

# Modes of Payments and Transfer

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**BANKING SERVICES**

# Bank-Based Electronic Payment Systems

**NEFT (NATIONAL ELECTRONIC FUNDS TRANSFER) – BATCH-WISE SETTLEMENT FOR FUND TRANSFERS.**

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**RTGS (REAL TIME GROSS SETTLEMENT) – REAL-TIME, HIGH-VALUE FUND TRANSFERS.**

**IMPS (IMMEDIATE PAYMENT SERVICE) – INSTANT 24×7 INTERBANK TRANSFERS.**

# NEFT (National Electronic Funds Transfer)

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**Introduced by:** RBI

**Settlement Type:** Half-hourly batches (48 batches a day).

**Timings:** 24×7, including Sundays and holidays (since Dec 2019).

**Transfer Limit:**

- Minimum: ₹1
- Maximum: **No upper limit** (though banks may impose their own per transaction/day limit).

**Processing Time:** Usually within **30 minutes to 2 hours** depending on batch cycle.

**Charges:** RBI has waived off NEFT charges for savings bank customers (online). Banks may charge for branch-based transfers.

**Use Case:** Regular fund transfers that are not extremely time-sensitive.

# RTGS (Real Time Gross Settlement)

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**Introduced by:** RBI

**Settlement Type:** Real-time, individual transactions (not batch-processed).

**Timings:** 24×7, throughout the year (since Dec 2020).

**Transfer Limit:**

- Minimum: ₹2,00,000
- Maximum: **No upper limit** (subject to bank-specific cap).

**Processing Time:** Instant (few seconds to minutes).

**Charges:** RBI has removed processing charges; some banks may add minimal fees for corporate customers.

**Use Case:** High-value, time-critical payments (e.g., property purchase, large business payments).

# IMPS (Immediate Payment Service)

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**Introduced by:** NPCI (National Payments Corporation of India).

**Settlement Type:** Real-time, 24×7.

**Timings:** 24×7, 365 days (including Sundays and bank holidays).

**Transfer Limit:**

- Minimum: ₹1
- Maximum: ₹5,00,000 per transaction (limit revised in 2021).

**Processing Time:** Instant (within seconds).

**Modes of Access:** Net Banking, Mobile Banking apps, ATMs, SMS banking.

**Charges:** Vary from bank to bank; often very nominal or zero.

**Use Case:** Small-to-medium value urgent payments (e.g., emergency transfers, bill payments).

# Quick Comparison Table

Feature	NEFT	RTGS	IMPS
Settlement	Batch (half-hourly)	Real-time (gross settlement)	Real-time
Timings	24×7	24×7	24×7
Minimum Amount	₹1	₹2,00,000	₹1
Maximum Amount	No upper limit	No upper limit	₹5,00,000 per transaction
Processing Speed	30 min – 2 hrs	Instant	Instant
Best Use Case	Routine fund transfers	High-value urgent transfers	Instant, small/medium transfers

# Card-Based Payment Systems

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**CREDIT CARDS (VISA, MASTERCARD, RUPAY, AMERICAN EXPRESS).**

**DEBIT CARDS (VISA, MASTERCARD, RUPAY, MAESTRO).**

**PREPAID CARDS / GIFT CARDS / FOREX CARDS.**

# Card-Based Payment Systems - Credit Cards

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**Issuers:** Banks & financial institutions.

**Networks:** Visa, Mastercard, RuPay, American Express.

**Working:** Allows cardholders to borrow funds up to a **pre-approved credit limit** and pay later.

**Features:**

- Interest-free credit period (usually 20–50 days).
- Reward points, cashback, discounts.
- EMI conversion options.

**Limits:** Based on credit score, income, and bank policy.

**Use Case:** Best for shopping, travel, online purchases, and short-term credit needs.

# Card-Based Payment Systems - Debit Cards

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**Issuers:** Banks linked to savings or current accounts.

