value is ₹ 40 lakhs and sale price is ₹ 50 lakhs.

e) Fair value is ₹ 46 lakhs and sale price is ₹ 50 lakhs

f) Fair value is ₹ 35 lakhs and sale price is ₹ 39 lakhs.

Solution

Following will be the treatment in the given cases:

(a) When sales price of ₹ 50 lakhs is equal to fair value, A Ltd. Should immediately recognise the profit of ₹ 10 lakhs (i.e. 50 – 40) in its books.

(b) When fair value is ₹ 60 lakhs then also profit of ₹ 10 lakhs should be immediately recognised by A Ltd.

(c) When fair value of leased machinery is ₹ 45 lakhs & sales price is ₹ 38 lakhs, then loss of ₹ 2 lakhs (40 – 38) to be immediately recognised by A Ltd. in its books provided loss is not compensated by future lease payment, otherwise defer and amortise the loss.

(d) When fair value is ₹ 40 lakhs & sales price is ₹ 50 lakhs then, profit of ₹ 10 lakhs is to be deferred and amortised over the lease period.

(e) When fair value is ₹ 46 lakhs & sales price is ₹ 50 lakhs, profit of ₹ 6 lakhs (46 - 40) to be immediately recognised in its books and balance profit of ₹ 4 lakhs (50-46) is to be amortised/deferred over lease period.

(f) When fair value is ₹ 35 lakhs & sales price is ₹ 39 lakhs, then the loss of ₹ 5 lakhs (40-35) to be immediately recognised by A Ltd. in its books and profit of ₹ 4 lakhs (39-35) should be amortised/deferred over lease period.

Illustration 4

Explain the types of lease as per AS 19.

Solution:

For the purpose of accounting AS 19, classifies leases into two categories as follows:

1. Finance Lease

2. Operating Lease

Finance Lease:

It is a lease, which transfers substantially all the risks and rewards incidental to ownership of an asset to the lessee by the lessor but not the legal ownership.
As per para 8 of the standard, in following situations, the lease transactions are called Finance lease:
1. The lessee will get the ownership of leased asset at the end of the lease term.
2. The lessee has an option to buy the leased asset at the end of the lease term at price, which is lower than its expected fair value at the date on which option will be exercised.
3. The lease term covers the major part of the life of asset even if title is not transferred.
4. At the beginning of lease term, present value of minimum lease rental covers the initial fair value.
5. The asset given on lease to lessee is of specialized nature and can only be used by the lessee without major modification.

Operating Lease:

It is lease, which does not transfer all the risks and rewards incidental to ownership.

Illustration 5

Explain the accounting treatment for a sale and leaseback transaction under Operating lease.

Solution:

As per AS 19, where sale and leaseback results in operating lease, then the accounting treatment in different situations is as follows:

Situation 1: Sale price = Fair Value

Profit or loss should be recognized immediately.

Situation 2: Sale Price < Fair Value

Profit should be recognized immediately. The loss should also be recognized immediately except that, if the loss is compensated by future lease payments at below market price, it should be deferred and amortized in proportion to the lease payments over the period for which the asset is expected to be used.

Situation 3: Sale Price > Fair Value

The excess over fair value should be deferred and amortized over the period for which the asset is expected to be used.

Illustration 6

What do you understand by the term “Interest rate implicit on lease”?

Solution:

As per para 3 of AS 19 'Leases' the interest rate implicit in the lease is the discount rate that, at the inception of the lease, causes the aggregate present value of:

(a) the minimum lease payments under a finance lease from the standpoint of the lessor; and

(b) any unguaranteed residual value accruing to the lessor, to be equal to the fair value of the leased asset.

Illustration 7 (Past Exam May'22)

What are the disclosures requirements for operating leases by the lessee as per AS-19? **(5 Marks)**

Solution:
As per AS 19, lessees are required to make following disclosures for operating leases:

(a) the total of future minimum lease payments under non-cancelable operating leases for each of the following periods:

(i) not later than one year;

(ii) later than one year and not later than five years;

(iii) later than five years;

(b) the total of future minimum sublease payments expected to be received under non- cancelable subleases at the balance sheet date;

(c) lease payments recognized in the statement of profit and loss for the period, with separate amounts for minimum lease payments and contingent rents;

(d) sub-lease payments received (or receivable) recognized in the statement of profit and loss for the period;

(e) a general description of the lessee's significant leasing arrangements including, but not limited to, the following:

(i) the basis on which contingent rent payments are determined;

(ii) the existence and terms of renewal or purchase options and escalation clauses; and

(iii) restrictions imposed by lease arrangements, such as those concerning dividends, additional debt, and further leasing.

