

# **Ind AS 116**

# **LEASES**

#### SM 1. **Short-term lease**

#### Scenario A:

A lessee enters into a lease with a nine-month non-cancellable term with an option to extend the lease for four months. The lease does not have a purchase option. At the lease commencement date, the lessee is reasonably certain to exercise the extension option because the monthly lease payments during the extension period are significantly below market rates. Whether the lessee can take a short-term exemption in accordance with Ind AS 116?

#### Scenario B:

Assume the same facts as Scenario A except, at the lease commencement date, the lessee is not reasonably certain to exercise the extension option because the monthly lease payments during the optional extension period are at what the lessee expects to be market rates and there are no other factors that would make exercise of the renewal option reasonably certain. Will your answer be different in this case?

#### Ans.

#### Scenario A:

As the lessee is reasonably certain to exercise the extension option (Refer section 3.2 lease term), the lease term is greater than 12 months (i.e., 13 months). Therefore, the lessee will not account for the lease as a short-term lease.

#### Scenario B:

In this case, the lease term is less than 12 months, i.e., nine months. Thus, the lessee may account for the said lease under the short-term lease exemption, i.e., it recognises lease payments as an expense on either a straightline basis over the lease term or another systematic basis

#### SM 2. Asset implicitly specified in a contract

Customer XYZ enters into a ten-year contract with Supplier ABC for the use of rolling stock specifically designed for Customer XYZ.

The rolling stock is designed to transport materials used in Customer XYZ's production process and is not suitable for use by other customers. The rolling stock is not explicitly specified in the contract but, Supplier ABC owns only one rolling stock that is suitable for Customer XYZ's use. If the rolling stock does not operate properly, the contract requires Supplier ABC to repair or replace the rolling stock.

Whether there is an identified asset?

#### Ans.

Yes, the said rolling stock is an identified asset.

Though the rolling stock is not explicitly specified in the contract (e.g., by serial number), it is implicitly specified because Supplier ABC must use it to fulfil the contract.

### Asset implicitly specified in a contract

Customer XYZ enters into a ten-year contract with Supplier ABC for the use of a car. The specification of the car is specified in the contract (i.e., brand, type, colour, options, etc.). At inception of the contract, the car is not yet

Whether there is an identified asset?

### Ans.

Yes, the said car is an identified asset.

Though the car cannot be identified at inception of the contract, it is implicitly specified at the time the same will be made available to Customer XYZ.

# SM 4. Substantive Substitution Rights

#### Scenario A:

An electronic data storage provider (supplier) provides services through a centralised data centre that involve the use of a specified server (Server No. 10). The supplier maintains many identical servers in a single accessible location and determines, at inception of the contract, that it is permitted to and can easily substitute another server without the customer's consent throughout the period of use.

Further, the supplier would benefit economically from substituting an alternative asset, because doing this would allow the supplier to optimise the performance of its network at only a nominal cost. In addition, the supplier has made clear that it has negotiated this right of substitution as an important right in the arrangement, and the substitution right affected the pricing of the arrangement.

Whether the substitution rights are substantive and whether there is an identified asset?

#### Scenario B:

Assume the same facts as in Scenario A except that Server No. 10 is customised, and the supplier does not have the practical ability to substitute the customised asset throughout the period of use. Additionally, it is unclear whether the supplier would benefit economically from sourcing a similar alternative asset.

Whether the substitution rights are substantive and whether there is an identified asset?

#### Ans.

### Scenario A:

The customer does not have the right to use an identified asset because, at the inception of the contract, the supplier has the practical ability to substitute the server and would benefit economically from such a substitution. Thus, there is no identified asset.

However, if the customer could not readily determine whether the supplier had a substantive substitution right (for e.g., there is insufficient transparency into the supplier's operations), the customer would presume the substitution right is not substantive and conclude that there is an identified asset.

# Scenario B:

The substitution right is not substantive, and Server No. 10 would be an identified asset because the supplier does not have the practical ability to substitute the asset and there is no evidence of economic benefit to the supplier for substituting the asset. In this case, neither of the conditions of a substitution right is met (whereas both the conditions must be met for the supplier to have a substantive substitution right). Therefore, Server No 10 will be considered as an identified asset.

# SM 5. Identified Asset – Physically Distinct):

Customer XYZ enters into a 15-year contract with Supplier ABC for the right to use five fibres within a fibre optic cable between Mumbai and Pune. The contract identifies five of the cable's 25 fibres for use by Customer XYZ. The five fibres are dedicated solely to Customer XYZ's data for the duration of the contract term. Assume that Supplier ABC does not have a substantive substitution right.

Whether there is an identified asset?

#### Ans.

Yes, the said five fibres are identified assets because they are physically distinct and explicitly specified in the contract.

# SM 6. Identified Asset – Not Physically Distinct

Scenario A:

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Customer XYZ enters into a ten-year contract with Supplier ABC for the right to transport oil from India to Bangladesh through Supplier ABC's pipeline. The contract provides that Customer XYZ will have the right to use of 95% of the pipeline's capacity throughout the term of the arrangement.

Whether there is an identified asset?

#### Scenario B:

Assume the same facts as in Scenario A, except that Customer XYZ has the right to use 65% of the pipeline's capacity throughout the term of the arrangement.

Whether there is an identified asset?

#### Ans.

#### Scenario A:

Yes, the capacity portion of the pipeline is an identified asset.

While 95% of the pipeline's capacity is not physically distinct from the remaining capacity of the pipeline, it represents substantially all of the capacity of the entire pipeline and thereby provides Customer XYZ with the right to obtain substantially all of the economic benefits from use of the pipeline.

#### Scenario B:

No, the capacity portion of the pipeline is NOT an identified asset.

Since 65% of the pipeline's capacity is less than substantially all of the capacity of the pipeline, Customer XYZ does not have the right to obtain substantially all of the economic benefits from use of the pipeline.

#### SM 7. Right to use for a portion of the term of contract

ABC Ltd enters into a contract with XYZ Ltd, which grants ABC Ltd exclusive rights to use a specific grain storage facility over a five-year period in the months of May and June. During these months, ABC Ltd has the right to decide which crops are placed in storage and when to remove them. XYZ Ltd provides the loading and unloading services for the warehouse activities. During the other ten months each year, XYZ Ltd has the right to determine how the warehouse will be used.

Which party has the right to control the use of the identified asset during the period of use?

### Ans.

In the above case, ABC Ltd has the right to control the use of the identified asset during the period of use because they have the power to determine how the warehouse will be used during the contractually defined usage periods. The analysis should focus on the rights and economics of the use of the warehouse for the specified usage periods (May and June). During the period of use, ABC Ltd has the rights to determine how much of a crop to place in storage, and the timing of placing and removing it from storage. These rights are more significant to the economics of the use of the asset than the loading and unloading services performed by XYZ Ltd during the same period. ABC Ltd receives all of the economic benefit from use of the asset during those specified time periods. Therefore, contract contains a lease for the specified period of term.

#### SM 8. Right to obtain substantially all of the economic benefits

Company MNO enters into a 15-year contract with Power Company PQR to purchase all of the electricity produced by a new solar farm. PQR owns the solar farm and will receive tax credits relating to the construction and ownership of the solar farm, and MNO will receive renewable energy credits that accrue from use of the solar farm.).

Who has the right to substantial benefits from the solar farm?

#### Ans.

Company MNO has the right to obtain substantially all of the economic benefits from use of the solar farm over the 15-year period because it obtains:

the electricity produced by the farm over the lease term - i.e. the primary product fromuse of the asset; and

• the renewable energy credits — i.e. the by-product from use of the asset.

Although PQR receives economic benefits from the solar farm in the form of tax credits, these economic benefits relate to the ownership of the solar farm. The tax credits do not relate to use of the solar farm and therefore are not considered in this assessment.

# SM 9. Right to direct the use of an asset

Customer X enters into a contract with Supplier Y to use a vehicle for a five-year period. The vehicle is identified in the contract. Supplier Y cannot substitute another vehicle unless the specified vehicle is not operational (for e.g., if it breaks down). Under the contract:

- Customer X operates the vehicle (i.e., drives the vehicle) or directs others to operate thevehicle (for e.g., hires a driver).
- Customer X decides how to use the vehicle (within contractual limitations). For example, throughout the period of use, Customer X decides where the vehicle goes, as well as whenor whether it is used and what it is used for. Customer X can also change these decisionsthroughout the period of use.
- Supplier Y prohibits certain uses of the vehicle (for e.g., moving it overseas) andmodifications to the vehicle to protect its interest in the asset.

Whether Customer X has the right to direct the use of the vehicle throughout the period of lease?

#### Ans.

Yes, Customer X has the right to direct the use of the identified vehicle throughout the period of use because it has the right to change how the vehicle is used, when or whether the vehicle is used, where the vehicle goes and what the vehicle is used for.

Supplier Y's limits on certain uses for the vehicle and modifications to it are considered protective rights that define the scope of Customer X's use of the asset, but do not affect the assessment of whether Customer X directs the use of the asset.

#### SM 10. Right to direct the use of an asset

Entity A contracts with Supplier H to manufacture parts in a facility. Entity A designed the facility and provided its specifications. Supplier H owns the facility and the land. Entity A specifies how many parts it needs and when it needs the parts to be available. Supplier H operates the machinery and makes all operating decisions including how and when the parts are to be produced, as long as it meets the contractual requirements to deliver the specified number on the specified date. Assuming supplier H cannot substitute the facility and hence is an identified asset. Which party has the right to control the use of the identified asset (i.e., equipment) during the period of use?

#### Ans.

Entity A does not direct the use of the asset that most significantly drives the economic benefits because Supplier H determines how and when the equipment is operated once the contract is signed. Therefore, Supplier H has the right to control the use of the identified asset during the period of use. Although Entity A stipulates the product to be provided and has input into the initial decisions regarding the use of the asset through its involvement in the design of the asset, it does not have decision making rights over how and for what purpose the asset will be used over the asset during the period of use. This arrangement is a supply agreement, not a lease.

# SM 11. Right to direct the use of an asset

Entity L enters into a five—year contract with Company A, a ship owner, for the use of an identified ship. Entity L decides whether and what cargo will be transported, and when and to which ports the ship will sail throughout the period of use, subject to restrictions specified in the contract. These restrictions prevent Entity L from sailing the ship into waters at a high risk of piracy or carrying explosive materials as cargo. Company A operates and maintains the ship, and is responsible for safe passage.

Who has the right to direct the use of the ship during the period of use?

#### Ans.



Entity L has the right to direct the use of the ship. The contractual restrictions are protective rights. In the scope of its right of use, Entity L determines how and for what purpose the ship is used throughout the five — year period because it decides whether, where and when the ship sails, as well as the cargo that it will transport. Entity L has the right to change these decisions throughout the period of use. Therefore, the contract contains a lease.

# SM 12. Identifying and separating lease components

#### Scenario A:

A lessee enters a lease of an excavator and the related accessories (for e.g., excavator attachments) that are used for mining purposes. The lessee is a local mining company that intends to use the excavator at a copper mine. How many lease and non-lease components are there?