**Networks:** Visa, Mastercard, RuPay, Maestro.

**Working:** Amount is **directly deducted** from the linked bank account at the time of transaction.

**Features:**

- ATM withdrawals, PoS transactions, online shopping.
- Daily withdrawal and spending limits (bank-specific).

**Limits:**

- Varies by bank (e.g., ₹25,000–₹2,00,000 per day for shopping/ATM).

**Use Case:** Everyday payments directly from bank balance, ATM cash withdrawals.

# Card-Based Payment Systems - Prepaid Cards / Gift Cards / Forex Cards

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**Issuers:** Banks, NBFCs, fintech companies.

**Types:**

- **Prepaid Cards** – loaded with money in advance, usable till balance is exhausted.
- **Gift Cards** – often issued by banks/retailers, for gifting purposes.
- **Forex Cards** – loaded with foreign currency for international travel.

**Working:** Function like debit/credit cards, but spending limited to the **loaded balance**.

**Features:**

- Not linked to a bank account (standalone balance).
- Reloadable (except some one-time gift cards).
- Forex cards protect against currency fluctuations.

**Limits:**

- RBI allows up to **₹1,00,000** in prepaid instruments (can vary for specific card types).

**Use Case:** Controlled spending (e.g., travel, employee benefits, gifting, students abroad).

# Quick Comparison Table

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Feature	Credit Cards	Debit Cards	Prepaid / Gift / Forex Cards
Source of Funds	Borrowed (pay later)	Directly from bank account	Preloaded balance
Spending Limit	Credit limit (bank decides)	Linked to account balance	Preloaded amount (reloadable)
Repayment	Monthly billing cycle	Immediate deduction	No repayment (use till balance ends)
Best Use Case	Credit, rewards, EMI	Daily expenses, ATM withdrawal	Controlled use, travel, gifting

# Mobile-Based / UPI Payments

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**UPI (UNIFIED PAYMENTS INTERFACE).**

**BHIM APP (BHARAT INTERFACE FOR MONEY).**

**UPI-BASED APPS (PHONEPE, GOOGLE PAY, PAYTM, AMAZON PAY, ETC.).**

# Unified Payments Interface (UPI)

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- ❖ Introduced by the **National Payments Corporation of India (NPCI)**.
- ❖ Enables **instant money transfer** between bank accounts through a mobile device.
- ❖ Works **24×7**, including **Sundays and holidays**.
- ❖ Uses a **Virtual Payment Address (VPA)** – no need to share bank details.
- ❖ Integrated with multiple banks and apps.
- ❖ Safe, secure, and convenient for both small and large payments.
  
- ❖ **Example:** Sending/receiving money instantly through a UPI ID (e.g., ravi@oksbi).

# BHIM – Bharat Interface for Money

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- ❖ Developed by **NPCI** and launched by the **Government of India**.
- ❖ A **government-backed UPI app** promoting cashless transactions.
- ❖ Allows users to **send, receive, and request money** directly from bank accounts.
- ❖ Works on both **Android and iOS** platforms.
- ❖ Simple interface and **supports biometric authentication**.
- ❖ Promotes **Digital India** initiative.
- ❖ **Features:**
  - QR code scanning for easy payments.
  - Works without internet through *\*USSD (99#) service*.

# Popular UPI-Based Payment Apps

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Multiple apps use the **UPI system** for instant money transfer.

Examples include:

- **PhonePe:** First UPI-based app in India, known for cashback offers.
- **Google Pay (GPay):** Simple interface and reward-based payments.
- **Paytm:** Combines UPI, wallet, and bill payment services.
- **Amazon Pay:** Linked with Amazon account; used for shopping and utility bills.

Provide additional features like:

- Bill payments, recharges, online shopping, ticket booking.
- **Rewards and discounts** for regular users.

**Note:**

All these apps are **linked to UPI**, ensuring instant and secure digital payments.

