



Collegedunia NCERT Notes

The Ultimate Class 12 Revision Guide

Money and Banking Class 12 Notes (2026-27)

Class 12 Economics (Macroeconomics) Chapter 2: Money and Banking

Syllabus 2026-27 • Aligned with the New NCERT Textbook

What you will master in this chapter

Barter • Functions • Forms of Money • M_1 , M_2 , M_3 , M_4 • High-Powered Money
Commercial Banks • Credit Creation • Money Multiplier • RBI Functions •
CRR, SLR, Repo, MSF, OMO

*A complete, exam-ready revision pack for Class 12 CBSE Economics.
Formula-rich, numerical-backed, and built around the new NCERT 2026-27 pattern.*

Also see for this chapter: [NCERT Solutions](#)

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1 Why Money: Barter and Its Failures

Before there were rupees, there were goats traded for grain. The story of money is the story of a problem and its fix. The problem is that direct, goods-for-goods exchange (**barter**) breaks down the moment an economy grows beyond a handful of producers. The fix is to invent a universally acceptable token that everyone is willing to take in exchange for whatever they have to sell. This opening section sets the stage for the heavy formulas that follow by showing exactly which barter problem each function of money is designed to cure.

1.1 The Barter Economy and Its Four Failures

A **barter system** (also called the C-C economy, where C stands for Commodity) exchanges one commodity directly for another without using money as an intermediate step. Imagine a weaver wanting rice. Under barter, the weaver must find a rice farmer who happens to want cloth at that moment, and the two must agree on how many metres of cloth equals one kilogram of rice. This requirement is the famous **double coincidence of wants**, and it is only the first of four problems.

The four barter failures, mapped to four cures

Barter failure	Cured by which function of money?
1. Lack of double coincidence of wants	Medium of Exchange
2. No common unit of account (n goods need $\frac{n(n-1)}{2}$ price ratios)	Unit of Account / Measure of Value
3. Goods spoil; storage is bulky and risky	Store of Value
4. No standard for future / deferred contracts	Standard of Deferred Payment

Quick arithmetic: 4 goods need $\frac{4 \times 3}{2} = 6$ price ratios under barter. 10 goods

need 45. 100 goods need 4,950. Money collapses this combinatorial blow-up to just n prices.

1.2 From C-C to C-M-C: How Money Slips In

Money turns one trade into two, but each trade is now easy. The weaver sells cloth for money ($C \rightarrow M$), then uses that money to buy rice ($M \rightarrow C$). The whole exchange becomes C-M-C, and the search for a perfect counterpart vanishes.

Barter ($C \rightarrow C$): rare match, slow, fragile



C-M-C: split one impossible trade into two easy ones

Do not list only one barter drawback

A common board-exam slip is writing only "double coincidence of wants" as the limitation of barter. CBSE markers expect at least three: write all of *double-coincidence, no unit of account, no store of value, and no standard of deferred payment*, with one line of explanation each.

1.3 Why Modern Economies Cannot Run Without Money

Without money, every loan, every tax, every salary contract and every futures market would have to be re-negotiated in commodity terms each time prices moved. The cost of trading would be enormous. Money is the lubricant that lets specialisation happen: the chip designer in Bengaluru can buy idlis from Chennai by trading neither chips nor idlis, only rupees. This is why every classroom definition begins the same way: *Money is anything that is generally acceptable as a medium of exchange.*

The Yap Island stone-money lesson

On the Pacific island of Yap, large carved stones called Rai once served as money. Ownership was tracked publicly by oral memory even though the stones were too heavy to move. The story confirms that money does not need to be portable, divisible or even physically transferred. It just needs to be generally accepted and trusted. That trust is the only thing keeping the rupee in your wallet useful.

2 Functions of Money

The four standard functions of money each cure one specific barter failure. NCERT groups them into **primary functions** (the two that the economy cannot function without), **secondary functions** (the two that make modern finance possible) and **contingent functions** (the supporting roles that emerge once money exists). Knowing all three buckets, with examples, is worth roughly 3 marks on every CBSE paper that touches this chapter.