#### Scenario B:

Assume the same facts as in Scenario A, except that the contract also conveys the right to use an additional loading truck. This loading truck could be deployed by the lessee for other uses (for e.g., to transport iron ores at another mine).

#### Ans.

#### Scenario A:

The lessee would be unable to benefit from the use of the excavator without also using the accessories. Therefore, the excavator is dependent upon the accessories. Thus, from the perspective of the lessee, the contract contains one lease component.

#### Scenario B:

The lessee can benefit from the loading truck on its own or together with other readily available resources because the loading truck could be deployed for other uses independent of the excavator. The lessee can also benefit from the use of the excavator on its own or together with other readily available resources.

Thus, from the perspective of the lessee, the contract contains two lease components, viz., a lease of the excavator (together with the accessories) and a lease of the loading truck.

# SM 13. Identifying different components in the contract

Entity L rents an office building from Landlord M for a term of 10 years. The rental contract stipulates that the office is fully furnished and has a newly installed and tailored HVAC system. It also requires Landlord M to perform all common area maintenance (CAM) during the term of the arrangement. Entity L makes single monthly rental payment and does not pay for the maintenance separately. The office building has a useful life of 40 years and the HVAC system and office furniture each has a life of 15 years.

What are the units of account in the lease?

# Ans.

There are three components in the arrangement - the building assets (office building and HVAC), the office furniture, and the maintenance agreement.

The office building and HVAC system are one lease component because they cannot function independently of each other. The HVAC system was designed and tailored specifically to be integrated into the office building and cannot be removed and used in another building without incurring substantial costs. These building assets are a lease component because they are identified assets for which Entity L directs the use.

The office furniture functions independently and can be used on its own. It is also a lease component because it is a group of distinct assets for which Entity L directs the use.

The maintenance agreement is a non-lease component because it is a contract for service and not for the use of a specified asset.

# Activities which are not components of a lease contract

#### Scenario A:

A lessee enters into a five-year lease of equipment, with fixed annual payments of ₹ 10,000. The contract contains fixed annual payments as follows: ₹ 8,000 for rent, ₹ 1,500 for maintenance and ₹ 500 of administrative tasks. How the consideration would be allocated?

#### Scenario B:

Assume the fact pattern as in scenario A except that, in addition, the contract requires the lessee to pay for the restoration of the equipment to its original condition. How the consideration would be allocated?

#### Ans.

#### Scenario A:

The contract contains two components, viz., a lease component (lease of equipment) and a non-lease component (maintenance). The amount paid for administrative tasks does not transfer a good or service to the lessee.

Assuming that the lessee does not elect to use the practical expedient as per para 15 of Ind AS 116, both the lessee and the lessor account for the lease of equipment and maintenance components separately and the administration charge is included in the total consideration to be allocated between those components. Therefore, the total consideration in the contract of ₹ 50,000 will be allocated to the lease component (equipment) and the non-lease component (maintenance).

#### Scenario B:

The contract still contains two components, viz., a lease component (lease of equipment) and a non-lease component (maintenance). Similar to the amount paid for administrative tasks, the restoration does not transfer a good or service to the lessee as it is only performed at the end of the lease term.

Therefore, the total consideration in the contract of ₹ 50,000 will be allocated to the lease component (equipment) and the non-lease component (maintenance).

# SM 15. Allocating contract consideration to lease and non-lease components – Lessees

A lessee enters into a lease of an equipment. The contract stipulates the lessor will perform maintenance of the leased equipment and receive consideration for that maintenance service. The contract includes the following fixed prices for the lease and non-lease component:

Lease	₹ 80,000
Maintenance	₹ 10,000
Total	₹ 90,000

Assume the stand-alone prices cannot be readily observed, so the lessee makes estimates, maximising the use of observable information, of the lease and non-lease components, as follows:

Lease	₹ 85,000
Maintenance	₹ 15,000
Total	₹1,00,000

In the given scenario, assuming lessee has not opted the practical expedient, how will the lessee allocate the consideration to lease and non-lease component?



#### Ans.

The stand-alone price for the lease component represents 85% (i.e., ₹ 85,000 / ₹ 1,00,000) of total estimated stand-alone prices. The lessee allocates the consideration in the contract (i.e., ₹ 90,000), as follows:

Lease	* ₹ 76,500
Maintenance	** ₹ 13,500
Total	₹ 90,000
*₹90,000 x 85%	
**₹90,000 x 15%	

# SM 16. Determining the lease term

# Scenario A:

Entity ABC enters into a lease for equipment that includes a non-cancellable term of six years and a two-year fixedpriced renewal option with future lease payments that are intended to approximate market rates at lease inception. There are no termination penalties or other factors indicating that Entity ABC is reasonably certain to exercise the renewal option. What is the lease term?

#### Scenario B:

Entity XYZ enters into a lease for a building that includes a non-cancellable term of eight years and a two-year, market-priced renewal option. Before it takes possession of the building, Entity XYZ pays for leasehold improvements. The leasehold improvements are expected to have significant value at the end of eight years, and that value can only be realised through continued occupancy of the leased property. What is the lease term?

#### Scenario C:

Entity PQR enters into a lease for an identified retail space in a shopping centre. The retail space will be available to Entity PQR for only the months of October, November and December during a non-cancellable term of seven years. The lessor agrees to provide the same retail space for each of the seven years. What is the lease term?

#### Ans.

#### Scenario A:

At the lease commencement date, the lease term is six years (being the non-cancellable period). The renewal period of two years is not taken into consideration since it is mentioned that Entity ABC is not reasonably certain to exercise the option.

#### Scenario B:

At the lease commencement, Entity XYZ determines that it is reasonably certain to exercise the renewal option because it would suffer a significant economic penalty if it abandoned the leasehold improvements at the end of the initial non-cancellable period of eight years. Thus, at the lease commencement, Entity XYZ concludes that the lease term is ten years (being eight years of non-cancellable period plus the renewal period of two years where the lessee is reasonably certain to exercise the option).

#### Scenario C:

At the lease commencement date, the lease term is 21 months (three months per year over the seven annual periods as specified in the contract), i.e., the period over which Entity PQR controls the right to use the underlying asset.

# SM 17. Re-assessment of exercise of lease extension option

Retailer M enters into a five-year lease for a building floor, followed by two successive five-year renewal options. On the commencement date, Retailer M is not reasonably certain to exercise the extension option. At the end of third year, Retailer M extended to include another floor from year 4 due to a business acquisition. For this purpose, the lessee concludes a separate seven-year lease for an additional floor in the building already leased. Is Retailer M required to reassess the lease term in this case?

#### Ans.

Ind AS 116 requires a lessee to reassess the lease term if there is change in business decision of the company which is directly relevant to exercising or not exercising an option to renew / extend the lease. In the given case, the Retailer M at the end of third year has extended to include another floor in the same building on account of acquiring another company. As Retailer M has entered into fresh lease of another floor for a seven-year term, it is reasonably certain to exercise the renewal option of original lease for a further five-year term. Hence Retailer M will have to reassess the lease term at the end of third year.

# SM 18. Re-assessment of non-cancellable period of lease

Company N has taken 10 vehicles on lease for an initial period of 5 years with an extension option at the option of the lessee for a further period of 5 years at the same rental amount. The remaining useful life of the vehicles as on the commencement date of the lease is 15 years. Company N has determined at the commencement date that it is reasonably certain to exercise the extension option and hence it has taken a period of 10 years for the lease. At the end of 4th year, there is an announcement by the government that all the cars of this particular model have to be discontinued from the road within 1 year due to the change in the pollution norms in the country. Will the lease term be reassessed in this case?

#### Ans.

In the given case, as per Ind AS 116, the announcement by the government to discontinue the use of the underlying asset will prohibit the lessee from exercising the extension option that was already included in the non-cancellable period by Company N and hence, Company N will reassess the non-cancellable period to exclude the extension option of 5 years.

# SM 19. Determining the fixed payments

Entity M and Lessor A enter into a 10-year lease of an office building for fixed annual lease payments of ₹ 200,000. Per the terms of the lease agreement, annual fixed lease payments comprise ₹ 170,000 for rent and ₹ 30,000 for real estate taxes.

What are the fixed lease payments for purposes of classifying the lease?

# Ans.

The fixed lease payments are  $\stackrel{?}{\stackrel{?}{?}}$  2,00,000. Although real estate taxes are explicitly stated in the lease contract, they do not represent a separate non-lease component as they do not provide a separate good or service. The right to use the office building is the only component. The annual lease payments of  $\stackrel{?}{\stackrel{?}{?}}$  2,00,000 represent payments related to that single lease component.

# SM 20. In substance fixed lease payments

Entity Q enters into a seven-year lease for a piece of machinery. The contract sets out the lease payments as follows.

- If Q uses the machinery within a given month, then an amount of 2,000 accrues for that month.
- If Q does not use the machinery within a given month, then an amount of 1,000 accrues for that month.

What is considered as lease payment in this case?



#### Ans.

Q considers the contract and notes that although the lease payments contain variability based on usage, and there is a realistic possibility that Q may not use the machinery in some months, a monthly payment of 1,000 is unavoidable. Accordingly, this is an in-substance fixed payment, and is included in the measurement of the lease liability.

#### SM 21. In-substance fixed lease payment

Entity P enters into a five-year lease for office space with Entity Q. The initial base rent is ₹1 lakh per month. Rents increase by the greater of 1% of Entity P's generated sales or 2% of the previous rental rate on each anniversary of the lease commencement date. What are the lease payments for purposes of measuring lease liability?

#### Ans.

In the given case, the lease payments for purposes of classifying the lease are the fixed monthly payments of ₹ 1 lakh plus the minimum annual increase of 2% of the previous rental rate. Entity P is required to pay no less than a 2% increase regardless of the level of sales activity; therefore, this minimum level of increase is in substance fixed lease payment.

# SM 22. In substance fixed lease payments

Company N leases a production line. The lease payments depends on the number of operating hours of the production line – i.e., N has to pay ₹ 1,000 per hour of use. The annual minimum payment is ₹ 10,00,000. The expected usage per year is 1,500 hours

#### Ans.

The lease contains in substance fixed payments of ₹ 10,00,000 per year, which are included in the initial measurement of the lease liability. The additional ₹ 5,00,000 that Company N expects to pay per year are variable payments that do not depend on an index or a rate but usage.

#### SM 23. Variable lease payments that depend on an index or rate

An entity enters into a 10-year lease of property. The lease payment for the first year is ₹ 1,000. The lease payments are linked to the consumer price index (CPI), i.e., not a floating interest rate. The CPI at the beginning of the first year is 100. Lease payments are updated at the end of every second year. At the end of year one, the CPI is 105. At the end of year two, the CPI is 108. What should be included in lease payments?

#### Ans.

At the lease commencement date, the lease payments are ₹ 1,000 per year for 10 years. The entity does not take into consideration the potential future changes in the index. At the end of year one, the payments have not changed and hence, the liability is not updated.

At the end of year two, when the lease payments change, the entity updates the remaining eight lease payments to ₹ 1,080 per year (i.e., ₹ 1,000 / 100 x 108).

