Quantity Cycle Token (QCT)

A Time-Based Monetary Privilege and Interest-Free Credit System

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Token: QuantityCycleToken (QCT)

Abstract

Traditional money systems rely on explicit interest, leading to compounding debt, systemic inequality, and credit exclusion. Quantity Cycle Token (QCT) introduces a **time-based monetary privilege system** where value is not embedded in the token itself, but in **who can buy at a favored price at a given time**.

Interest is eliminated at the borrower level and replaced with **time-shifted purchasing power** granted to lenders. This system enables:

- Interest-free loans for borrowers
- Guaranteed principal return for lenders
- Deterministic, inflation-resistant price logic
- Infinite time scalability
- Credit creation without monetary debasement

QCT is **fungible**, but **economic privilege is non-fungible and time-dependent**.

1. Core Insight

Value is not intrinsic to tokens — value emerges from acceptance rules over time.

QCT does not promise stable price or backing.
Instead, it enforces **who is allowed to buy cheaply and when**.

This creates a new financial primitive:

- **Money as scheduling rights**
- **Interest as time privilege**
- **Credit without interest extraction**

2. Terminology

Term	Meaning
Favoured Day	A day where a user can buy at low price
Unfavoured Day	A day where the user pays high price
Privilege	Right to buy at favoured price
Big Holder	Wallet ≥ 10,000,000 QCT
Small Holder	Wallet < 10,000,000 QCT
Base Value	Reference price doubling yearly

3. Token Overview

3.1 Token Details

Parameter	Value
Name	QuantityCycleToken
Symbol	QCT
Supply	100,000,000,000 QCT (fixed)
Standard	ERC-20
Fungibility	Fully fungible

QCT **does not encode value per unit**.

Value emerges only at the point of exchange.

4. Time-Based Value Engine

4.1 Annual Reference Growth

The system defines a deterministic reference value:

$BaseValue(y) = 1000 \times 2^y$

Where y is years since deployment.

Year	Base Value (₹)	Expensive Price
1	1,000	1,999
2	2,000	3,999
3	4,000	7,999
10	1,024,000	2,047,999
100	Extremely Large	Deterministic

This allows the system to scale beyond 100 years **without upgrades**.

5. Day-Cycle Privilege Model

5.1 Holder Classification

- **Big Holder:** ≥ 10,000,000 QCT
- **Small Holder:** < 10,000,000 QCT

5.2 Alternating Privilege Rule

Day	Favoured
Even Day	Small Holders
Odd Day	Big Holders

Only the favoured group may buy at **₹1 price**.

All others pay **Expensive Price**.

6. The Cake Example (Canonical Model)

- Cake intrinsic value: ₹1000
- Alice (favoured) buys cake for ₹1 QCT
- Seller accepts ₹1 QCT as ₹1000 due to rule
- Problem: seller must recover purchasing power

Solution:
Purchasing power recovery occurs through **collateralized lending + privilege transfer**

7. Credit System (Privilege Lending)

7.1 Borrowing Rules

- Borrow **any ERC-20 token**
- Provide **over-collateralized asset**
- Loan-to-Value: 70%
- Example:
    - ₹10,000 BTC collateral
    - Borrow ₹7,000 token

7.2 Borrower Economics

- Pays **zero interest**
- Repays **only principal**
- Recovers full collateral

This removes debt spirals and liquidation pressure.

8. Interest Replaced by Privilege

8.1 Lender Compensation

Instead of interest payments:

- Lender receives **favoured-day purchase rights**
- Granted via QCT system

Example:

- Loan: ₹7,000
- Interest rate: 10%
- Privilege units granted: 700 favoured uses

Each privilege allows:

- Buying on unfavoured day at favoured price

This converts interest into **time arbitrage rights**, not money extraction.

9. Why This System Works

9.1 No Free Value Creation

- Privilege ≠ minting
- No token inflation
- No price peg

9.2 Deterministic Acceptance

Sellers accept QCT because:

- They know **when** they regain purchasing power
- Not **if**

10. Fungibility vs Economic Identity

QCT is fungible at the token level.

But economic outcomes depend on:

- Holding quantity
- Time
- Privilege state

This creates **economic identity without NFTs or KYC**.

11. Game-Theoretic Stability

Actor	Incentive
Borrower	Zero interest loans
Lender	Guaranteed principal + privilege
Seller	Predictable future recovery
System	No collapse from leverage

No participant can extract value without time commitment.

12. Risk Analysis

12.1 Risks

- Adoption lag
- Thin liquidity
- Mispriced collateral

12.2 Mitigations

- Over-collateralization
- Deterministic price rules

- Privilege non-transferability

13. Comparison with Traditional Finance

Feature	Traditional	QCT
Interest	Compounding	Eliminated
Inflation	Continuous	None
Credit Access	Centralized	Permissionless
Value	Market-driven	Rule-driven
Debt Traps	Yes	No

14. Long-Term Vision

QCT is not:

- A stablecoin
- A payment coin
- A meme token

QCT is:

- **A monetary operating system**
- **A credit scheduling protocol**
- **An economic time machine**

15. Conclusion

Quantity Cycle Token introduces a radical but mathematically sound financial construct:

Money is not what you own — it is when you are allowed to buy.

By converting interest into time privilege, QCT creates a sustainable, infinite-horizon monetary system without inflation, usury, or collapse.