2.1 Primary Functions

The primary functions are the two functions that arise the instant money appears, with no further institutional support required.

Primary Function 1: Medium of Exchange

Money is generally acceptable in payment for goods, services and assets. It removes the need for a double coincidence of wants and splits one impossible barter trade (C-C) into two easy money trades (C-M and M-C).

Primary Function 2: Unit of Account (Measure of Value)

Money provides a common yardstick in which the value of every good, asset, debt and contract is measured. Instead of $\frac{n(n-1)}{2}$ relative prices, an economy only needs n money prices. India quotes every good in rupees so that comparisons across goods, regions and time become possible.

2.2 Secondary Functions

The secondary functions emerge once money is durable, divisible and trusted by everyone.

Secondary Function 1: Store of Value

Money holds purchasing power across time. A worker can be paid today and spend the rupees next week, next month or next year. Money is the most liquid store of value, but inflation can erode this property if the price level rises sharply.

Secondary Function 2: Standard of Deferred Payment

Loans, salaries, rents, EMIs and bond contracts are all denominated in money for future settlement. This lets credit markets exist, which in turn lets investment outrun current saving, fuelling long-run growth.

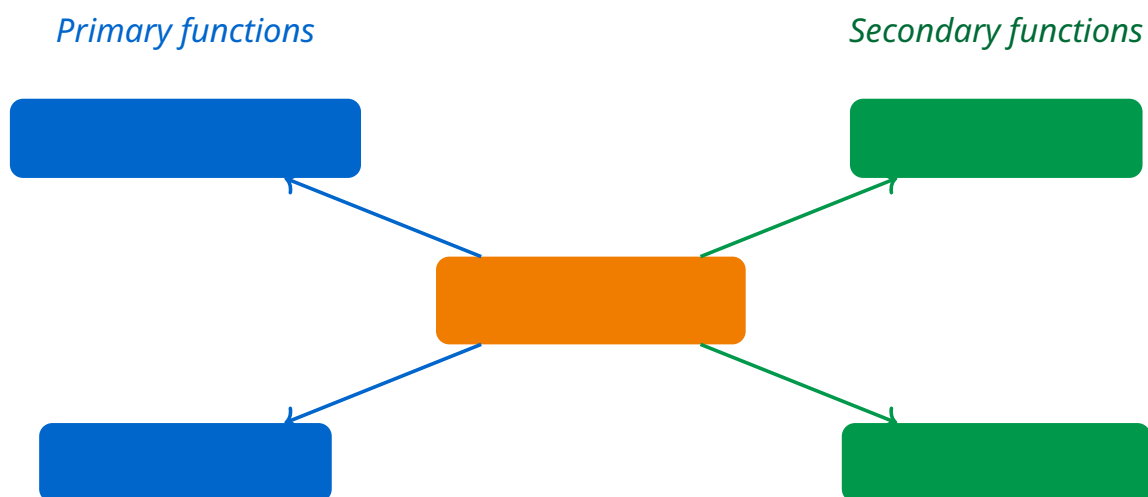
2.3 Contingent Functions

NCERT does not always test contingent functions in detail, but they are listed in the textbook and may appear as a 1-mark MCQ.

- **Distribution of National Income.** Money lets factor incomes (rent, wages, interest, profit) be paid out and re-spent.

- **Maximisation of satisfaction.** A consumer can equalise the marginal utility per rupee across goods only because every good is priced in the same unit.
- **Basis of credit.** No bank can extend a rupee loan without a rupee-denominated deposit base.
- **Liquidity of wealth.** Wealth held in money is instantly spendable; wealth held in property or shares must first be sold.

2.4 The Four-Function Picture



MUSS: the four-function recall hook

Medium of exchange **U**nit of account **S**ore of value **S**tandard of deferred payment. Read it as “MUSS” (must) because money MUST do all four to qualify as money. If something fails any one of these, it is not yet money.