Illustration 8 (RTP Nov 20) (Past Exam Nov'19)

Classify the following into either operating lease or finance lease with reason:

1) Economic life of asset is 10 years, lease term is 9 years, but asset is not acquired at the end of lease term.

2) Lessee has option to purchase the asset at lower than fair value at the end of lease term.

3) Lease payments should be recognized as an expense in the statement of Profit & Loss of a lessee.

4) Present Value (PV) of Minimum Lease Payment (MLP) = "X" Fair value of the asset is "Y" And X = Y.

5) Economics life of the asset is 5 years, lease term is 2 years, but the asset is of special nature and has been procured only for use of the lessee. **(5 Marks)**

Solution:

(i) The lease will be classified as a finance lease, since a substantial portion of the life of the asset is covered by the lease term.

(ii) If it becomes certain at the inception of lease itself that the option will be exercised by the lessee, it is a Finance Lease.

(iii) It is an operating lease under which lease payments are recognized as expense in the profit and loss account of lessee to have better matching between cost and revenue.

(iv) The lease is a finance lease if X = Y, or where X substantially equals Y.

(v) Since the asset is of special nature and has been procured only for the use of lessee, it is a finance lease.

Illustration 9 (Past Exam Dec'21) (MTP May'20, Mar'21)

A machine was given on 3 years operating lease by a dealer of the machine for equal annual lease rentals to yield 30% profit margin on cost ₹ 1,50,000.

Economic life of the machine is 5 years and output from the machine are estimated as 40,000 units, 50,000 units, 60,000 units, 80,000 units and 70,000 units consecutively for 5 years. Straight line depreciation in proportion of output is considered appropriate. Compute the following:

(i) Annual Lease Rent

(ii) Lease Rent income to be recognized in each operating year and

(iii) Depreciation for 3 years of lease. **(5 Marks)**

Solution:

(i) Annual lease rent

Total lease rent

$$= 130\% \text{ of } ₹\ 1,50,000 \times \frac{\text{Output during lease period}}{\text{Total output}}$$

= 130% of ₹ 1,50,000 x (40,000 +50,000+ 60,000)/(40,000 + 50,000 + 60,000 + 80,000 + 70,000)

= 1,95,000 x 1,50,000 units/3,00,000 units = ₹ 97,500

Annual lease rent = ₹ 97,500 / 3 = ₹ 32,500

(ii) Lease rent Income to be recognized in each operating year

Total lease rent should be recognised as income in proportion of output during lease period, i.e. in the proportion of 40 : 50 : 60.

Hence income recognised in years 1, 2 and 3 will be as:

Year 1 ₹ 26,000,

Year 2 ₹ 32,500 and

Year 3 ₹ 39,000.

(**iii) Depreciation for three years of lease**

Since depreciation in proportion of output is considered appropriate, the depreciable amount ₹ 1,50,000 should be allocated over useful life 5 years in proportion of output, i.e. in proportion of 40 : 50 : 60 : 80 : 70 .

Depreciation for year 1 is ₹ 20,000, year 2 = 25,000 and year 3 = 30,000.

Illustration 10 (RTP Nov'18, May'20, Nov'23) (MTP Oct'19, Mar'24)

Lessee Ltd. took a machine on lease from Lessor Ltd., the fair value being ₹ 7,00,000.

The economic life of machine as well as the lease term is 3 years. At the end of each year Lessee Ltd. pays ₹ 3,00,000. The Lessee has guaranteed a residual value of ₹ 22,000 on expiry of the lease to the Lessor. However, Lessor Ltd., estimates that the residual value of the machinery will be only ₹ 15,000. The implicit rate of return is 15% p.a. and present value factors at 15% are 0.869, 0.756 and 0.657 at the end of first, second and third years respectively.

Calculate value of machinery to be considered by Lessee Ltd. and finance charges in each year. **(5 Marks)**

Solution:

As per para 11 of AS 19 "Leases", the lessee should recognize the lease as an asset and a liability at the inception of a finance lease. Such recognition should be at an amount equal to the fair value of the leased asset at the inception of lease. However, if the fair value of the leased asset exceeds the present value of minimum lease payment from the standpoint of the lessee, the amount recorded as an asset and liability should be the present value of minimum lease payments from the standpoint of the lessee.