#### SM 24. Variable lease payments that do not depend on an index or rate

Entity XYZ is a medical equipment manufacturer and a supplier of the related consumables. Customer ABC operates a medical centre. Under the agreement entered into by both parties, Entity XYZ grants Customer ABC the right to use a medical laboratory machine at no cost and Customer ABC purchases consumables for use in the equipment from Entity XYZ at ₹ 100 each.

The consumables can only be used for that equipment and Customer ABC cannot use other consumables as substitutes. There is no minimum purchase amount required in the contract.

Based on its historical experience, Customer ABC estimates that it is highly likely to purchase at least 8,000 units of consumables annually. Customer ABC has appropriately assessed that the arrangement contains a lease of medical equipment. There are no residual value guarantees or other forms of consideration included in the contract. Whether these payments affect the calculation of lease liability and ROU Asset? How does Entity XYZ and Customer ABC would allocate these lease payments?

#### Ans.

There are two components in the arrangement, viz., a lease of equipment and the purchase of consumables. Even though Customer ABC may believe that it is highly unlikely to purchase lesser than 8,000 units of consumables every year, in this example, there are no lease payments for purposes of initial measurement (for Entity XYZ and Customer ABC) and lease classification (for Entity XYZ).

Entity XYZ and Customer ABC would allocate the payments associated with the future payments to the lease and consumables component of the contract.

# SM 25. Variable lease payments

Entity A enters into a five-year lease of an office building. The lease payments are ₹ 5,00,000 per year and the contract includes an additional water charge calculated as ₹ 0.50 per litre consumed. Payments are due at the end of year. Entity A elects to apply the practical expedient to combine lease and non-lease components

#### Ans.

As stated above, payments are due at the end of the year. Entity A elects to apply the practical expedient not to separate lease and non-lease components.

At the commencement date, Entity A measures the lease liability as the present value of the fixed lease payments (i.e. five annual payments of 5,00,000). Although Entity A has elected to apply the practical expedient to combine non-lease components (i.e. water charges) with the lease component, Entity A excludes the non-lease component from its lease liability because they are variable payments that depend on usage. That is, the nature of the costs does not become fixed just because Entity A has elected not to separate them from the fixed lease payments. Entity A recognises the payments for water – as a variable lease payment – in profit or loss when they are incurred. In contrast, if B does not elect to apply the practical expedient to combine lease and non-lease components, then it recognises the payments for water – as an operating expense – in profit or loss when they are incurred.

# SM 26. Residual value guarantee included in lease payments

An entity (a lessee) enters into a lease and guarantees that the lessor will realise  $\stackrel{?}{\sim}$  20,000 from selling the asset to another party at the end of the lease. At lease commencement, based on the lessee's estimate of the residual value of the underlying asset, the lessee determines that it expects that it will owe  $\stackrel{?}{\sim}$  8,000 at the end of the lease. Whether the lessee should include the said payment of  $\stackrel{?}{\sim}$  8,000 as a lease payment?

#### Ans.

The lessee should include the amount of  $\stackrel{?}{\stackrel{?}{\sim}}$  8,000 as a lease payment because it is expected that it will owe the same to the lessor under the residual value guarantee.

# SM 27. Initial measurement of lease liability

Entity L enters into a lease for 10 years, with a single lease payment payable at the beginning of each year. The initial lease payment is ₹ 100,000. Lease payments will increase by the rate of LIBOR each year. At the date of commencement of the lease, LIBOR is 2 per cent.

Assume that the interest rate implicit in the lease is 5 per cent. How lease liability is initially measured?

#### Ans.

In the given case, the lease payments depend on a rate (i.e., LIBOR) and hence is included in measuring lease liability, As per Ind AS 116, the lease payments should initially be measured using the rate (i.e. LIBOR) as at the commencement date. LIBOR at that date is 2 per cent; therefore, in measuring the lease liability, it is assumed that each year the payments will increase by 2 per cent, as follows

Year	Lease Payment	Discount factor @ 5%	PV of lease payments
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1	1,00,000	1	100,000
2	1,02,000	0.952	97,102
3	1,04,040	0.907	94,364
4	1,06,121	0.864	91,689
5	1,08,243	0.823	89,084
6	1,10,408	0.784	86,560
7	1,12,616	0.746	84,012
8	1,14,869	0.711	81,672
9	1,17,166	0.677	79,321
10	1,19,509	0.645	77,083
			8,80,887

Therefore, the lease liability is initially measured at ₹8,80,887

# SM 28. Measuring right-of-use asset

Entity Y and Entity Z execute a 12-year lease of a railcar with the following terms on January 1, 2016:

- The lease commencement date is February 1, 2016.
- Entity Y must pay Entity Z the first monthly rental payment of ₹ 10,000 upon execution of the lease.
- Entity Z will pay Entity Y ₹ 50,000 cash incentive to enter into the lease payable upon lease execution.

Entity Y incurred ₹ 1,000 of initial direct costs, which are payable on February 1, 2016. Entity Y calculated the initial lease liability as the present value of the lease payments discounted using its incremental borrowing rate because the rate implicit in the lease could not be readily determined; the initial lease liability is ₹850,000.

How would Lessee Company measure and record this lease?

# Ans.

Entity Y would calculate the right-of-use asset as follows: ₹

Initial measurement of lease liability	8,50,000
Lease payments made to Entity Z at or before the commencement date	10,000
Lease incentives received from Entity Z	(50,000)
Initial direct cost	1,000
Initial measurement of right-of-use asset	<u>8,11,000</u>

### SM 29. Dismantling costs to be included in initial measurement of ROU Asset

Company H leases an aircraft for a period of 5 years. The aircraft must undergo a planned check after every 100,000 flight hours. At the end of the lease, company H must have a check performed (or refund the costs to the lessor), irrespective of the actual number of flight hours. What are the lease payments for purposes of calculating ROU asset?

#### Ans.

In the given case, the legal requirement to perform a check after every 1,00,000 flight hours does not directly lead to an obligation as it depends on future circumstances. However, as the check must be carried out at the end of the lease irrespective of the actual number of flight hours gives rise to an obligation.

As a result, company H has to recognize a provision for the costs of the final check ("present value of the expected cost") at the beginning of the lease term. At the same time, these costs must be included in the cost of the right-ofuse (ROU) asset pursuant to para 24 (d) of Ind AS 116.

# SM 30. Lessee Accounting

Entity ABC (lessee) enters into a three-year lease of equipment. Entity ABC agrees to make the following annual

payments at the end of each year:

₹ 20,000 in year one

₹ 30,000 in year two

₹50,000 in year three.

For simplicity purposes, there are no other elements to the lease payments (like purchase options, lease incentives from the lessor or initial direct costs). Assumed a discount rate of 12% (which is Entity ABC's incremental borrowing rate because the interest rate implicit in the lease cannot be readily determined). Entity ABC depreciates the ROU Asset on a straight-line basis over the lease term.

How would Entity ABC would account for the said lease under Ind AS 116?

#### Ans.

At the commencement date, Entity ABC would initially recognise ROU Asset and the corresponding Lease Liability of ₹77,364 which is calculated as follows:

Year	Payments	Discounting Factor	Discounted Cash flows /
	(Cash flows)	@12%	Present Value
1	20,000	0.8929	17,858
2	30,000	0.7972	23,916
3	_50,000	0.7118	<u>35,590</u>
	<u>1,00,000</u>		<u>77,364</u>

Then, the next step would be to prepare a schedule for Lease Liability and ROU Asset as follows:

#### **Lease Liability**

Year	Opening balance	Interest Expense	Payments	Closing balance
1	77,364	9,284	(20,000)	66,648
2	66,648	7,998	(30,000)	44,646
3	44,646	5,354*	(50,000)	-

<sup>\*</sup> Difference of ₹ 4 is due to approximation.

# ROU Asset (assuming no lease incentives, no initial direct costs, etc.):

Year	Opening balance	Depreciation	Closing balance
1	77,364	(25,788)	51,576
2	51,576	(25,788)	25,788
3	25,788	(25,788)	-

At lease commencement, Entity ABC would recognise the Lease Liability and the corresponding ROU Asset as follows:

ROU Asset	Dr.	77,364	
To Lease Liability			77,364
To initially recognise the Lease Liability and the correspo		onding ROU Asset	

The following journal entries would be recorded in the first year:

Interest Expense	Dr.	9,284	
To Lease Liability			9,284
To record interest expense a	and accrete the lease liabilit	y using the effective interest	method (₹ 77,364 x 12%)



Depreciation Expense Dr.	25,788	
To ROU Asset		25,788
To record interest expense and accrete the lease liabilit	ty using the straight line meth	nod (₹ 77,364 / 3 years)

Lease Liability	Dr.	20,000	
To Cash / Bank			20,000
To record lease paymen	nt		

Following is the summary of the said lease contract's accounting (assuming no changes due to reassessment):

Particulars	Initially	Year 1	Year 2	Year 3
Cash lease payments		20,000	30,000	50,000
Lease Expense Recognised:				
Interest Expense		9,284	7,998	5,354
Depreciation Expense		<u>25,788</u>	<u>25,788</u>	<u>25,788</u>
Total Periodic Expense		<u>35,072</u>	<u>33,786</u>	<u>31,142</u>
Balance Sheet:				
ROU Asset	<u>77,364</u>	<u>51,576</u>	<u>25,788</u>	-
Lease Liability	<u>(77,364)</u>	(66,648)	<u>(44,646)</u>	-

# SM 31. Subsequent measurement using cost model

Company EFG enters into a property lease with Entity H. The initial term of the lease is 10 years with a 5- year renewal option. The economic life of the property is 40 years and the fair value of the leased property is ₹ 50 Lacs. Company EFG has an option to purchase the property at the end of the lease term for ₹ 30 lacs. The first annual payment is ₹ 5 lacs with an increase of 3% every year thereafter. The implicit rate of interest is 9.04%. Entity H gives Company EFG an incentive of ₹ 2 lacs (payable at the beginning of year 2), which is to be used for normal tenant improvement.

Company EFG is reasonably certain to exercise that purchase option. How would EFG measure the right-of-use asset and lease liability over the lease term?

### Ans.

As per Ind AS 116, Company EFG would first calculate the lease liability as the present value of the annual lease payments, less the lease incentive paid in year 2, plus the exercise price of the purchase option using the rate implicit in the lease of approximately 9.04%.

Total lease liability	₹ 49,99,648 or ₹ 50,00,000 (approx.)
PV of purchase option at end of lease term (W.N. 2)	₹ 12,60,000
PV of lease payments, less lease incentive (W.N. 1)	₹ 37,39,648

The right-of-use asset is equal to the lease liability because there is no adjustment required for initial direct costs incurred by Company EFG, lease payments made at or before the lease commencement date, or lease incentives received prior to the lease commencement date.

Entity EFG would record the following journal entry on the lease commencement date.

Right-of-use Asset	Dr.	₹5	50,00,000		
To Lease Liability	'		₹ 50,00,000		
To record ROU asset and lease liability at the commencement date.					