CBSE rewards answers that explicitly map each function to the barter problem it solves: *medium of exchange* cures the lack of double coincidence of wants, *unit of account* cures the absence of a common yardstick, *store of value* cures the spoilage problem, and *standard of deferred payment* enables credit contracts. Writing the function alongside its barter cure wins the explanation marks.

3 Forms of Money: Fiat, Fiduciary, Legal Tender

Money has changed shape across centuries: cowrie shells → gold coins → paper notes → chequebook deposits → UPI. Each change traded off intrinsic value for convenience and trust in the issuer. The CBSE syllabus expects a clean classification by form, with one example each, and a careful distinction between **full-bodied** money (intrinsic value = face value) and **token** money (face value ≫ intrinsic value).

3.1 Classification by Form

The five forms of money (with an example each)

Form	Definition	Example
Commodity Money	A useful commodity that also serves as money	Cowrie shells, salt, cattle, gold, silver
Metallic Money	Coins struck from metal	Indian Rs. 1, Rs. 2, Rs. 5, Rs. 10, Rs. 20 coins
Paper Money	Notes issued by the central bank	RBI notes of Rs. 10 to Rs. 500
Credit / Bank Money	Bank-issued claims that circulate as money	Demand deposits, cheques, bank drafts
Plastic / Electronic Money	Digital claims on a bank balance	Debit cards, UPI, wallets, IMPS, RTGS

3.2 Full-Bodied vs Token Money

Full-bodied money carries an intrinsic commodity value equal to its face value. A pre-1947 silver rupee coin contained roughly one rupee worth of silver. **Token money** is the opposite: a Rs. 10 coin costs the mint a fraction of Rs. 10 to produce, and a Rs. 500 note costs a few rupees of paper and ink. The state guarantees the rest.

Why all modern money is token money

No country today issues full-bodied money. The cost saving is enormous (the state earns "seigniorage" equal to face value minus production cost), and there is no longer any need to tie the money supply to a finite metal stock. The trade-off is that token money relies entirely on public trust in the issuer.

3.3 Fiat Money vs Fiduciary Money vs Legal Tender

These three labels overlap but mean different things, and CBSE tests the distinction.

Three labels, one answer-friendly comparison

Label	Meaning
Fiat Money	Money that has value purely because the government decrees so (Latin <i>fiat</i> = “let it be done”). No commodity backing. Today, every rupee note and coin is fiat money.
Fiduciary Money	Money accepted on the basis of trust in the issuer, not on legal compulsion. Cheques, bank drafts and traveller’s cheques are fiduciary because creditors accept them voluntarily, trusting that the bank will honour them.
Legal Tender	Money the law requires a creditor to accept in settlement of debt. RBI notes (<i>unlimited legal tender</i>) and government coins (<i>limited legal tender</i>) qualify; cheques and UPI do not.

Unlimited vs Limited Legal Tender

Unlimited legal tender can settle a debt of any size: RBI currency notes. **Limited legal tender** can only settle debts up to a statutory ceiling: government-issued coins. Beyond the ceiling, a creditor may refuse to accept coins as payment.