Computation of Value of machinery:

Present value of minimum lease payment = ₹ 6,99,054

(See working note below)

Fair value of leased asset = ₹ 7,00,000

Therefore, the recognition will be at the lower of the two i.e. 6,99,054

Working Note - Present value of minimum lease payments:

Annual lease rental × PVIF+ Present value of guaranteed residual value

= ₹ 3,00,000 × (0.869 + 0.756 + 0.657) + ₹ 22,000 × 0.657

= ₹ 6,84,600 + ₹ 14,454 = 6,99,054

Computation of finance charges:

Year	Finance charge	Payment	Reduction in outstanding liability	Outstanding liability
1st Year beginning	–	–	–	6,99,054
End of 1st year	1,04,858	3,00,000	1,95,142	5,03,912
End of 2nd year	75,587	3,00,000	2,24,413	2,79,499
End of 3rd year	41,925	3,00,000	2,58,075	21,424

Illustration 11

B&P Ltd. availed a lease from N&L Ltd. The conditions of the lease terms are as under:

(i) Lease period is 3 years, in the beginning of the year 2009, for equipment costing ₹ 10,00,000 and has an expected useful life of 5 years.

(ii) The Fair market value is also ₹ 10,00,000

(iii) The property reverts back to the lessor on termination of the lease.

(iv) The unguaranteed residual value is estimated at ₹ 1,00,000 at the end of the year 2011.

(v) 3 equal annual payments are made at the end of each year.

(vi) Consider IRR = 10%.

The present value off ₹ 1 due at the end of 3rd year at 10% rate of interest is ₹ 0.7513. The present value of annuity of ₹ 1 due at the end of 3rd year at 10% IRR is ₹ 2.4868.

State whether the lease constitute finance lease and also calculate unearned finance income.

Solution:

Computation of annual lease payment:

Particulars	₹
Cost of equipment	10,00,000
Unguaranteed residual value	1,00,000
Present value of unguaranteed residual value (₹ 1,00,000 x 0.7513)	75,130
Present value of lease payments (₹ 10,00,000 - ₹ 75,130)	9,24,870
Present value of annuity for three years is	2.4868
Annual lease payment [9,24,870/2.4868]	3,71,911.70

Classification of lease:

Parameter 1:

The present value of lease payment i.e., ₹ 9,24,870 which equals 92.48% of the fair market value i.e., ₹ 10,00,000.

The present value of minimum lease payments substantially covers the fair value of the leased asset

Parameter 2:

The lease term (i.e. 3 years) covers the major part of the life of asset (i.e. 5 years).

Therefore, it constitutes a finance lease.

Computation of Unearned Finance Income:

Particulars	
Total lease payments (₹ 3,71,911.70 x 3)	11,15,735
Add: Unguaranteed residual value	1,00,000
Gross investment in the lease	1,215,735
Less: Present value of lease payments and residual value i.e.	
Net Investment (₹ 75,130 + ₹ 9,24,870)	(10,00,000)
Unearned finance income	2,15,735

Illustration 12 (MTP Oct'20, Oct'21) (Past Exam May'18, Jan'21) (RTP Nov 20, May'22)

X Ltd. sold machinery having WDV of ₹ 300 lakhs to Y Ltd. for ₹ 400 lakhs and the same machinery was leased back by Y Ltd. to X Ltd. The lease back arrangement is operating lease.

Give your comments in the following situations:

(i) Sale price of ₹ 400 lakhs is equal to fair value.

(ii) Fair value is ₹ 450 lakhs.

(iii) Fair value is ₹ 350 lakhs and the sale price is ₹ 250 lakhs.

(iv) Fair value is ₹ 300 lakhs and sale price is ₹ 400 lakhs.

