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F&O Basics — Introduction to Options

Options are one of the most powerful — and most misunderstood — tools in the market. This introduction covers exactly what they are, how they work, and the risks every beginner must understand before trading them.

1. Introduction — What Is F&O and Why It's Different

F&O stands for Futures & Options — a category of financial instruments known as derivatives, because their value is 'derived' from an underlying asset such as a stock or an index, rather than being an asset in itself. When you buy a share of Reliance, you own a small piece of the company. When you buy a Reliance option, you own a contract whose value depends on where Reliance's share price moves.

This single distinction — owning an asset versus owning a contract based on that asset — is what makes F&O behave so differently from regular stock investing. Options can expire completely worthless, they move faster (and can lose value faster) than the underlying stock, and they require genuinely understanding a few extra concepts before using them.

KEY	Options are a legitimate and widely used tool for both hedging (protecting existing positions) and speculation (betting on price direction) — but they are meaningfully more complex and riskier than buying stocks outright. This chapter focuses specifically on Options; Futures are covered separately.

In this chapter, we will build the foundation: what a Call and a Put actually are, the key terminology you'll see on every options chain, how buying differs from selling options, and the payoff diagrams that show exactly how much you can gain or lose.

2. Futures vs Options — The Key Difference

Both are contracts based on an underlying asset, agreed today for a settlement at a future date — but they differ in one crucial way: obligation.

- Futures: Both the buyer and the seller are obligated to complete the transaction at the agreed price on the expiry date, regardless of where the market has moved.
- Options: The buyer has the right, but not the obligation, to complete the transaction. The seller (writer), however, does have an obligation if the buyer chooses to exercise that right.

Real-Life Analogy

A Futures contract is like a fully committed advance booking for a wedding hall — both sides must go through with it on the agreed date, no matter what. An Options contract is like paying a small, non-refundable token amount to hold a hall on reservation — you can walk away and lose only the token if your plans change, but the hall owner must honour the booking if you decide to proceed.

3. Options Basics — Call and Put

Every options contract in the world is one of exactly two types, and understanding this pair is the single most important concept in this entire chapter.

Fig 3.1 — A Call gives the right to buy; a Put gives the right to sell.

3.1 Call Option

A Call option gives the buyer the right to buy the underlying asset at a fixed price (the strike price) on or before a set expiry date. Traders buy Calls when they expect the price to rise — if the stock rallies well above the strike price, the Call becomes valuable.

3.2 Put Option

A Put option gives the buyer the right to sell the underlying asset at a fixed strike price on or before expiry. Traders buy Puts when they expect the price to fall — if the stock drops well below the strike price, the Put becomes valuable.

TIP	A simple way to remember it: 'Call up, Put down.' Buy a Call if you expect the price to go up; buy a Put if you expect it to go down.

4. Key Options Terminology

Before going further, get comfortable with these terms — they appear on every single options chain you will ever look at.

Term	What It Means
Strike Price	The fixed price at which the option holder can buy (Call) or sell (Put) the underlying
Premium	The price you pay to buy an option — this is also the maximum a buyer can lose
Expiry Date	The date on which the options contract expires; Indian index options commonly expire weekly or monthly
Lot Size	Options trade in fixed lot sizes (a bundle of shares), not single units — set by the exchange for each underlying

Term	What It Means
Underlying	The stock or index the option's value is based on, e.g. Nifty, Reliance, HDFC Bank
Option Chain	A table listing all available strike prices, premiums, and other data for Calls and Puts on a given underlying and expiry
Open Interest (OI)	The total number of outstanding (not yet settled) contracts at a given strike — a rough gauge of where market interest is concentrated

4.1 ITM, ATM, and OTM — Moneyness

'Moneyness' describes where the strike price sits relative to the current market price of the underlying.

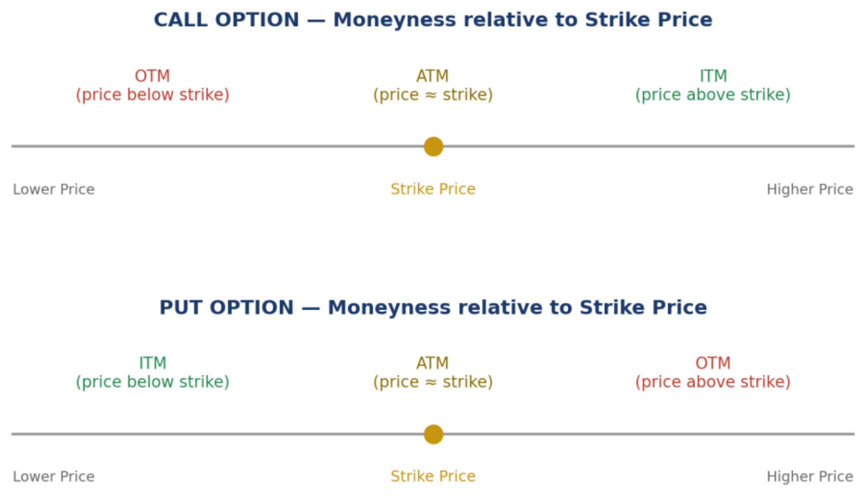

Fig 4.1 — In-the-Money (ITM), At-the-Money (ATM), and Out-of-the-Money (OTM) for Calls and Puts.