Since the purchase option is reasonably certain to be exercised, EFG would amortize the right-of-use asset over the economic life of the underlying asset (40 years). Annual amortization expense would be ₹ 1,25,000 (₹ 50,00,000 / 40 years)

Interest expense on the lease liability would be calculated as shown in the following table. This table includes all expected cash flows during the lease term, including the lease incentive paid by Entity H and Company EFG's purchase option.

Year	Payment	Principal paid at the beginning of the	Interest paid	Interest expense	Lease Liability (end of the year
		year			
	а	b= a-c	c = (d of pvs.	d = [(e of pvs. year-	e = (e of pvs.
			Year)	a) x 9.04%]	Year + d – a)
Commencement					50,00,000
Year 1	5,00,000	5,00,000	-	4,06,800	49,06,800
Year 2	3,15,000*	(91,800)	4,06,800	4,15,099	50,06,899
Year 3	5,30,450	1,15,351	4,15,099	4,04,671	48,81,120
Year 4	5,46,364	1,41,693	4,04,671	3,91,862	47,26,618
Year 5	5,62,754	1,70,892	3,91,862	3,76,413	45,40,277
Year 6	5,79,637	2,03,224	3,76,413	3,58,042	43,18,682
Year 7	5,97,026	2,38,984	3,58,042	3,36,438	40,58,094
Year 8	6,14,937	2,78,499	3,36,438	3,11,261	37,54,418
Year 9	6,33,385	3,22,124	3,11,261	2,82,141	34,03,174
Year 10	6,52,387	3,70,246	2,82,141	2,49,213*	30,00,000
Year 10	30,00,000	27,50,787	2,49,213*		-
Total	<u>85,31,940</u>	50,00,000	<u>35,31,940</u>	<u>35,31,940</u>	

<sup>\*(5,00,000 +</sup> increased by 3% - lease incentive paid amounting to 2,00,000)

Although the lease was for 10 years, the asset had an economic life of 40 years. When Company EFG exercises its purchase option at the end of the 10-year lease, it would have fully extinguished its lease liability but continue depreciating the asset over the remaining useful life.

# **Working Notes**

# 1. Calculating PV of lease payments, less lease incentive:

Year	Lease Payment (A)	Present value factor @ 9.04% (B)	Present value of lease payments (A*B=C)
Year 1	5,00,000	1	5,00,000
Year 2	3,15,000	0.92	2,89,800
Year 3	5,30,450	0.84	4,45,578
Year 4	5,46,364	0.77	4,20,700
Year 5	5,62,754	0.71	3,99,555
Year 6	5,79,637	0.65	3,76,764
Year 7	5,97,026	0.59	3,52,245
Year 8	6,14,937	0.55	3,38,215
Year 9	6,33,385	0.50	3,16,693



Total			37,39,648
Year 10	6,52,387	0.46	3,00,098

# 2. Calculating PV of purchase option at end of lease term:

Year	Payment on purchase option (A)	Present value factor @ 9.04% (B)	Present value of purchase option (A*B=C)
Year 10	30,00,000	0.42	12,60,000
Total			12,60,000

The discount rate for year 10 is different in the above calculations because in the earlier one its beginning of year 10 and in the later one its end of the year 10.

# SM 32. Remeasurement of a lease with variable lease payments

Entity W entered into a contract for lease of retail store with Entity J on January 01/01/2017. The initial term of the lease is 5 years with a renewal option of further 3 years. The annual payments for initial term and renewal term is ₹ 100,000 and ₹ 110,000 respectively. The annual lease payment will increase based on the annual increase in the CPI at the end of the preceding year. For example, the payment due on 01/01/18 will be based on the CPI available at 31/12/17.

Entity W's incremental borrowing rate at the lease inception date and as at 01/01/2020 is 5% and 6% respectively and the CPI at lease commencement date and as at 01/01/2020 is 120 and 125 respectively.

At the lease commencement date, Entity W did not have a significant economic incentive to exercise the renewal option. In the first quarter of 2020, Entity W installed unique lease improvements into the retail store with an estimated five-year economic life. Entity W determined that it would only recover the cost of the improvements if it exercises the renewal option, creating a significant economic incentive to extend.

Is Entity W required to remeasure the lease in the first quarter of 2020?

#### Ans.

Since Entity W is now reasonably certain that it will exercise its renewal option, it is required to remeasure the lease in the first quarter of 2020.

The following table summarizes information pertinent to the lease remeasurement.

Remeasured lease term	5 years; 2 years remaining in the initial term plus 3 years in the renewal period
Entity W's incremental borrowing rate On the remeasurement date	6%
CPI available on the remeasurement date	125
Right-of-use asset immediately before the remeasurement	₹ 1,81,840 (Refer note 1)
Lease liability immediately before the remeasurement	₹ 1,85,947 (Refer note 1)

To remeasure the lease liability, Entity W would first calculate the present value of the future lease payments for the new lease term (using the updated discount rate of 6%). The following table shows the present value of the future lease payments based on an updated CPI of 125. Since the initial lease payments were based on a CPI of 120, the CPI has increased by 4% approx. As a result, Entity W would increase the future lease payments by 4%. As shown in the table, the revised lease liability is ₹ 490,589.



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Year	4	5	6	7	8	Total
Lease payment	104,000	104,000	114,400	114,400	114,400	551,200
Discount	1	0.943	0.890	0.840	0.792	
Present value	104,000	98,072	101,816	96,096	90,605	490,589

To calculate the adjustment to the lease liability, Entity W would compare the recalculated and original lease liability balances on the remeasurement date.

Revised lease liability	490,589
Original lease liability	(1,85,947)
	3,04,642

Entity W would record the following journal entry to adjust the lease liability.

ROU Asset	Dr.	3,04,642	
To Lease liabil	ity		3,04,642
Being lease liability and	ROU asset adjusted on account of re	measurement.	

# **Working Notes:**

1 Calculation of ROU asset before the date of remeasurement

Year beginning	Lease Payment (A)	Present value factor @ 5% (B)	Present value of lease payments (AxB=C)
1	1,00,000	1.000	1,00,000
2	1,00,000	0.952	95,200
3	1,00,000	0.907	90,700
4	1,00,000	0.864	86,400
5	1,00,000	0.823	_82,300
Lease liability as at cor	mmencement date	<u>4,54,600</u>	

2 Calculation of Lease Liability and ROU asset at each year end

Year	Lease Liability				ROU asset		
	Initial value	Lease payments	Interest expense	Closing balance	Initial Value	Depreciation	Closing balance
1	4,54,600	1,00,000	-	3,54,600	4,54,600	90,920	3,63,680
2	3,54,600	1,00,000	17,730	2,72,330	3,63,680	90,920	2,72,760
3	2,72,330	1,00,000	13,617	1,85,947	2,72,760	90,920	1,81,840
4	1,85,947				1,81,840		

# SM 33. Modification that is a separate lease

Lessee enters into a 10-year lease for 2,000 square metres of office space. At the beginning of Year 6, Lessee and Lessor agree to amend the original lease for the remaining five years to include an additional 3,000 square metres of office space in the same building. The additional space is made available for use by Lessee at the end of the second



quarter of Year 6. The increase in total consideration for the lease is commensurate with the current market rate for the new 3,000 square metres of office space, adjusted for the discount that Lessee receives reflecting that Lessor does not incur costs that it would otherwise have incurred if leasing the same space to a new tenant (for example, marketing costs).

How should the said modification be accounted for?

#### Ans.

Lessee accounts for the modification as a separate lease, separate from the original 10-year lease because the modification grants Lessee an additional right to use an underlying asset, and the increase in consideration for the lease is commensurate with the stand-alone price of the additional right-of-use adjusted to reflect the circumstances of the contract. In this example, the additional underlying asset is the new 3,000 square metres of office space. Accordingly, at the commencement date of the new lease (at the end of the second quarter of Year 6), Lessee recognises a ROU Asset and a lease liability relating to the lease of the additional 3,000 square metres of office space. Lessee does not make any adjustments to the accounting for the original lease of 2,000 square metres of office space as a result of this modification.

# SM 34. Modification that increases the scope of the lease by extending the contractual lease term

Lessee enters into a 10-year lease for 5,000 square metres of office space. The annual lease payments are ₹ 1,00,000 payable at the end of each year. The interest rate implicit in the lease cannot be readily determined. Lessee's incremental borrowing rate at the commencement date is 6% p.a. At the beginning of Year 7, Lessee and Lessor agree to amend the original lease by extending the contractual lease term by four years. The annual lease payments are unchanged (i.e., ₹ 1,00,000 payable at the end of each year from Year 7 to Year 14). Lessee's incremental borrowing rate at the beginning of Year 7 is 7% p.a.

# Ans.

At the effective date of the modification (at the beginning of Year 7), Lessee remeasures the lease liability based on:

- (a) An eight-year remaining lease term
- (b) Annual payments of ₹ 1,00,000 and
- (c) Lessee's incremental borrowing rate of 7% p.a.

How should the said modification be accounted for?

The modified lease liability equals ₹ 5,97,100 (W.N.1). The lease liability immediately before the modification (including the recognition of the interest expense until the end of Year 6) is ₹ 3,46,355 (W.N.3). Lessee recognises the difference between the carrying amount of the modified lease liability and the carrying amount of the lease liability immediately before the modification (i.e., ₹2,50,745) (W.N. 4) as an adjustment to the ROU Asset.

# **Working Notes:**

# 1. Calculation of modified lease liability:

Year	Lease Payment (A)	Present value factor @ 7% (B)	Present value of lease payments (A*B=C)
7	100,000	0.935	93,500
8	100,000	0.873	87,300
9	100,000	0.816	81,600
10	100,000	0.763	76,300
11	100,000	0.713	71,300
12	100,000	0.666	66,600
13	100,000	0.623	62,300



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Modified leas	e liability	<u>5,97,100</u>	
14	100,000	0.582	<u>58,200</u>

# 2. Calculation of Lease liability as at commencement date:

Year	Lease Payment (A)	Present value factor @ 6% (B)	Present value of lease payments (A x B = C)
1	100,000	0.943	94,300
2	100,000	0.890	89,000
3	100,000	0.840	84,000
4	100,000	0.792	79,200
5	100,000	0.747	74,700
6	100,000	0.705	70,500
7	100,000	0.665	66,500
8	100,000	0.627	62,700
9	100,000	0.592	59,200
10	100,000	0.558	55,800
Lease liability as	at modification da	ite	7,35,900

# 3. Calculation of Lease liability immediately before modification date:

Year	Opening lease liability	Interest @ 6%	Lease payments	Closing liability
	(A)	(B) = [A x 6%]	(C)	(D) = [A+B-C]
1	7,35,900	44,154	100,000	6,80,054
2	6,80,054	40,803	100,000	6,20,857
3	6,20,857	37,251	100,000	5,58,108
4	5,58,108	33,486	100,000	4,91,594
5	4,91,594	29,496	100,000	4,21,090
6	4,21,090	25,265	100,000	3,46,355
	Lease liability as at modifica	3,46,355		

# 4. Adjustment to ROU asset:

Adjustment to ROU asset	2,50,745
Original Lease liability as at modification date	(3,46,355)
Modified Lease liability	5,97,100

The ROU asset will be increased by ₹ 2,50,745 on the date of modification.