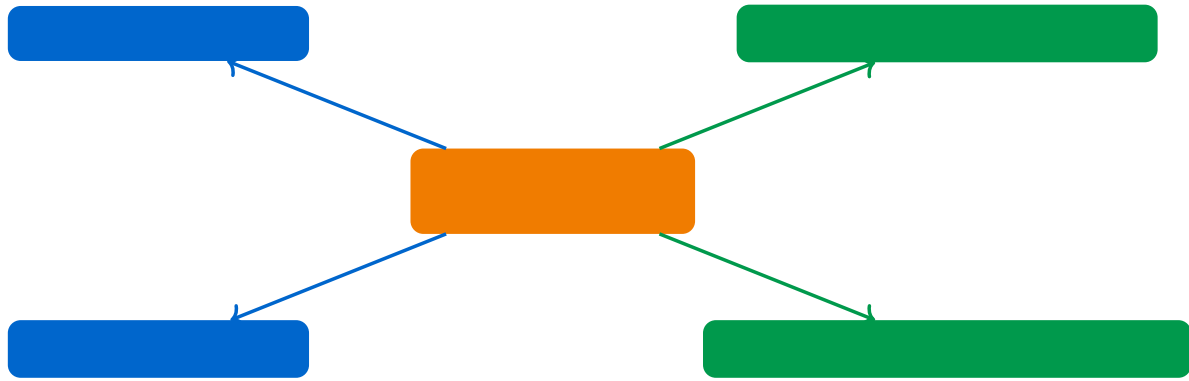
The cheque trap

A cheque is **fiduciary money**, not legal tender. A shopkeeper is legally allowed to refuse a cheque (it depends on trust) but cannot legally refuse a Rs. 500 note within India. Remember: notes are forced acceptance; cheques are negotiated acceptance.

Bitcoin in India: not legal tender

Cryptocurrencies such as Bitcoin are sometimes mistakenly called legal tender. As of 2026, the only legal tender in India is RBI currency notes and government coins. The Digital Rupee (e-Rupee) issued directly by RBI is legal tender; private cryptos are not.

3.4 Form vs Function: A Visual Map



Demonetisation 2016: when legal tender stopped being legal

On 8 November 2016, the Government of India withdrew the legal-tender status of Rs. 500 and Rs. 1000 notes overnight. Holders had to deposit or exchange them at banks. The episode illustrated three things at once: (i) legal tender is granted, not inherent, (ii) most Indians actually held cash for transactions and not just hoarding, and (iii) digital alternatives (UPI, wallets) gained massive ground in the months that followed.

4 Money Supply: M_1 , M_2 , M_3 , M_4

The **money supply** (M_s) is the total stock of money in circulation in an economy at a point in time. It is a **stock** concept, measured on a specific date (typically the last Friday of the month for India). The RBI publishes four progressively wider measures, M_1 to M_4 , each adding one more layer of less-liquid deposits to the previous level. Knowing the exact composition and the liquidity ordering is a standard 3-mark theory item.

4.1 Building Up the Four Measures

The four standard money-supply measures (RBI)

M_1 = Currency with the Public + Demand Deposits with the Banking System + Other Deposits with RBI

M_2 = M_1 + Savings Deposits with Post Office Savings Banks

M_3 = M_1 + Net Time Deposits with the Banking System

M_4 = M_3 + Total Deposits with Post Office Savings Organisations (excluding NSCs)

Aliases used by RBI:

M_1 = Narrow Money. M_3 = Broad Money.

4.2 Each Component Explained

- **Currency with the Public.** Total notes and coins held by households and firms, *excluding* cash in commercial-bank vaults (which is part of bank reserves, not public currency).
- **Demand Deposits.** Chequable balances repayable on demand. Current accounts and the chequable portion of savings accounts qualify.
- **Other Deposits with RBI.** A small residual covering deposits held with RBI by foreign central banks, the IMF and World Bank. Typically less than 1% of M_1 .
- **Post Office Savings Deposits.** Savings balances held in post offices. Less liquid than bank demand deposits, hence kept out of M_1 .
- **Net Time Deposits.** Fixed deposits and recurring deposits with commercial banks. Cannot be withdrawn before maturity without penalty, hence less liquid.

4.3 Magnitude and Liquidity Orderings (the two-direction rule)

The most testable single fact in the chapter

$M_1 < M_2 < M_3 < M_4$ in magnitude

$M_1 > M_2 > M_3 > M_4$ in liquidity

Each step up adds a less-liquid component, so the stock grows but its average liquidity falls.

4.4 A Worked Numerical: Computing M_1 , M_3 and the M_3/M_1 Ratio

Given (Rs. crore): Currency with the public = 25,000; Demand deposits = 18,000; Other deposits with RBI = 500; Savings deposits with post offices = 4,500; Net time deposits with banks = 60,000; Total post-office deposits (excl. NSCs) = 9,000.