# Wallets & Prepaid Payment Instruments (PPIs)

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- **PPIS ARE FINANCIAL INSTRUMENTS THAT STORE MONEY FOR FUTURE PAYMENTS.**
  - **ISSUED BY BANKS AND NON-BANKING ENTITIES UNDER RBI REGULATION.**
  - **ENABLE DIGITAL AND CASHLESS TRANSACTIONS WITHOUT USING PHYSICAL CASH.**
  - **EXAMPLES: PAYTM WALLET, PHONEPE WALLET, MOBIKWIK, ETC.**

# Mobile Wallets

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- ❖ Digital versions of physical wallets that store money electronically.
- ❖ Linked to bank accounts or credit/debit cards.
- ❖ Used for **online payments, recharges, and shopping.**
- ❖ Examples: **Paytm Wallet, Mobikwik, Freecharge, Airtel Money, JioMoney.**
- ❖ **Advantages:**
  - Easy to use and reload.
  - Fast and secure transactions.

# Closed Wallets

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- ❖ Issued by a company for use **only with that company's services/products**.
- ❖ Money cannot be transferred to another wallet or withdrawn.
- ❖ Example: **Ola Money (for cab rides), Zomato Wallet, Flipkart Wallet**.
- ❖ **Purpose:** Enhances customer loyalty and repeat purchases.

# Semi-Closed Wallets

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- ❖ Can be used with **multiple merchants**, but not for cash withdrawal.
- ❖ Require an agreement between wallet issuer and merchants.
- ❖ Examples: **Paytm Wallet, PhonePe Wallet.**
- ❖ **Features:**
  - Usable across different stores and service providers.
  - Secure, convenient, and widely accepted.

# ECS & NACH-Based Payments

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- **BOTH ARE SYSTEMS FOR AUTOMATED BULK AND RECURRING ELECTRONIC PAYMENTS.**
  - **OPERATED UNDER THE SUPERVISION OF RBI AND NPCI.**
  - **USED BY ORGANIZATIONS AND BANKS FOR REGULAR FUND TRANSFERS LIKE SALARIES, EMIS, AND BILLS.**

# ECS (Electronic Clearing Service)

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- ❖ An older system introduced by the RBI.
- ❖ Used for bulk fund transfers from one bank to many beneficiaries.
- ❖ Commonly used for:
  - Salary and pension disbursement
  - Dividend and interest payments
- ❖ Operates in two variants:
  - ECS Debit – to collect payments (e.g., loan EMI, insurance premium).
  - ECS Credit – to make payments (e.g., salary, interest).

# NACH (National Automated Clearing House)

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- ❖ Developed by NPCI to replace ECS with a faster and centralized system.
- ❖ Used for **recurring and bulk payments** like EMIs, bills, SIPs, insurance, etc.
- ❖ Provides **same-day settlement** and higher efficiency.
- ❖ Used by banks, mutual funds, and utility companies.
- ❖ **Advantages:**
  - Faster processing.
  - Centralized and paperless.
  - Better tracking and security.

# Merchant Payment Solutions

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- Solutions that enable **businesses and merchants** to accept digital payments.
- Include card-based, app-based, and QR-based systems.
- Help merchants manage **cashless transactions securely and efficiently**.
- Examples: POS, mPOS, and QR Code Payments.

# POS (Point of Sale) Machines

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- ❖ Devices used to **accept card payments** via swipe, insert, or tap.
- ❖ Connected to bank networks for real-time authorization.
- ❖ Support **debit, credit, and contactless (NFC)** payments.
- ❖ Used in retail stores, restaurants, and supermarkets.
- ❖ **Example:** Swiping a debit card at a store's billing counter.

# mPOS (Mobile Point of Sale)

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- ❖ **Portable card readers** connected to smartphones or tablets.
- ❖ Ideal for small businesses and mobile vendors.
- ❖ Enables merchants to **accept payments anywhere** using mobile data.
- ❖ Low-cost and easy to set up.
- ❖ **Example:** Delivery agents or small shops using phone-connected card readers.