# SM 35. Modification that decreases the scope of the lease

Lessee enters into a 10-year lease for 5,000 square metres of office space. The annual lease payments are ₹ 50,000 payable at the end of each year. The interest rate implicit in the lease cannot be readily determined. Lessee's incremental borrowing rate at the commencement date is 6% p.a. At the beginning of Year 6, Lessee and Lessor



agree to amend the original lease to reduce the space to only 2,500 square metres of the original space starting from the end of the first quarter of Year 6. The annual fixed lease payments (from Year 6 to Year 10) are ₹ 30,000. Lessee's incremental borrowing rate at the beginning of Year 6 is 5% p.a.

How should the said modification be accounted for?

Ans.

In the given case, Lessee calculates the ROU asset and the lease liabilities before modification as follows:

	Lease Liability					ROU asset	
Year	Initial value	Lease payments	Interest expense @ 6%	Closing balance	Initial Value	Depreciation	Closing balance
	а	b	c = a x 6%	d = a-b + c	е	f	g
1	3,67,950*	50,000	22,077	3,40,027	3,67,950	36,795	3,31,155
2	3,40,027	50,000	20,402	3,10,429	3,31,155	36,795	2,94,360
3	3,10,429	50,000	18,626	2,79,055	2,94,360	36,795	2,57,565
4	2,79,055	50,000	16,743	2,45,798	2,57,565	36,795	2,20,770
5	2,45,798	50,000	14,748	2,10,546	2,20,770	36,795	1,83,975
6	2,10,546				1,83,975		

<sup>\*(</sup>refer note 1)

At the effective date of the modification (at the beginning of Year 6), Lessee remeasures the lease liability based on:

- (a) a five-year remaining lease term,
- (b) annual payments of ₹ 30,000 and
- (c) Lessee's incremental borrowing rate of 5% p.a.

Year	Lease Payment(A)	Present value factor @ 5% (B)	Present value of lease payments (A x B = C)
6	30,000	0.952	28,560
7	30,000	0.907	27,210
8	30,000	0.864	25,920
9	30,000	0.823	24,690
10	30,000	0.784	23,520
Total			<u>1,29,900</u>

Lessee determines the proportionate decrease in the carrying amount of the ROU Asset on the basis of the remaining ROU Asset (i.e., 2,500 square metres corresponding to 50% of the original ROU Asset).

50% of the pre-modification ROU Asset (₹ 1,83,975) is ₹ 91,987.50.

50% of the pre-modification lease liability (₹ 2,10,546) is ₹ 1,05,273.

Consequently, Lessee reduces the carrying amount of the ROU Asset by ₹91,987.50 and the carrying amount of the lease liability by ₹ 1,05,273. Lessee recognises the difference between the decrease in the lease liability and the decrease in the ROU Asset (₹ 1,05,273 – ₹ 91,987.50 = ₹ 13,285.50) as a gain in profit or loss at the effective date of the modification (at the beginning of Year 6).

Lessee recognises the difference between the remaining lease liability of ₹ 1,05,273 and the modified lease liability of ₹ 1,29,900 (which equals ₹ 24,627) as an adjustment to the ROU Asset reflecting the change in the consideration paid for the lease and the revised discount rate.

# **Working Note:**

# Calculation of Initial value of ROU asset and lease liability:

Year	Lease Payment(A)	Present value factor @ 6% (B)	Present value of lease payments (A x B = C)
1	50,000	0.943	47,150
2	50,000	0.890	44,500
3	50,000	0.840	42,000
4	50,000	0.792	39,600
5	50,000	0.747	37,350
6	50,000	0.705	35,250
7	50,000	0.665	33,250
8	50,000	0.627	31,350
9	50,000	0.592	29,600
10	50,000	0.558	27,900
			<u>3,67,950</u>

# SM 36. Modification that is a change in consideration only

Lessee enters into a 10-year lease for 5,000 square metres of office space. At the beginning of Year 6, Lessee and Lessor agree to amend the original lease for the remaining five years to reduce the lease payments from ₹ 1,00,000 per year to ₹ 95,000 per year. The interest rate implicit in the lease cannot be readily determined. Lessee's incremental borrowing rate at the commencement date is 6% p.a. Lessee's incremental borrowing rate at the beginning of Year 6 is 7% p.a. The annual lease payments are payable at the end of each year.

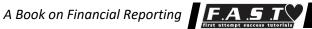
How should the said modification be accounted for?

# Ans.

In the given case, Lessee calculates the ROU asset and the lease liabilities before modification as follows:

Year	Opening lease liability	Interest @ 6%	Lease payments	Closing liability
	(A)	(B) = [A x 6%]	(C)	(D) = [A+B-C]
1	7,35,900	44,154	100,000	6,80,054
2	6,80,054	40,803	100,000	6,20,857
3	6,20,857	37,251	100,000	5,58,108
4	5,58,108	33,486	100,000	4,91,594
5	4,91,594	29,496	100,000	4,21,090
6	4,21,090			

At the effective date of the modification (at the beginning of Year 6), Lessee remeasures the lease liability based on:



- a five-year remaining lease term, (a)
- (b) annual payments of ₹95,000, and
- (c) Lessee's incremental borrowing rate of 7% p.a.

Year	Lease Payments (A)	Present value @ 7% (B)	Present value of lease payments (A x B = C)
1	95,000	0.935	88,825
2	95,000	0.873	82,935
3	95,000	0.816	77,520
4	95,000	0.763	72,485
5	95,000	0.713	67,735
			<u>3,89,500</u>

Lessee recognises the difference between the carrying amount of the modified liability (₹ 3,89,500) and the lease liability immediately before the modification (₹ 4,21,090) of ₹ 31,590 as an adjustment to the ROU Asset.

# **Working Note:** Calculation of Initial value of ROU asset and lease liability:

Year	Lease Payment (A)	Present value factor @ 6% (B)	Present value of lease payments (A x B = C)
1	100,000	0.943	94,300
2	100,000	0.890	89,000
3	100,000	0.840	84,000
4	100,000	0.792	79,200
5	100,000	0.747	74,700
6	100,000	0.705	70,500
7	100,000	0.665	66,500
8	100,000	0.627	62,700
9	100,000	0.592	59,200
10	100,000	0.558	55,800
Lease liability a	s at modification date	<u>7,35,900</u>	

# SM 37. Modification that both increases and decreases the scope of the lease

Lessee enters into a 10-year lease for 2,000 square metres of office space. The annual lease payments are ₹ 1,00,000 payable at the end of each year. The interest rate implicit in the lease cannot be readily determined. Lessee's incremental borrowing rate at the commencement date is 6% p.a.

At the beginning of Year 6, Lessee and Lessor agree to amend the original lease to:

- (a) include an additional 1,500 square metres of space in the same building starting from the beginning of Year
- (b) reduce the lease term from 10 years to eight years. The annual fixed payment for the 3,500 square metres is ₹ 1,50,000 payable at the end of each year (from Year 6 to Year 8). Lessee's incremental borrowing rate



at the beginning of Year 6 is 7% p.a.

The consideration for the increase in scope of 1,500 square metres of space is not commensurate with the standalone price for that increase adjusted to reflect the circumstances of the contract. Consequently, Lessee does not account for the increase in scope that adds the right to use an additional 1,500 square metres of space as a separate lease.

How should the said modification be accounted for?

#### Ans.

The pre-modification ROU Asset and the pre-modification lease liability in relation to the lease are as follows:

	Lease liability			ROU Asset			
Year	Opening balance	Interest expense @ 6%	Lease payment	Closing balance	Opening balance	Depreciation charge	Closing balance
1	7,35,900*	44,154	(1,00,000)	6,80,054	7,35,900	(73,590)	6,62,310
2	6,80,054	40,803	(1,00,000)	6,20,857	6,62,310	(73,590)	5,88,720
3	6,20,857	37,251	(1,00,000)	5,58,108	5,88,720	(73,590)	5,15,130
4	5,58,108	33,486	(1,00,000)	4,91,594	5,15,130	(73,590)	4,41,540
5	4,91,594	29,496	(1,00,000)	4,21,090	4,41,540	(73,590)	3,67,950
6	4,21,090				3,67,950		

<sup>\*</sup>Refer Note 4.

At the effective date of the modification (at the beginning of Year 6), Lessee remeasures the lease liability on the basis of:

- (a) A three-year remaining lease term (ie. till 8th year),
- (b) Annual payments of ₹ 150,000 and
- (c) Lessee's incremental borrowing rate of 7% p.a.

Year	Lease Payments	Present value @ 7%	Present value of lease payments
	(A)	(B)	(A x B = C)
1	1,50,000	0.935	1,40,250
2	1,50,000	0.873	1,30,950
3	1,50,000	0.816	<u>1,22,400</u>
Modifi	ied lease liability	<u>3,93,600</u>	

The modified liability equals  $\stackrel{?}{\underset{?}{?}}$  3,93,600, of which (a)  $\stackrel{?}{\underset{?}{?}}$  1,31,200 relates to the increase of  $\stackrel{?}{\underset{?}{?}}$  50,000 in the annual lease payments from Year 6 to Year 8 and (refer note 1) (b)  $\stackrel{?}{\underset{?}{?}}$  2,62,400 relates to the remaining three annual lease payments of  $\stackrel{?}{\underset{?}{?}}$  1,00,000 from Year 6 to Year 8 with reduction of lease term (Refer Note 3)

#### Decrease in the lease term:

At the effective date of the modification (at the beginning of Year 6), the pre-modification ROU Asset is ₹ 3,67,950. Lessee determines the proportionate decrease in the carrying amount of the ROU Asset based on the remaining ROU Asset for the original 2,000 square metres of office space (i.e., a remaining three-year lease term rather than the original five-year lease term). The remaining ROU Asset for the original 2,000 square metres of office space is ₹ 2,20,770 [i.e.,  $₹ (3,67,950 / 5) \times 3$  years].



Consequently, Lessee reduces the carrying amount of the ROU Asset by ₹1,47,180 (₹3,67,950 – ₹ 2,20,770), and the carrying amount of the lease liability by ₹ 1,53,790 (₹ 4,21,090 – ₹ 2,67,300). Lessee recognises the difference between the decrease in the lease liability and the decrease in the ROU Asset (₹ 1,53,790 – ₹ 1,47,180 = ₹ 6,610) as a gain in profit or loss at the effective date of the modification (at the beginning of Year 6).

Lease Liability	Dr.	1,53,790	
To ROU Asset			1,47,180
To Gain			6,610

At the effective date of the modification (at the beginning of Year 6), Lessee recognises the effect of the remeasurement of the remaining lease liability reflecting the revised discount rate of 7% p.a., which is ₹ 4,900 (₹ 2,67,300 – ₹2,62,400\*), as an adjustment to the ROU Asset.