- In-the-Money (ITM): The option already has intrinsic (real) value if exercised right now — for a Call, this means the market price is above the strike; for a Put, below the strike.
- At-the-Money (ATM): The strike price is approximately equal to the current market price.
- Out-of-the-Money (OTM): The option currently has no intrinsic value — for a Call, the market price is below the strike; for a Put, above the strike. OTM options are cheaper, but only have value if the market moves favourably before expiry.

5. Buying vs Selling (Writing) Options

Every options contract has two sides, and the risk profile for each side is dramatically different — this is one of the most important things a beginner must internalise before trading options.

- Buying (Long) an option: You pay a premium upfront. Your maximum possible loss is limited to that premium, no matter how far the market moves against you. Your potential profit can be large (for a Call, theoretically unlimited).
- Selling (Writing/Short) an option: You receive the premium upfront. Your maximum possible profit is limited to that premium. But your potential loss can be very large — for a naked short Call, theoretically unlimited.

CAUTION

Selling (writing) options without fully understanding the risk is one of the fastest ways beginners lose significant money in F&O. Unlike buying an option, where your downside is capped at the premium paid, selling an uncovered option exposes you to losses that can vastly exceed the premium you collected.

6. Payoff Diagrams — Understanding Risk & Reward

A payoff diagram shows exactly how much profit or loss a position makes at every possible price of the underlying on expiry day. Learning to read these four basic shapes will make the risk of any options position immediately obvious.