(v) Fair value is ₹ 250 lakhs and sale price is ₹ 290 lakhs. **(5 Marks)**

Solution:

Accounting Treatment:

S. No.	**Particulars**	**Accounting Treatment**
(i)	When sale price of ₹ 400 lakhs is equal to fair value	X Ltd. should immediately recognize the profit of ₹ 100 lakhs (i.e. 400 – 300) in its books.
(ii)	When fair value is ₹ 450 lakhs	Profit of ₹ 100 lakhs should be immediately recognized by X Ltd.
(iii)	When fair value of leased machinery is ₹ 350 lakhs & sales price is ₹ 250 lakhs	Then loss of ₹ 50 lakhs (300 – 250) to be immediately recognized by X Ltd. in its books provided loss is not compensated by future lease payment.
(iv)	When fair value is ₹ 300 lakhs & sales price is ₹ 400 lakhs	Then, profit of ₹ 100 lakhs is to be deferred and amortized over the lease period.
(v)	When fair value is ₹ 250 lakhs & sales price is ₹ 290 lakhs	Then the loss of ₹ 50 lakhs (300-250) to be immediately recognized by X Ltd. in its books and profit of ₹ 40 lakhs (290-250) should be amortized/ deferred over lease period.

MTP / RTP / Past Exam

Question 1 (MTP Aug'18) (RTP Nov'19, May'21, May'24)

Sun Limited wishes to obtain a machine costing Rs. 30 lakhs by way of lease. The effective life of the machine is 14 years, but the company requires it only for the first 5 years. It enters into an agreement with Star Ltd., for a lease rental for Rs. 3 lakhs p.a. payable in arrears and the implicit rate of interest is 15%. The chief accountant of Sun Limited is not sure about the treatment of these lease rentals and seeks your advise. You are required to explain the necessary accounting treatment in line with AS 19. (use annuity factor at @ 15% for 3 years as 3.36) **(5 Marks)**

Solution:

As per AS 19 'leases', a lease will be classified as finance lease if at the inception of the lease, the present value of minimum lease payment amounts to at least substantially all of the fair value of leased asset. In the given case, the implicit rate of interest is given at 15%. The present value of minimum lease payments at 15% using PV- Annuity Factor can be computed as:

Annuity Factor (Year 1 to Year 5) 3.36 (approx.)

Present Value of minimum lease payments (Rs. 3 lakhs each year) Rs. 10.08 lakhs (approx.)

Thus present value of minimum lease payments is Rs. 10.08 lakhs and the fair value of the machine is Rs. 30 lakhs. In a finance lease, lease term should be for the major part of the economic life of the asset even if title is not transferred. However, in the given case, the effective useful life of the machine is 14 years while the lease is only for five years. Therefore, lease agreement is an operating lease.

Lease payments under an operating lease should be recognized as an expense in the statement of profit and loss on a straight line basis over the lease term unless another systematic basis is more representative of the time pattern of the user's benefit.

Question 2 (MTP April'21, April'22)

You are required to give the necessary journal entry at the inception of lease to record the asset taken on finance lease in books of lessee from the following information:

Lease period = 5 years;

Annual lease rents = Rs. 50,000 at the end of each year.

Guaranteed residual value = Rs. 25,000

Fair Value at the inception (beginning) of lease = Rs. 2,00,000

Interest rate implicit on lease is = 12.6% (Discounted rates for year 1 to 5 are .890, .790, .700, .622 and .552 respectively). **(5 Marks)**

Solution:

Present value of minimum lease payment is computed below:

Year	MLP Rs.	DF (12.6%)	PV Rs.
1	50,000	0.890	44,500
2	50,000	0.790	39,500
3	50,000	0.700	35,000
4	50,000	0.622	31,100
5	50,000	0.552	27,600
5	25,000	0.552	13,800
			1,91,500

Present value of minimum lease payment = Rs. 1,91,500 Fair value of leased asset = Rs. 2,00,000 As per AS 19, on the date of inception of Lease, Lessee should show it as an asset and corresponding iability at lower of Fair value of leased asset at the inception of the lease and present value of minimum lease

payments from the standpoint of the lessee. The accounting entry at the inception of lease to record the asset taken on finance lease in books of lessee is suggested below:

		Rs.	Rs.
Asset A/c	Dr.	1,91,500	
To Lessor (Lease Liability) A/c			1,91,500
(Being recognition of finance lease as asset and liability)			

Question 3 (RTP May'19)(MTP Sep '23)

Aksat International Limited has given a machinery on lease for 36 months, and its useful life is 60 months. Cost & fair market value of the machinery is Rs. 5,00,000. The amount will be paid in 3 equal annual installments and the lessee will return the machinery to lessor at termination of lease. The unguaranteed residual value at the end of 3 years is Rs. 50,000. IRR of investment is 10% and present value of annuity factor of Rs. 1 due at the end of 3 years at 10% IRR is 2.4868 and present value of Rs. 1 due at the end of 3rd year at 10% IRR is 0.7513.