<sup>\*(</sup>Refer note 3)

Lease Liability	Dr.	4,900	
To ROU Asset			4,900

# Increase in the leased space:

At the commencement date of the lease for the additional 1,500 square metres of space (at the beginning of Year 6), Lessee recognises the increase in the lease liability related to the increase in leased space of ₹ 1,31,200 (i.e., present value of three annual lease payments of ₹ 50,000, discounted at the revised interest rate of 7% p.a.) as an adjustment to the ROU Asset.

ROU Asset	Dr.	1,31,200	
To Lease Liability			1,31,200

The modified ROU Asset and the modified lease liability in relation to the modified lease are as follows:

		Lease liability			ROU Asset		
Year	Opening	Interest	Lease	Closing	Opening	Depreciation	Closing
	balance	expense @ 7%	payment	balance	balance	charge	balance
6	3,93,600	27,552	(1,50,000)	2,71,152	3,47,100**	(1,15,700)	2,31,400
7	2,71,152	18,981	(1,50,000)	1,40,133	2,31,400	(1,15,700)	1,15,700
8	1,40,133	9,867*	(1,50,000)	-	1,15,700	(1,15,700)	-

<sup>\*</sup>Difference is due to approximation.

# **Working Notes:**

Calculation of lease liability on increased consideration:

Year	Lease Payments (A)	Present value @7% (B)	Present value of lease payments
			(A x B = C)
1	50,000	0.935	46,750
2	50,000	0.873	43,650
3	50,000	0.816	40,800

<sup>\*\*</sup>Refer Note 5

Modified lease liability	<u>1,31,200</u>
--------------------------	-----------------

2. Calculation of remaining lease liability for the original contract of 2000 square meters at Original discount rate:

Year	Lease Payments (A)	Present value factor @ 6% (B)	Present value of lease payments (A x B = C)
1	1,00,000	0.943	94,300
2	1,00,000	0.890	89,000
3	1,00,000	0.840	84,000
Remai	ning lease liability	<u>2,67,300</u>	

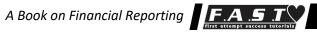
3. Calculation of remaining lease liability for the original contract of 2000 square meters at revised discount rate:

Year	Lease Payments (A)	Present value factor @ 7% (B)	Present value of lease payments (A x B = C)
1	1,00,000	0.935	93,500
2	1,00,000	0.873	87,300
3	1,00,000	0.816	81,600
Remai	ning lease liability	2,62,400	

4. Calculation of Initial value of ROU asset and lease liability:

Year	Lease Payment	Present value factor @ 6%	Present value of lease payments
	(A)	(B)	(A x B = C)
1	100,000	0.943	94,300
2	100,000	0.890	89,000
3	100,000	0.840	84,000
4	100,000	0.792	79,200
5	100,000	0.747	74,700
6	100,000	0.705	70,500
7	100,000	0.665	66,500
8	100,000	0.627	62,700
9	100,000	0.592	59,200
10	100,000	0.558	<u>55,800</u>
Lease	liability as at modification	on date	<u>7,35,900</u>

5. Calculation of opening balance of Modified ROU Asset at the beginning of 6th year:



The remaining ROU Asset for the original 2,000 square metres of office space after decrease	2,20,770
in term	
Less: Adjustment for increase in interest rate from 6% to 7%	(4,870)
Add: Adjustment for increase in leased space	<u>1,31,200</u>
	3,47,100

# SM 38. Lessor accounting for a finance lease $\rightarrow$ dealer-lessor case

A Lessor enters into a 10-year lease of equipment with Lessee. The equipment is not specialised in nature and is expected to have alternative use to Lessor at the end of the 10-year lease term. Under the lease:

- Lessor receives annual lease payments of ₹ 15,000, payable at the end of the year
- Lessor expects the residual value of the equipment to be ₹ 50,000 at the end of the 10-year lease term
- Lessee provides a residual value guarantee that protects Lessor from the first ₹ 30,000 of loss for a sale at a price below the estimated residual value at the end of the lease term (i.e., ₹ 50,000)
- The equipment has an estimated remaining economic life of 15 years, a carrying amount of ₹ 1,00,000 and a fair value of ₹ 1,11,000
- The lease does not transfer ownership of the underlying asset to Lessee at the end of the lease term or contain an option to purchase the underlying asset
- The interest rate implicit in the lease is 10.078%.

How should the Lessor account for the same in its books of accounts?

#### Ans.

Lessor shall classify the lease as a FINANCE LEASE because the sum of the present value of lease payments amounts to substantially all of the fair value of the underlying asset.

At lease commencement, Lessor accounts for the finance lease, as follows:

Net investment in the lease	₹ 1,11,000 <sup>(a)</sup>	
Cost of goods sold	₹ 92,340 <sup>(b)</sup>	
Revenue		₹1,03,340 <sup>(c)</sup>
Property held for lease		₹1,00,000 <sup>(d)</sup>

To record the net investment in the finance lease and derecognise the underlying asset.

- (a) The net investment in the lease consists of:
  - (1) the present value of 10 annual payments of ₹ 15,000 plus the guaranteed residual value of ₹ 30,000, both discounted at the interest rate implicit in the lease, which equals ₹ 1,03,340 (i.e., the lease payment) (Refer note 1) AND
  - (2) the present value of unguaranteed residual asset of  $\stackrel{?}{\stackrel{?}{\sim}}$  20,000, which equals  $\stackrel{?}{\stackrel{?}{\sim}}$  7,660 (Refer note 2). Note that the net investment in the lease is subject to the same considerations as other assets in classification as current or non-current assets in a classified balance sheet.
- (b) Cost of goods sold is the carrying amount of the equipment of ₹ 1,00,000 (less) the present value of the unguaranteed residual asset of ₹ 7,660.
- (c) Revenue equals the lease receivable.
- (d) The carrying amount of the underlying asset.

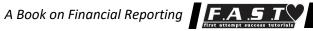
At lease commencement, Lessor recognises selling profit of ₹ 11,000 which is calculated as = lease payment of ₹ 1,03,340 – [carrying amount of the asset (₹ 1,00,000) – net of any unguaranteed residual asset (₹ 7,660) ie which equals ₹ 92,340]

# Year 1

# Journal entry for a finance lease

Cash	₹ 15,000(e)	
Net investment in the lease		₹ 3,813(f)
Interest income		₹ 11,187(g)

- (e) Receipt of annual lease payments at the end of the year.
- (f) Reduction of the net investment in the lease for lease payments received of ₹ 15,000, net of interest income of ₹ 11,187



(g) Interest income is the amount that produces a constant periodic discount rate on the remaining balance of the net investment in the lease. Please refer the computation below:

The following table summarises the interest income from this lease and the related amortisation of the net investment over the lease term:

Year	Annual Rental Payment	Annual Interest Income (h)	Net investment at the end of the year
Initial net investment	-	-	1,11,000
1	15,000	11,187	1,07,187
2	15,000	10,802	1,02,989
3	15,000	10,379	98,368
4	15,000	9,914	93,282
5	15,000	9,401	87,683
6	15,000	8,837	81,520
7	15,000	8,216	74,736
8	15,000	7,532	67,268
9	15,000	6,779	59,047
10	15,000	5,953	50,000

- (h) Interest income equals 10.078% of the net investment in the lease at the beginning of each year. For e.g., Year 1 annual interest income is calculated as ₹ 1,11,000 (initial net investment) x 10.078%.
- The estimated residual value of the equipment at the end of the lease term. (i)

# **Working Notes:**

# Calculation of net investment in lease:

Year	Lease Payment (A)	Present value factor @ 10.078% (B)	Present value of lease payments (A x B = C)
1	15,000	0.908	13,620
2	15,000	0.825	12,375
3	15,000	0.750	11,250
4	15,000	0.681	10,215
5	15,000	0.619	9,285
6	15,000	0.562	8,430
7	15,000	0.511	7,665
8	15,000	0.464	6,960
9	15,000	0.421	6,315
10	15,000	0.383	5,745
10	30,000	0.383	11,480*
			1,03,340

\* Figure has been rounded off for equalization of journal entry.

# 2 Calculation of present value of unguaranteed residual asset

Year	Lease Payment (A)	Present value factor @ 10.078% (B)	Present value of lease payments (A x B = C)
10	20,000	0.383	7,660

### SM 39. Classification of a sublease in case of an Intermediate Lessor

Entity ABC (original lessee/intermediate lessor) leases a building for five years. The building has an economic life of 40 years. Entity ABC subleases the building for four years.

How should the said sublease be classified by Entity ABC?

#### Ans.

The sublease is classified with reference to the 'ROU Asset' in the head lease (and NOT the 'underlying building' of the head lease). Hence, when assessing the useful life criterion, the sublease term of four years is compared with five-year ROU Asset in the head lease (NOT compared with 40-year economic life of the building) and accordingly may result in the sublease being classified as a finance lease.

# Intermediate Lessor – Where the sublease is classified as a 'Finance Lease'

#### Head lease:

An intermediate lessor enters into a five-year lease for 10,000 square metres of office space (the head lease) with Entity XYZ (the head lessor).

#### Sublease:

At the beginning of Year 3, the intermediate lessor subleases the 10,000 square metres of office space for the remaining lease term i.e three years of the head lease to a sub-lessee.

How should the said sublease be classified and accounted for by the Intermediate Lessor?

#### Ans.

The intermediate lessor classifies the sublease by reference to the ROU Asset arising from the head lease (i.e., in this case, comparing the three-year sublease with the five-year ROU Asset in the head lease). The intermediate lessor classifies the sublease as a finance lease, having considered the requirements of Ind AS 116 (i.e., one of the criteria of 'useful life' for a lease to be classified as a finance lease).

When the intermediate lessor enters into a sublease, the intermediate lessor:

- (i) derecognises the ROU asset relating to the head lease that it transfers to the sublessee and recognises the net investment in the sublease;
- (ii) recognises any difference between the ROU asset and the net investment in the sublease in profit or loss;
- (iii) retains the lease liability relating to the head lease in its balance sheet, which represents the lease payments owed to the head lessor.

During the term of the sublease, the intermediate lessor recognises both

- finance income on the sublease AND
- interest expense on the head lease.

# SM 41. Intermediate Lessor – Where the sublease is classified as a 'Operating Lease'

#### Head lease:

An intermediate lessor enters into a five-year lease for 10,000 square metres of office space (the head lease) with Entity XYZ (the head lessor).

#### Sublease:



At the commencement of the head lease, the intermediate lessor subleases the 10,000 square metres of office space for two years to a sub-lessee.

How should the said sublease be classified and accounted for by the Intermediate Lessor?

#### Ans.

The intermediate lessor classifies the sublease by reference to the ROU Asset arising from the head lease (i.e., in this case, comparing the two-year sublease with the five-year ROU Asset in the head lease). The intermediate lessor classifies the sublease as an operating lease, having considered the requirements of Ind AS 116 (i.e., one of the criteria of 'useful life' for a lease to be classified as a finance lease and since, it is not satisfied, classified the same as an operating lease).

When the intermediate lessor enters into the sublease, the intermediate lessor retains:

- the lease liability AND
- the ROU asset

both relating to the head lease in its balance sheet.