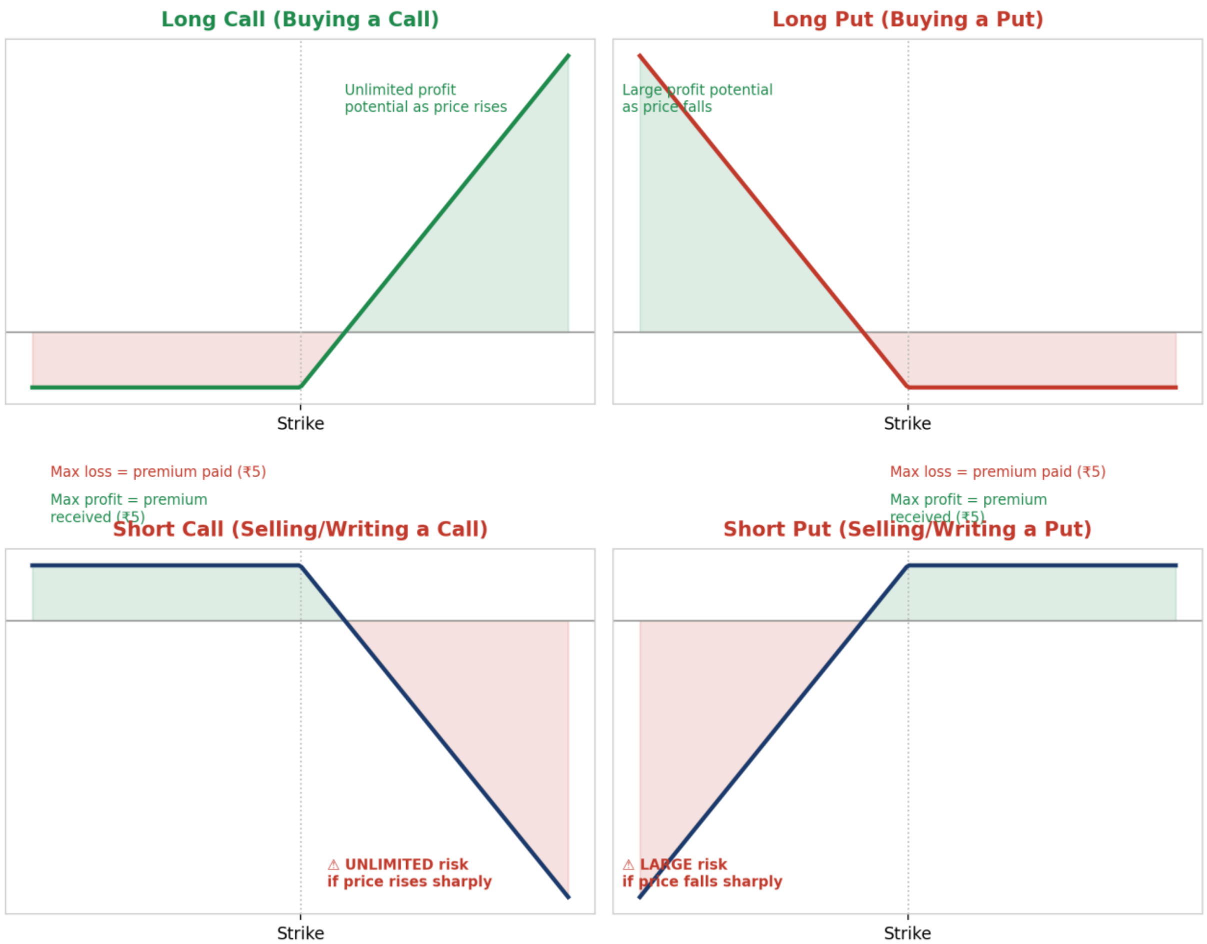

Fig 6.1 — The four basic options payoffs: Long Call, Long Put, Short Call, Short Put.

6.1 Long Call (Buying a Call)

Loss is capped at the premium paid if the price stays below the strike. Profit grows without limit as the price rises above the strike plus premium.

6.2 Long Put (Buying a Put)

Loss is capped at the premium paid if the price stays above the strike. Profit grows substantially (though not infinitely, since a price cannot fall below zero) as price falls below the strike minus the premium.

6.3 Short Call and Short Put (Selling/Writing)

Both short positions flip the payoff shape: profit is capped at the premium received, but potential loss is large — theoretically unlimited for a short Call, and substantial (down to zero) for a short Put. This asymmetry is exactly why option-selling strategies demand more capital, margin, and risk management than option-buying.

> **Concrete Example**
> Suppose you buy one Nifty Call option at a strike of 25,000 for a premium of ₹100, with a lot size of 50. Your total cost is ₹5,000, and that is also your maximum possible loss — even if Nifty crashes. If Nifty rallies to 25,300 by expiry, your option is worth roughly ₹300 in intrinsic value, and your profit is (₹300 − ₹100) × 50 = ₹10,000.

7. Why Options Premiums Change

An option's premium is made up of two components, and understanding this split explains a lot of seemingly confusing price behaviour:

- Intrinsic Value: The real, immediate value if the option were exercised right now — only ITM options have any intrinsic value.
- Time Value: The extra amount buyers are willing to pay for the possibility that the option becomes more valuable before expiry. Time value shrinks steadily as expiry approaches — a process known as time decay, or 'Theta.'

KEY	An option is a wasting asset — all else being equal, its time value erodes every single day, faster and faster as expiry approaches. This is precisely why option buyers can be right about direction but still lose money if the move happens too slowly or too close to expiry.

8. Common Beginner Mistakes

- Buying deep OTM options because they're 'cheap': These have the lowest probability of ever becoming profitable and often expire completely worthless.
- Ignoring time decay: Holding a long option through a slow, sideways market and watching the premium erode daily, even if the eventual direction call turns out correct.
- Selling uncovered (naked) options without understanding unlimited risk: Taking on a short Call or Put position without appreciating how large the potential loss can be.
- Trading options on unfamiliar underlyings: Trading options on a stock or index without first understanding its typical volatility and behaviour.
- Oversized position sizing: Because options offer high leverage, it is easy to risk far more of your capital in one trade than you realise — always calculate maximum loss before entering.

9. Quick Reference — Options Cheat Sheet

Position	Max Loss	Max Profit	Best Used When
Long Call	Premium paid	Unlimited	Expecting a strong upward move
Long Put	Premium paid	Large (capped at strike value)	Expecting a strong downward move
Short Call	Unlimited	Premium received	Expecting price to stay flat or fall (advanced)
Short Put	Large (capped at strike value)	Premium received	Expecting price to stay flat or rise (advanced)

10. Chapter Summary

Here is everything you learned in this chapter in one concise recap:

- Options are derivatives — contracts whose value is derived from an underlying stock or index, not an asset in themselves.
- Unlike Futures, an option buyer has a right but not an obligation; the seller, however, does have an obligation if the buyer exercises.
- A Call gives the right to buy at the strike price; a Put gives the right to sell at the strike price.
- Key terms — strike price, premium, expiry, lot size, and moneyness (ITM/ATM/OTM) — appear on every options chain you'll encounter.
- Buying an option caps your loss at the premium paid; selling (writing) an option caps your profit at the premium received but exposes you to much larger potential losses.
- An option's premium consists of intrinsic value plus time value, and time value steadily erodes as expiry approaches (time decay).
- Beginners should fully understand payoff diagrams and maximum loss before placing any options trade, and approach option-selling strategies with particular caution.

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