# QR Code Payments

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- ❖ Customers scan a **QR code** to make instant payments via UPI or wallet apps.
- ❖ Accepted across **shops, taxis, restaurants, and markets.**
- ❖ No hardware required – just a printed QR code.
- ❖ Supported by **Bharat QR, UPI QR, Paytm QR, etc.**
- ❖ **Advantages:**
  - Fast, paperless, and contactless.
  - Reduces dependency on cards or cash.

# Government & Utility Payment Systems

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- DIGITAL SYSTEMS DEVELOPED TO PROMOTE CASHLESS GOVERNANCE AND FINANCIAL INCLUSION.
  - USED FOR BILL PAYMENTS, SUBSIDIES, AND AADHAAR-BASED TRANSACTIONS.
  - ENSURE SECURE, TRANSPARENT, AND DIRECT TRANSFERS TO BENEFICIARIES.
  - MAJOR SYSTEMS: BBPS, AEPS, DBT, AND E-MANDATES.

# BBPS (Bharat Bill Payment System)

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- ❖ An **integrated online bill payment platform** launched by NPCI.
- ❖ Enables customers to pay **bills for electricity, gas, water, DTH, telecom, etc.**
- ❖ Available through **banks, apps, and agent outlets.**
- ❖ Ensures **standardized, secure, and quick** bill payments.
- ❖ **Example:** Paying your electricity or mobile bill through Paytm or bank app via BBPS.

# AePS (Aadhaar Enabled Payment System)

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- ❖ Allows banking transactions using Aadhaar authentication. Operated by NPCI to promote financial inclusion in rural areas.
- ❖ Services include:
  - Cash deposit/withdrawal
  - Balance enquiry
  - Fund transfer
  - Mini statement
- ❖ Used through micro ATMs or banking correspondents.

# DBT (Direct Benefit Transfer)

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- ❖ Introduced by the **Government of India** to transfer subsidies and benefits directly to beneficiaries' **bank accounts**.
- ❖ Reduces leakages and ensures transparency.
- ❖ Used for: LPG subsidy, pension, scholarship, MNREGA wages, etc.
- ❖ **Benefit:** Promotes **efficient, corruption-free** welfare distribution.

# e-Mandates

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- ❖ A **digital authorization** for recurring or automatic payments.
- ❖ Linked with **NACH or UPI systems**.
- ❖ Used for **loan EMIs, insurance premiums, SIPs, and subscription payments**.
- ❖ Eliminates need for manual payments each month.
- ❖ **Advantage: Convenient, secure, and paperless** payment authorization.

# Digital Banking Channels

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**PLATFORMS THAT ALLOW CUSTOMERS TO ACCESS BANKING SERVICES DIGITALLY.**

**PROVIDE 24×7 CONVENIENCE WITHOUT VISITING A BANK BRANCH.**

**INCLUDE NET BANKING AND MOBILE BANKING APPS.**

**ENABLE SECURE TRANSACTIONS, FUND TRANSFERS, AND BILL PAYMENTS.**

# Net Banking / Online Banking

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- ❖ Banking services accessed via a web browser using bank credentials.
- ❖ Enables:
  - Fund transfers (NEFT, RTGS, IMPS)
  - Bill and tax payments
  - Account statements and balance checks
  - Opening fixed deposits or updating details online
- ❖ Provides secure, paperless, and fast banking from anywhere.

# Mobile Banking Apps

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- ❖ Smartphone-based banking applications offered by banks.
- ❖ Allow users to manage finances on the go.
- ❖ Common services:
  - Account balance and mini statements
  - Fund transfers and bill payments
  - UPI transactions and QR code payments
- ❖ Examples:
  - SBI YONO
  - HDFC Mobile Banking
  - iMobile by ICICI Bank