During the term of the sublease, the intermediate lessor:

- recognises a depreciation charge for the ROU asset and interest on the lease liability; AND (a)
- (b) recognises lease income from the sublease.

#### **Sub-lessee Accounting:**

A sub-lessee accounts for its lease in the same manner as any other lease (i.e., as a new lease subject to Ind AS 116's recognition and measurement provisions).

#### SM 42. Sale and leaseback transaction

An entity (Seller-lessee) sells a building to another entity (Buyer-lessor) for cash of ₹ 30,00,000. Immediately before the transaction, the building is carried at a cost of ₹ 15,00,000. At the same time, Seller-lessee enters into a contract with Buyer-lessor for the right to use the building for 20 years, with annual payments of ₹ 2,00,000 payable at the end of each year.

The terms and conditions of the transaction are such that the transfer of the building by Seller- lessee satisfies the requirements for determining when a performance obligation is satisfied in Ind AS 115 Revenue from Contracts with Customers.

The fair value of the building at the date of sale is ₹ 27,00,000. Initial direct costs, if any, are to be ignored. The interest rate implicit in the lease is 12% p.a., which is readily determinable by Seller-lessee.

Buyer-lessor classifies the lease of the building as an operating lease.

How should the said transaction be accounted by the Seller-lessee and the Buyer-lessor?

# Ans.

Considering facts of the case, Seller-lessee and buyer-lessor account for the transaction as a sale and leaseback. Firstly, since the consideration for the sale of the building is not at fair value, Seller-lessee and Buyer - lessor make adjustments to measure the sale proceeds at fair value. Thus, the amount of the excess sale price of ₹ 3,00,000 (as calculated below) is recognised as additional financing provided by Buyer-lessor to Seller-lessee.

Sale Price:	30,00,000
Less: Fair Value (at the date of sale):	(27,00,000)
Additional financing provided by Buyer-lessor to Seller-lessee	3,00,000

Next step would be to calculate the present value of the annual payments which amounts to ₹ 14,94,000 (calculated considering 20 payments of ₹ 2,00,000 each, discounted at 12% p.a.) of which ₹ 3,00,000 relates to the additional financing (as calculated above) and balance ₹11,94,000 relates to the lease — corresponding

to 20 annual payments of ₹ 40,164 and ₹ 1,59,836, respectively (refer calculations below).

# Proportion of annual lease payments:

Present value of lease payments (as calculated above)	(A)	14,94,000
Additional financing provided (as calculated above)	(B)	3,00,000
Relating to the Additional financing provided	(C) = (E x B / A)	40,160
Relating to the Lease	(D) = (E – C)	1,59,840
Annual payments (at the end of each year)	(E)	2,00,000

# Seller-Lessee:

At the commencement date, Seller-lessee measures the ROU asset arising from the leaseback of the building at the proportion of the previous carrying amount of the building that relates to the right-of-use retained by Seller-lessee, calculated as follows:

ROU Asset	[(A / B) x C]	6,63,333
Discounted lease payments for the 20-year ROU asset	(C)	11,94,000
Fair Value (at the date of sale)	(B)	27,00,000
Carrying Amount	(A)	15,00,000

Seller-lessee recognises only the amount of the gain that relates to the rights transferred to Buyer- lessor, calculated as follows:

Fair Value (at the date of sale)	(A)	27,00,000
Carrying Amount	(B)	15,00,000
Discounted lease payments for the 20-year ROU asset	(C)	11,94,000
	(5) (4 5)	12.00.000
Gain on sale of building	(D) = (A - B)	12,00,000
Relating to the right to use the building retained by Seller-lessee	(D) = (A - B) $(E) = [(D / A) \times C]$	5,30,667

At the commencement date, Seller-lessee accounts for the transaction, as follows:

Cash	Dr.	30,00,000	
ROU Asset	Dr.	6,63,333	
To Building			15,00,000
To Financial Liability			14,94,000
To Gain on rights tra	nsferred		6,69,333

# **Buyer-Lessor:**

At the commencement date, Buyer-lessor accounts for the transaction, as follows:

Building	Dr.	27,00,000	
Financial Asset (20 payments of ₹ 40,160		3,00,000	
discounted @ 12% p.a.) (approx.)	Dr.		
To Cash			30,00,000



After the commencement date, Buyer-lessor accounts for the lease by treating ₹ 1,59,840 of the annual payments of ₹ 2,00,000 as lease payments. The remaining ₹ 40,160 of annual payments received from Seller-lessee are accounted for as:

- payments received to settle the financial asset of ₹ 3,00,000 AND (a)
- (b) interest revenue.

# SM 43. Transition Approaches

A retailer (lessee) entered into 3-year lease of retail space beginning at 1 April 2017 with three annual lease payments of ₹ 2,00,000 due on 31 March 2018, 2019 and 2020, respectively. The lease is classified as an operating lease under Ind AS 17. The retailer initially applies Ind AS 116 for the first time in the annual period beginning at 1 April 2019. The incremental borrowing rate at the date of the initial application (i.e., 1 April 2019) is 10% p.a. and at the commencement of the lease (i.e., 1 April 2017) was 12% p.a. The ROU asset is subject to straight-line depreciation over the lease term. Assume that no practical expedients are elected, the lessee did not incur initial direct costs, there were no lease incentives and there were no requirements for the lessee to dismantle and remove the underlying asset, restore the site on which it is located or restore the underlying asset to the condition under the terms and conditions of the lease.

What would be the impact for the lessee using all the following transition approaches: Full Retrospective Approach Modified Retrospective Approach

- Alternative 1
- Alternative 2

#### Ans.

# **Full Retrospective Approach:**

Under the full retrospective approach, the lease liability and the ROU asset are measured on the commencement date (i.e., 1 April 2017 in this case) using the incremental borrowing rate at lease commencement date (i.e., 12% p.a. in this case). The lease liability is accounted for by the interest method subsequently and the ROU asset is subject to depreciation on the straight-line basis over the lease term of three years. Let us first calculate the Lease Liability and ROU Asset as follows:

Year	Payments (Cash flows)	Present Value Factor @12%	Discounted Cash flows / Present Value
31 Mar 2018	2,00,000	0.8929	1,78,580
31 Mar 2019	2,00,000	0.7972	1,59,440
31 Mar 2020	2,00,000	0.7118	<u>1,42,360</u>
	6,00,000		<u>4,80,380</u>

# **Lease Liability Schedule:**

Year	Opening	Interest Expense @ 12%	Payments	Closing
31 Mar 2018	4,80,380	57,646	(2,00,000)	3,38,026
31 Mar 2019	3,38,026	40,563	(2,00,000)	1,78,589
31 Mar 2020	1,78,589	21,411*	(2,00,000)	-

<sup>\*</sup>Difference is due to approximation

# **ROU Asset Schedule:**

Year Opening Depreciation Closing
-----------------------------------

31 Mar 2018	4,80,380	(1,60,126)	3,20,254
31 Mar 2019	3,20,254	(1,60,127)	1,60,127
31 Mar 2020	1,60,127	(1,60,127)	-

The following table shows account balances under this method beginning at lease commencement:

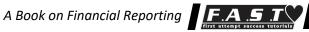
Date	ROU Asset	Lease Liability	Interest Expense	Depreciation Expense	Retained Earnings
01 Apr 2017	4,80,380	4,80,380	-	-	-
31 Mar 2018	3,20,254	3,38,026	-	-	-
01 Apr 2018	3,20,254	3,38,026			(17,772)
31 Mar 2019	1,60,127	1,78,589	40,563	1,60,127	-
01 Apr 2019	1,60,127	1,78,589	-	-	-
31 Mar 2020	-	-	21,411	1,60,127	-

Ind AS 116 is applicable for the financial year beginning from 1st April 2019. Hence, 2019-20 is the first year of adoption and using Full retrospective method the comparative for 2018-19 needs to be restated and 1st April 2018 (i.e the opening of the comparative) is taken as transition date for adoption of this standard. At adoption, the lessee would record the ROU asset 1and lease liability at the 1 April 2018 by taking values from the above table, with the difference between the ROU asset and lease liability going to retained earnings as of 1 April 2018 (assuming that only the 2018-19 financial information is included as comparatives).

ROU Asset	Dr.	3,20,254				
Retained Earnings	Dr.	17,772				
To Lease Liability			3,38,026			
To initially recognise the lease-relate	To initially recognise the lease-related asset and liability as of 1 April 2018.					

The following journal entries would be recorded during 2018-19:

Interest expense	Dr.	40,563				
To Lease Liability			40,563			
To record interest expense and accrete the lease liability using the interest method.						
Depreciation expense	Dr.	1,60,127				
To ROU Asset			1,60,127			
To record depreciation expense on t	he ROU asset.					
Lease Liability	Dr.	2,00,000				
To Cash			2,00,000			
To record lease payment.						



The following journal entries would be recorded during 2019-20:

Interest expense	Dr.	21,411		
To Lease Liability			21,411	
To record interest expense and accrete the lease liability using the interest method.				

Depreciation expense	Dr.	1,60,127			
To ROU Asset			1,60,127		
To record depreciation expense on the ROU asset.					

Lease Liability	Dr.	2,00,000	
To Cash			2,00,000
To record lease payment.			

# **Modified Retrospective Approach (Alternative 1):**

Under the modified retrospective approach (Alternative 1), the lease liability is measured based on the remaining lease payments (i.e., from the date of transition to the lease end date, viz., 01 April 2019 to 31 March 2020 in this case) discounted using the incremental borrowing rate as of the date of initial application being 01 April 2019 (i.e. 10% p.a. in this case). The ROU asset is at its carrying amount as if Ind AS 116 had been applied since the commencement date (i.e., 01 April 2017 in this case) by using incremental borrowing rate as at transition date. Let us first calculate the Lease Liability and ROU Asset as follows:

Year	Payments (Cash flows)	Discounting Factor @10%	Discounted Cash flows / Present Value
31 Mar 2020	2,00,000	0.9091	1,81,820
	2,00,000		1,81,820

# **Lease Liability Schedule:**

Year	Opening Balance	Interest Expense @ 10%	Payments	Closing Balance
31 Mar 2020	1,81,820	18,182	(2,00,000)	-

# **ROU Asset Schedule:**

Year	Opening Balance	Depreciation	Closing Balance
31 Mar 2020	1,65,790***	(1,65,790)	-

<sup>\*\*\*(</sup>Refer note no 3)

The following table shows account balances under this method beginning at lease commencement:

Date	ROU Asset	Lease Liability	Interest Expense	Depreciation Expense	Retained Earnings
01 Apr 2017	4,97,360*	4,97,360**	-	-	-

31 Mar 2018	3,31,574	3,47,096	49,737	1,65,786	-
31 Mar 2019	1,65,787	1,81,806	34,710	1,65,787	(16,019)
01 Apr 2019	1,65,787	1,81,806	-	-	-
31 Mar 2020	-	-	18,194	1,65,787	-

<sup>\*(</sup>Refer note no 1)

At adoption, the lessee would record the ROU asset and lease liability at the 1 April 2019 by taking values from the above table, with the difference between the ROU asset and lease liability going to retained earnings as of 1 April 2019.