Step 1. $M_1 = 25000 + 18000 + 500 = \text{Rs. } 43,500$ crore.

Step 2. $M_2 = M_1 + 4500 = \text{Rs. } 48,000$ crore.

Step 3. $M_3 = M_2 + \text{Net Time Deposits} = 48000 + 60000 = \text{Rs. } 1,08,000$ crore.

Step 4. $M_4 = M_3 + \text{Total Post-Office Deposits} = 1,08,000 + 9,000 = \text{Rs. } 1,17,000$ crore.

Step 5. $M_3/M_1 = 1,08,000/43,500 \approx 2.48$. The high ratio means most household financial wealth in India sits in time deposits, not in cheque-writable balances.

4.5 Why RBI Targets M_3 , Not M_1

Magnitude grows →



Most liquid

Liquidity shrinks →

Least liquid

Why M_3 is the policy anchor

M_1 is too volatile (Diwali, festivals, salary cycles) to make a stable policy target. M_4 includes assets that almost never circulate as money. M_3 captures total purchasing power in the banking system without the noise of cash spikes, which is why RBI's Monetary Policy Committee anchors its analysis on M_3 .

Climb the staircase: "Cash, Demand, Save, Time, Post"

M_1 adds Cash and Demand. M_2 adds Post-Office Savings. M_3 adds Time. M_4 adds the rest of Post. Climb the staircase one step at a time and the composition writes itself.

5 High-Powered Money: The Monetary Base H

High-powered money (H), also called the **monetary base** or **reserve money**, is the part of the money supply that the central bank alone creates and controls. Every rupee of H “supports” several rupees of broad money once commercial banks lend out their excess reserves, which is why H is called “high-powered”. The relationship between H and M_s is the heart of the next two sections (credit creation, money multiplier).

5.1 Definition and Components

High-Powered Money (Indian definition)

$$H = C + R$$

where:

C = Currency held by the public

R = Cash reserves of commercial banks (vault cash + deposits with RBI)

RBI’s published definition adds Other Deposits with RBI as a small third term, but for board-exam working you may treat the two-term version $H = C + R$ as canonical.

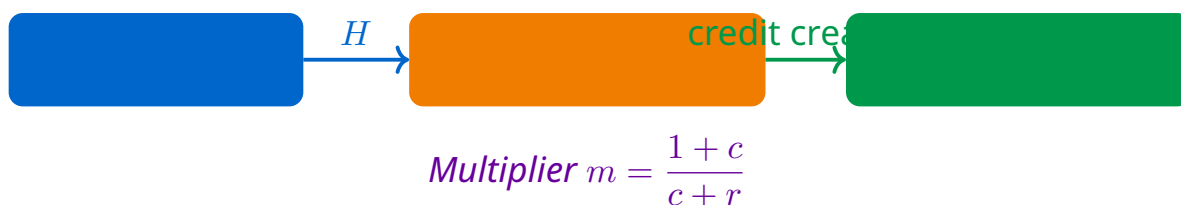
5.2 The Three Lines of RBI’s Liability Side

RBI’s balance sheet shows H on the liability side because it is what RBI owes to the rest of the economy. Three line items together equal H :

- **Currency in circulation.** Notes and coins held by the public and by bank vaults.
- **Bankers’ deposits with RBI.** Mainly the Cash Reserve Ratio (CRR) balances.
- **Other deposits with RBI.** Foreign central banks, IMF, World Bank.

5.3 Why “High-Powered”?

Each rupee that the RBI prints can become several rupees of money supply once banks re-lend their reserves. Suppose the public withdraws no cash and banks keep only 4% of every deposit as reserves. Then Rs. 1 of H that enters the system can fuel Rs. 25 of M_s (we will derive the formula in Section 7). That multiplicative power is exactly what “high-powered” refers to.