You are required to comment with reason whether the lease constitute finance lease or operating lease. If it is finance lease, calculate unearned finance income. **(5 Marks)**

Solution:

Determination of Nature of Lease

Present value of unguaranteed residual value at the end of 3rd year = Rs. 50,000 x 0.7513= Rs. 37,565

Present value of lease payments = Rs. 5,00,000 – Rs. 37,565= Rs. 4,62,435

The percentage of present value of lease payments to fair value of the equipment is (Rs. 4,62,435/ Rs. 5,00,000) x 100 = 92.487%.

Since, lease payments substantially covers the major portion of the fair value; the lease constitutes finance lease.

Calculation of Unearned Finance Income

Annual lease payment = Rs. 4,62,435/ 2.4868 = Rs. 1,85,956 (approx.)

Gross investment in the lease = Total minimum lease payments + unguaranteed residual value

= (Rs. 1,85,956 × 3) + Rs. 50,000

= Rs. 5,57,868 + Rs. 50,000 = Rs. 6,07,868

Unearned finance income

= Gross investment - Present value of minimum lease payments and unguaranteed residual value

= Rs. 6,07,868 – Rs. 5,00,000 = Rs. 1,07,868

Question 4 (RTP May'18, May'23)

WIN Ltd. has entered into a three year lease arrangement with Tanya sports club in respect of Fitness Equipment's costing ₹ 16,99,999.50. The annual lease payments to be made at the end of each year are structured in such a way that the sum of the Present Values of the lease payments and that of the residual value together equal the cost of the equipments leased out. The unguaranteed residual value of the equipment at the expiry of the lease is estimated to be ₹ 1,33,500. The assets would revert to the lessor at the end of the lease. Given that the implicit rate of interest is 10%.

You are required to calculate the amount of the annual lease payment and the unearned finance income. Discounting Factor at 10% for years 1, 2 and 3 are 0.909, 0.826 and 0.751 respectively.

Solution:

I. Computation of annual lease payment to the lessor

	₹

Cost of equipment	16,99,999.50
Unguaranteed residual value	1,33,500.00
Present value of residual value after third year @ 10% (₹ 1,33,500 × 0.751)	1,00,258.50
Fair value to be recovered from lease payments (₹ 16,99,999.5– ₹ 1,00,258.5)	15,99,741.00
Present value of annuity for three years is 2.486	
Annual lease payment = ₹ 15,99,741/ 2.486	6,43,500.00

II. Computation of Unearned Finance Income

	₹
Total lease payments (₹ 6,43,500 x 3)	19,30,500
Add: Unguaranteed residual value	1,33,500
Gross investment in the lease	20,64,000.00
Less: Present value of investment (lease payments and residual value) (₹ 1,00,258.5+ ₹ 15,99,741)	(16,99,999.50)
Unearned finance income	3,64,000.50

Question 5 (RTP Nov '23)

Jaya Ltd. took a machine on lease from Deluxe Ltd., the fair value being ₹ 11,50,000. Economic life of the machine as well as lease term is 4 years. At the end of each year, lessee pays ₹ 3,50,000 to lessor. Jaya Ltd. has guaranteed a residual value of ₹ 70,000 on expiry of the lease to Deluxe Ltd., however Deluxe Ltd. estimates that residual value will be only ₹ 25,000. The implicit rate of return is 10% p.a. and present value factors at 10% are : 0.909, 0.826, 0.751 and 0.683 at the end of 1st, 2nd, 3rd and 4th year respectively.

Calculate the value of machinery to be considered by Jaya Ltd. and the value of the lease liability as per AS-19

Solution:

According to para 11 of AS 19 "Leases", the lessee should recognise the lease as an asset and a liability at an amount equal to the fair value of the leased asset at the inception of the finance lease. However, if the fair value of the leased asset exceeds the present value of the minimum lease payments from the standpoint of the lessee, the amount recorded as an asset and a liability should be the present value of the minimum lease payments from the standpoint of the lessee.

In calculating the present value of the minimum lease payments the discount rate is the interest rate implicit in the lease. Present value of minimum lease payments will be calculated as follows:

Year	Minimum Lease Payment ₹	Internal rate of return (Discount rate @10%)	Present value ₹
1	3,50,000	0.909	3,18,150
2	3,50,000	0.826	2,89,100
3	3,50,000	0.751	2,62,850
4	4,20,000*	0.683	2,86,860
Total	14,70,000		11,56,960

Present value of minimum lease payments ₹ 11,56,960 is more than fair value at the inception of lease i.e. ₹ 11,50,000, therefore, the lease liability and machinery should be recognized in the books at ₹ 11,50,000 as per AS 19.