ROU Asset	Dr.	1,65,787	
Retained Earnings	Dr.	16,019	
To Lease Liability			1,81,806
To initially recognise the lease-related asset and liability as of 1 April 2019.			

The following journal entries would be recorded during 2019-20:

Interest expense	Dr.	18,182		
To Lease Liability			18,182	
To record interest expense and accrete the lease liability using the interest method.				

Depreciation expense	Dr.	1,65,787	
To ROU Asset			1,65,787
To record depreciation expense on	the ROU asset.		

Lease Liability	Dr.	2,00,000	
To Cash			2,00,000
To record lease payment.			

# Note 1: Calculation of Present value of lease payments as at commencement date i.e., 01/04/2017

Year	Payments	Discounting Factor @10%	Discounted Cash flows
	(Cash flows)		/ Present Value
31 Mar 2018	2,00,000	0.9091	1,81,820
31 Mar 2019	2,00,000	0.8264	1,65,280
31 Mar 2020	2,00,000	0.7513	<u>1,50,260</u>
	6,00,000		<u>4,97,360</u>

<sup>\*\*(</sup>Refer note no 2)



# **Lease Liability Schedule:**

Year	Opening	Interest Expense @ 10%	Payments	Closing
31 Mar 2018	4,97,360	49,736	(2,00,000)	3,47,096
31 Mar 2019	3,47,096	34,710	(2,00,000)	1,81,806
31 Mar 2020	1,81,806	18,194*	(2,00,000)	-

<sup>\*</sup>Difference is due to approximation

Calculation of ROU asset as at transition date i.e., April 01, 2019

Year	Opening	Depreciation	Closing
31 Mar 2018	4,97,360	(1,65,786)	3,31,574
31 Mar 2019	3,31,574	(1,65,787)	1,65,787
31 Mar 2020	1,65,787	(1,65,787)	-

# Modified Retrospective Approach (Alternative 2):

Under the modified retrospective approach (Alternative 2), the lease liability is also measured based on the remaining lease payments (i.e., from the date of transition to the lease end date, viz., 01 April 2019 to 31 March 2020 in this case) discounted using the incremental borrowing rate as of the date of initial application being 01 April 2019 (i.e. 10% p.a. in this case). The carrying amount of the ROU asset is an amount equal to the carrying amount of the lease liability on the date of initial application as there are no prepayments or accrual items and hence, no impact on retained earnings as on the transition date. Let us first calculate the Lease Liability and ROU Asset as follows:

Year	Payments (Cash flows)	Discounting Factor @ 10%	Discounted Cash flows / Present Value
31 Mar 2020	2,00,000	0.9091	<u>1,81,820</u>
	2,00,000		1,81,820

# **Lease Liability Schedule:**

Year	Opening	Interest Expense	Payments	Closing
31 Mar 2020	1,81,820	18,182	(2,00,000)	-

# **ROU Asset Schedule:**

Year	Opening	Depreciation	Closing
31 Mar 2020	1,81,820	(1,81,820)	-

The following table shows account balances under this method beginning at lease commencement:

Date	ROU Asset	Lease Liability	Interest Expense	Depreciation Expense	Retained Earnings
01 Apr 2019	1,81,820	1,81,820	-	-	-
31 Mar 2020	-	-	18,182	1,81,820	-

At adoption, the lessee would record the ROU asset and lease liability at the 1 April 2019 by taking values from the above table and there will be no impact on retained earnings on the transition date being 1 April 2019 since under this alternative, ROU Asset is equal to the Lease Liability.

ROU Asset	Dr.	1,81,820	
To Lease Liability			1,81,820
To initially recognise the lease-related asset and liability as of 1 April 2019.			

The following journal entries would be recorded during 2019-20:

Interest expense	Dr.	18,182		
To Lease Liability			18,182	
To record interest expense and accrete the lease liability using the interest method.				
Depreciation expense	Dr.	1,81,820		
To ROU Asset			1,81,820	
To record depreciation expense on the ROU asset.				
Lease Liability	Dr.	2,00,000		
To Cash			2,00,000	
To record lease payment.				

A summary of the lease contract's accounting (assuming there are no changes due to reassessments) is, as follows:

Particulars	Full Retrospective Approach	Modified Retrospective Approach (Alternative 1)	Modified Retrospective Approach (Alternative 2)		
Opening balance sheet impact as on 1 April 2019:					
ROU Asset	1,60,126	1,65,787	1,81,820		
Lease Liability	1,78,589	1,81,806	1,81,820		
Period ended 31 March 2020 activity:					
Cash lease payments	2,00,000	2,00,000	2,00,000		
Lease payments recognised:					
Interest expense	21,411	18,194	18,182		
Depreciation expense	<u>1,60,127</u>	<u>1,65,787</u>	<u>1,81,820</u>		
Total periodic expense	<u>1,81,538</u>	<u>1,83,981</u>	2,00,002		



SM 44. A lessee enters into a ten-year contract with a lessor (freight carrier) to transport a specified quantity of goods. Lessor uses rail wagons of a particular specification, and has a large pool of similar rail wagons that can be used to fulfil the requirements of the contract. The rail wagons and engines are stored at lessor's premises when they are not being used to transport goods. Costs associated with substituting the rail wagons are minimal for lessor. Whether the lessor has substantive substitutions rights and whether the arrangement contains a lease?

Ans.

In this case, the rail wagons are stored at lessor's premises and it has a large pool of similar rail wagons and substitution costs to be incurred are minimal. Thus, the lessor has the practical ability to substitute the asset. If at any point, the same become economically beneficial for the lessor to substitute the wagons, he can do so and hence, the lessor's substitution rights are substantive and the arrangement does not contain a lease.

SM 45. Customer M enters into a 20-year contract with Energy Supplier S to install, operate and maintain a solar plant for M's energy supply. M designed the solar plant before it was constructed – M hired experts in solar energy to assist in determining the location of the plant and the engineering of the equipment to be used. M has the exclusive right to receive and the obligation to take any energy produced. Whether it can be established that M is having the right to control the use of identified asset?

Ans.

In this case, the nature of the solar plant is such that all of the decisions about how and for what purpose the asset is used are predetermined because:

- the type of output (i.e. energy) and the production location are predetermined in the agreement; and
- when, whether and how much energy is produced is influenced by the sunlight and the design of the solar plant.

Because M designed the solar plant and thereby predetermined any decisions about how and for what purpose it is used, M is considered to have the right to direct the use. Although regular maintenance of the solar plant may increase the efficiency of the solar panels, it does not give the supplier the right to direct how and for what purpose the solar plant is used. Hence, M is having a right to control the use of asset.

SM 46. A Customer enters into a ten-year contract with a Company (a ship owner) for the use of an identified ship. Customer decides whether and what cargo will be transported, and when and to which ports the ship will sail throughout the period of use, subject to restrictions specified in the contract. These restrictions prevent the company from sailing the ship into waters at a high risk of piracy or carrying explosive materials. The company operates and maintains the ship, and is responsible for safe passage.

Does the customer has the right to direct how and for what purpose the ship is to be used throughout the period of use and whether the arrangement contains a lease?

Ans.

The customer has the right to direct the use of the ship because the contractual restrictions are merely protective rights that protect the company's investment in the ship and its personnel. In the scope of its right of use, the customer determines how and for what purpose the ship is used throughout the ten-year period because it decides whether, where and when the ship sails, as well as the cargo that it will transport.

The customer has the right to change these decisions throughout the period of use and hence, the contract contains a lease.

SM 47. A Lessee enters into a ten-year lease contract with a Lessor to use an equipment. The contract includes maintenance services (as provided by lessor). The Lessor obtains its own insurance for the equipment. Annual payments are ₹ 10,000 (₹ 1,000 relate to maintenance services and ₹ 500 to insurance costs).

The Lessee is able to determine that similar maintenance services and insurance costs are offered by third parties for ₹ 2,000 and ₹ 500 a year, respectively. The Lessee is unable to find an observable stand-alone rental amount for a similar equipment because none is leased without related maintenance services provided by the lessor. How would the Lessee allocate the consideration to the lease component?

#### Ans.

The observable stand-alone price for maintenance services is ₹ 2,000. There is no observable stand-alone price for the lease. Further, the insurance cost does not transfer a good or service to the lessee and therefore, it is not a separate lease component.

SM 48. A Lessee enters into a non-cancellable lease contract with a Lessor to lease a building. Initially, the lease is for five years, and the lessee has the option to extend the lease by another five years at the same rental.

To determine the lease term, the lessee considers the following factors:

- Market rentals for a comparable building in the same area are expected to increase by 10% over the ten-year period covered by the lease. At inception of the lease, lease rentals are in accordance with current market rents.
- The lessee intends to stay in business in the same area for at least 20 years.
- The location of the building is ideal for relationships with suppliers and customers.

What should be the lease term for lease accounting under Ind AS 116?

#### Δns.

After considering all the stated factors, the lessee concludes that it has a significant economic incentive to extend the lease.

Thus, for the purpose of lease accounting under Ind AS 116, the lessee uses a lease term of ten years.

#### SM 49.

A Lessee enters into a lease of a five-year-old machine. The non-cancellable lease term is 15 years. The lessee has the option to extend the lease after the initial 15-year period for optional periods of 12 months each at market rents.

To determine the lease term, the lessee considers the following factors:

- The machine is to be used in manufacturing parts for a type of plane that the lessee expects will remain popular with customers until development and testing of an improved model are completed in approximately 15 years.
- The cost to install the machine in lessee's manufacturing facility is significant.
- The non-cancellable term of lessee's manufacturing facility lease ends in 19 years, and the lessee has an option to renew that lease for another twelve years.
- Lessee does not expect to be able to use the machine in its manufacturing process for other types of planes without significant modifications.
- The total remaining life of the machine is 30 years.

What should be the lease term for lease accounting under Ind AS 116?

#### Ans.

The lessee notes that the terms for the optional renewal provide no economic incentive and the cost to install is significant. The lessee has no incentive to make significant modifications to the machine after the initial 15-year period. Therefore, the lessee does not expect to have a business purpose for using the machine after the noncancellable lease term of 15 years.

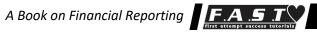
Thus, the lessee concludes that the lease term consists of the 15-year non-cancellable period only.

SM 50. A Company leases a manufacturing facility. The lease payments depend on the number of operating hours of the manufacturing facility, i.e., the lessee has to pay ₹ 2,000 per hour of use. The annual minimum payment is ₹ 2,00,00,000. The expected usage per year is 20,000 hours.

Whether the said payments be included in the calculation of lease liability under Ind AS 116?

# Ans.

The said lease contains in-substance fixed payments of ₹ 2,00,00,000 per year, which are included in the initial measurement of the lease liability under Ind AS 116.



However, the additional ₹ 2,00,00,000 that the company expects to pay per year are variable payments that do not depend on an index or rate and, thus, are not included in the initial measurement of the lease liability but, are expensed when the over-use occurs.