Sources vs Uses view of H

On RBI’s **liabilities** side, $H = \text{Currency} + \text{Bankers’ deposits with RBI} + \text{Other deposits}$. On the **assets** side, H originates from RBI’s claims on the Government,

on Banks, and from Net Foreign Exchange Assets. Whichever side you compute, the total is the same number.

H vs M_s : do not confuse

H is what RBI directly creates. M_s is the broad stock the public actually holds. The link is $M_s = m \cdot H$ where m is the money multiplier. RBI changes H through OMOs and changes the conditions of m through CRR/SLR.

6 Commercial Banks: Functions and Balance Sheet

A **commercial bank** is a financial institution that accepts deposits from the public and lends those funds, profiting from the interest-rate spread. In India, commercial banks fall into three groups: **public-sector banks** (SBI, PNB, Canara, etc.), **private-sector banks** (HDFC, ICICI, Axis, etc.) and **foreign banks** (Citibank, HSBC, Standard Chartered, etc.). All three groups perform the same primary and secondary functions.

6.1 Primary Functions

- **Accepting Deposits.** The bank receives money from the public in three account types:
 - **Demand Deposits:** current accounts and chequable savings, repayable on demand.
 - **Savings Deposits:** low interest, encourage thrift, partially chequable.
 - **Time / Fixed Deposits:** locked for a maturity period, earn higher interest.
- **Advancing Loans.** The bank lends the deposit pool, keeping only the legally required fraction as reserves. Four loan formats are standard:
 - **Cash Credit** against pledged stock or securities.
 - **Overdraft** on a current account up to a sanctioned limit.
 - **Loans:** lump-sum, fixed tenure, for housing, vehicle or business.
 - **Discounting Bills of Exchange:** immediate cash for a future-dated bill.

6.2 Secondary Functions

Two families of secondary functions

(A) Agency Functions (the bank acts for the customer):

- Collect and pay cheques, drafts, bills of exchange.
- Remit funds within and across cities (NEFT, RTGS, IMPS).
- Buy and sell securities on the customer's behalf.
- Pay periodic obligations (insurance premium, EMIs, taxes).

(B) General Utility Functions (services to the wider economy):

- Issue letters of credit, traveller's cheques, gift cards.
- Offer safe-deposit lockers.

- Foreign-exchange dealing.
- Underwrite share and bond issues.

6.3 Simplified Bank Balance Sheet

A balance sheet records everything the bank owes (liabilities) on one side and everything it owns (assets) on the other. The two must be equal by accounting identity.

Liabilities		Assets	
Capital + Reserves (own funds)	200	Cash in hand and with RBI	600
Demand Deposits	1,800	Loans and Advances	6,500
Time Deposits	6,000	Investments (G-Secs, etc.)	1,200
Borrowings from RBI / others	300	Fixed Assets (building, IT)	100
Other Liabilities	100	Other Assets	0
Total Liabilities	8,400	Total Assets	8,400

All figures are illustrative, in Rs. crore. Notice that loans dominate the asset side and deposits dominate the liability side.

Why a bank's loans are its assets

A loan creates a future stream of interest plus repayment for the bank. From the bank's perspective, that future inflow is something it owns, hence an *asset*. From the borrower's perspective, the same loan is a liability, because the borrower owes the bank. Both sides see the same transaction with opposite signs.

On the asset side of the balance sheet, "Cash in hand and with RBI" is the reserve R in the high-powered money equation. It splits into vault cash (kept on bank premises) plus CRR balances (kept on deposit with RBI). The SLR portion is held as *investments in G-Secs*, not as cash, so SLR sits in the "Investments" line and not under "Cash".

As of 2025, the State Bank of India (SBI) holds roughly Rs. 52 lakh crore of deposits across 22,000-plus branches, dwarfing the next-largest private bank (HDFC) at about Rs. 28 lakh crore. SBI alone funds 22% of India's total banking-system deposits, making it the natural transmission channel for RBI's policy moves.