* Minimum Lease Payment of 4th year includes guaranteed residual value amounting i.e.

3,50,000 + 70,000 = 4,20,000.

MCQs

1. A Ltd. sold machinery having WDV of ₹ 40 lakhs to B Ltd. for ₹ 50 lakhs (Fair value ₹ 50 lakhs) and same machinery was leased back by B Ltd. to A Ltd. The lease back is in nature of operating lease. The treatment will be

(a) A Ltd. should amortise the profit of ₹ 10 lakhs over lease term.

(b) A Ltd. should recognise the profit of ₹ 10 lakhs immediately.

(c) A Ltd. should defer the profit of ₹ 10 lakhs.

(d) B Ltd. should recognise the profit of ₹ 10 lakhs immediately.

2. In case of an operating lease – identify which statement is correct:

(a) The lessor continues to show the leased asset in its books of accounts.

(b) The lessor de-recognises the asset from its Balance Sheet.

(c) The lessor discontinues to claim depreciation in its books.

(d) The lessee recognises the asset in its Balance Sheet.

3. In case of finance lease, if the asset is returned back to the lessor at the end of the lease term - the lessee always claims depreciation based on which of the following:

(a) Useful life.

(b) Lease term.

(c) Useful life or lease term whichever is less.

(d) Useful life or lease term whichever is higher.

4. AS 19 lays down 5 deterministic conditions to classify the lease as a finance lease. To classify the lease as an operating lease – which statement is correct?

(a) Any 1 condition fails.

(b) Majority of the 5 conditions fail.

(c) All 5 conditions fail.

(d) Any 2 conditions fails.

5. The basis of classification of a lease is:

(a) Control Test.

(b) Risk and reward Test.

(c) Both control test and risk and reward test.

(d) Only reward Test

ANSWERS/SOLUTIONS

MCQs

1. (b) 2. (a) 3. (c) 4. (c) 5. (b)

SOLVED EXAMPLE

Example 1

Annual lease rents = ₹ 50,000 at the end of each year.

Lease period = 5 years;

Guaranteed residual value = ₹ 25,000

Unguaranteed residual value (UGR) = ₹ 15,000

Fair Value at the inception (beginning) of lease = ₹ 2,00,000

Interest rate implicit on lease is computed below:

Interest rate implicit on lease is a discounting rate at which present value of minimum lease payments and unguaranteed residual value is ₹ 2 lakhs.

PV of minimum lease payments and unguaranteed residual value at guessed rate 10%

Year	MLP + UGR	DF (10%)	PV
	₹		₹
I	50,000	0.909	45,450
2	50,000	0.826	41,300
3	50,000	0.751	37,550
4	50,000	0.683	34,150
5	50,000	0.621	31,050
5	25,000	0.621	15,525
5	15,000	0.621	9,315
			2,14,340

PV of minimum lease payments and unguaranteed residual value at guessed rate 14%

Year	MLP + UGR	DF (14%)	PV
	₹		₹
1	50,000	0.877	43,850
2	50,000	0.769	38,450
3	50,000	0.675	33,750
4	50,000	0.592	29,600
5	50,000	0.519	25,950
5	25,000	0.519	12,975
5	15,000	0.519	7,785
			1,92,360

Interest rate implicit on lease is computed below by interpolation:

Interest rate implicit on lease =10% + $\frac{14\% - 10\%}{2,14,340 - 1,92,360}$(2,14,340 2,00,000) 12.6%

Example 2

Annual lease rents = ₹ 50,000 at the end of each year.