7 Credit Creation and the Money Multiplier

Commercial banks do not simply hand back the deposits they receive; they relend most of them. Each loan disbursed becomes a new deposit somewhere else in the banking system, which the recipient bank can again partly re-lend. This iterative process is called **credit creation** (or **deposit creation**), and its outcome is captured by the **money multiplier**.

7.1 The Fractional-Reserve Assumption

Suppose the legal reserve ratio is $r = 0.20$ (banks must keep 20% of every deposit as reserves and may lend out 80%). Assume the public deposits every rupee it receives back into a bank (no currency leakage, so the currency-deposit ratio $c = 0$). Trace what happens when Rs. 1000 of new currency enters Bank A as a fresh deposit.

7.2 Step-by-Step Worked Example (Multiplier = 5)

Round	Deposit (Rs.)	Reserve (Rs.)	New Loan (Rs.)
1	1,000.00	200.00	800.00
2	800.00	160.00	640.00
3	640.00	128.00	512.00
4	512.00	102.40	409.60
5	409.60	81.92	327.68
...
Total	5,000.00	1,000.00	4,000.00

The sum of new deposits across all rounds is the geometric series $1000 \cdot (1 + 0.8 + 0.8^2 + 0.8^3 + \dots) = 1000 / (1 - 0.8) = 1000 / 0.2 = \text{Rs. } 5,000$. Total deposits expanded fivefold from the initial Rs. 1,000 injection.

Simple Money Multiplier (no currency leakage, $c = 0$)

$$m = \frac{1}{r}$$

Total Deposit Creation = Initial Deposit $\times m$.

With $r = 0.20$, $m = 5$. With $r = 0.04$, $m = 25$.

7.3 The General Money Multiplier (with currency leakage)

If the public chooses to hold a fraction c of every rupee of deposit as cash (instead of depositing it back), the multiplier shrinks because that cash leaves the banking system.

General Money Multiplier

$$m = \frac{M_s}{H} = \frac{1 + c}{c + r}$$

where:

$c = C/D$ = currency-to-deposit ratio of the public

$r = R/D$ = reserve-to-deposit ratio of banks (driven by CRR + SLR + prudence)

Total money supply: $M_s = m \cdot H$

7.4 Worked Numerical: Compute m and M_s

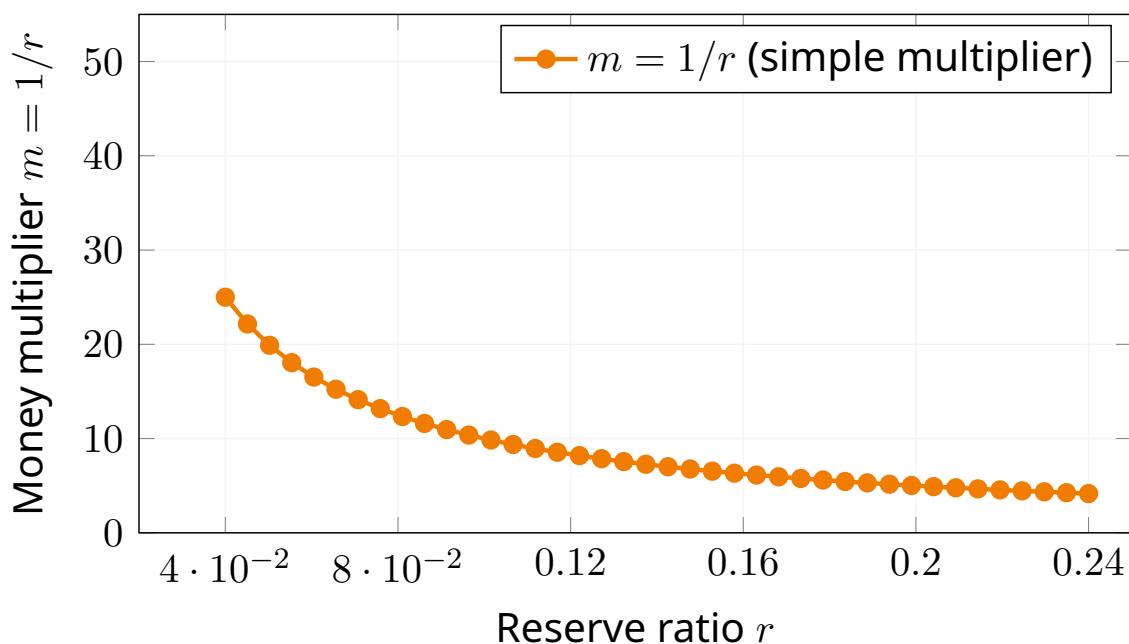
Given: $H = \text{Rs. } 5,00,000$ crore; $c = 0.15$; $r = 0.05$. Compute m and M_s .