Lease period = 5 years;

Guaranteed residual value = ₹ 25,000

Unguaranteed residual value (UGR) = ₹ 15,000

Fair Value at the inception (beginning) of lease = ₹ 2,00,000

Interest rate implicit on lease is =12.6%

Present value of minimum lease payment is computed below:

Year	MLP	DF (12.6%)	PV
	₹	₹	
1	50,000	0.890	44,500
2	50,000	0.790	39,500
3	50,000	0.700	35,000
4	50,000	0.622	31,100
5	50,000	0.552	27,600
5	25,000	0.552	13,800
			1,91,500

Present value of minimum lease payment = ₹ 1,91,500

Fair value of leased asset = ₹ 2,00,000

The accounting entry at the inception of lease to record the asset taken on finance lease in books of lessee is suggested below:

		₹	₹
Asset A/c	Dr.	1,91,500	
To Lessor (Lease Liability) A/c			1,91,500
(Being recognition of finance lease as asset and liability)			

		₹	₹
Asset A/c	Dr.	1,91,500	
To Lessor (Lease Liability) A/c			1,91,500
(Being recognition of finance lease as asset and liability)			

Example 3

Using data for example 2 and assuming zero residual value, allocation of finance charge over lease period is shown below:

Year	Minimum Lease Payments ₹	Finance Charge (12.6%)₹	Principal ₹	Principal due ₹
0	--	--	--	1,91,500
1	50,000	24,129	25,871	1,65,629
2	50,000	20,869	29,131	1,36,498
3	50,000	17,199	32,801	1,03,697
4	50,000	13,066	36,934	66,763
5	75,000	8,237*	66,763	
	2,75,000	83,500	1,91,500	

Accounting entries in year 1 to recognise the finance charge in books of lessee are suggested below:

		₹	₹
Finance Charge A/c	Dr.	24,129	
To Lessor			24,129
(Being finance charge due for the year)			
Lessor	Dr.	50,000	
To Bank A/c			50,000
(Being payment of lease rent for the year)			
P & L A/c	Dr.	24,129	
To Finance Charge A/c			24,129
(Being recognition of finance charge as expense for the year)			

Example 4

In example 2, suppose unguaranteed residual value is not determinable and lessee's incremental borrowing rate is 10%.

Since interest rate implicit on lease is discounting rate at which present value of minimum lease payment and present value of unguaranteed residual value equals the fair value, interest rate implicit on lease cannot be determined unless unguaranteed residual value is known. If interest rate implicit on lease is not determinable, the present value of minimum lease payments should be determined using lessee's incremental borrowing rate.

Present value of minimum lease payment using lessee's incremental borrowing rate 10% is computed below:

Year	MLP ₹	DF (10%)	PV ₹
1	50,000	0.909	45,450
2	50,000	0.826	41,300
3	50,000	0.751	37,550
4	50,000	0.683	34,150
5	50,000	0.621	31,050
5	25,000	0.621	15,525
			2,05,025

Present value of minimum lease payment = ₹ 2,05,025

Fair value of leased asset = ₹ 2,00,000

The accounting entry at the inception of lease to record the asset taken on finance lease in books of lessee is suggested below:

		₹	₹
Asset A/c	Dr.	2,00,000	
To Lessor (Lease Liability)			2,00,000
(Being recognition of finance lease as asset and liability)			

Since the liability is recognised at fair value ₹ 2 lakh (total principal), we need to ascertain a discounting rate at which present value minimum lease payments equals ₹ 2 lakh. The discounting rate can then be used for allocation of finance charge over lease period.

PV of minimum lease payments at guessed rate 12%.

Year	Minimum Lease	DF (12%)	PV ₹

	Payments		
1	50,000	0.893	44,650
2	50,000	0.797	39,850
3	50,000	0.712	35,600
4	50,000	0.636	31,800
5	50,000	0.567	28,350
5	25,000	0.567	14,175
			1,94,425

Required discounting rate = 10%+ $\frac{12\% - 10\%}{2{,}05{,}025 - 1{,}94{,}425}$ (2,05,025 2,00,000) 10.95%

Allocation of finance charge over lease period is shown below:

Year	Minimum Lease Payments	Finance Charge (10.95%)	Principal	Principal due
	₹	₹	₹	₹
0	--	--	--	2,00,000
1	50,000	21,900	28,100	1,71,900
2	50,000	18,823	31,177	1,40,723
3	50,000	15,409	34,591	1,06,132
4	50,000	11,621	38,379	67,753
5	75,000	7,247*	67,753	
	2,75,000	75,000	2,00,000	

Accounting entries in year 1 to recognise the finance charge in books of lessee are suggested below:

		₹	₹
Finance Charge A/c	Dr.	21,900	
To Lessor			21,900
(Being finance charge due for the year)			
Lessor	Dr.	50,000	
To Bank A/c			50,000
(Being payment of lease rent for the year)			
P & L A/c	Dr.	21,900	
To Finance Charge			21,900
(Being recognition of finance charge as expense for the year)			