Step 1. $m = (1 + c)/(c + r) = (1 + 0.15)/(0.15 + 0.05) = 1.15/0.20 = 5.75$.

Step 2. $M_s = m \cdot H = 5.75 \times 5,00,000 = \text{Rs. } 28,75,000$ crore.

Interpretation. A Rs. 5 lakh crore monetary base supports a Rs. 28.75 lakh crore broad-money stock. If the public chose to hold more cash (c rises to 0.25), the multiplier would fall to $(1.25)/(0.30) = 4.17$ and M_s would shrink to Rs. 20.83 lakh crore even though H is unchanged. This is exactly what happens in a panic: cash hoarding contracts M_s .

7.5 Visualising the Multiplier



The multiplier curve is steep at low r : cutting CRR from 4% to 2% doubles m from 25 to 50.

Three forces that limit credit creation in practice

The textbook multiplier assumes perfect re-deposit and perfect lending. In practice three frictions cap it:

- Banks hold *excess reserves* above the legal minimum for safety.
- The public holds *currency* (leakage out of the banking system).
- Borrowers may not always be available at the bank's offered rate.

The actual Indian multiplier hovers around 5–6, well below the algebraic ceiling of $1/r$.

A subtle caveat: the multiplier formula tells you how a change in H expands M_s via deposit creation. It does not tell you how a change in H that the public holds as cash expands M_s (it does not, because cash is one-for-one). Always identify whether new H is entering the system as bank reserves (multiplier active) or as currency in circulation (no multiplier).

8 The Central Bank (RBI): Six Core Functions

The **Reserve Bank of India** (RBI), established 1 April 1935 under the RBI Act 1934 and nationalised 1949, is India's central bank. Unlike commercial banks, RBI does not deal directly with the public for retail banking. Its job is to manage the monetary system as a whole. The CBSE syllabus expects six core functions, with one line of detail each.

8.1 Function 1: Currency Authority (Bank of Issue)

RBI has the **monopoly** on issuing currency notes in India, except the Rs. 1 note (issued by the Government of India). Coins are minted by the Government but circulated through RBI. The Minimum Reserve System (since 1956) requires RBI to hold a minimum of Rs. 200 crore in gold and foreign exchange (of which Rs. 115 crore in gold) as backing for the entire note issue.

8.2 Function 2: Banker, Agent and Adviser to the Government

RBI maintains the accounts of the Central and State governments, manages public debt (issuing T-bills and G-Secs), advises on fiscal-monetary coordination, and acts as the government's representative at the IMF and World Bank.

8.3 Function 3: Banker's Bank and Supervisor

RBI holds the cash reserves of all scheduled commercial banks (CRR balances), provides them with overnight liquidity through the LAF (repo and reverse repo), licences and supervises new banks, conducts inspections under the Banking Regulation Act 1949, and orders mergers / liquidations when necessary.

8.4 Function 4: Controller of Credit (Monetary Policy)

This is the function most often tested in CBSE. RBI controls the volume and cost of credit through six **quantitative** tools (Bank Rate, Repo, Reverse Repo, CRR, SLR, OMO) and four **qualitative** tools (margin requirements, moral suasion, selective credit controls, direct action). Sections 9-11 develop these in detail.

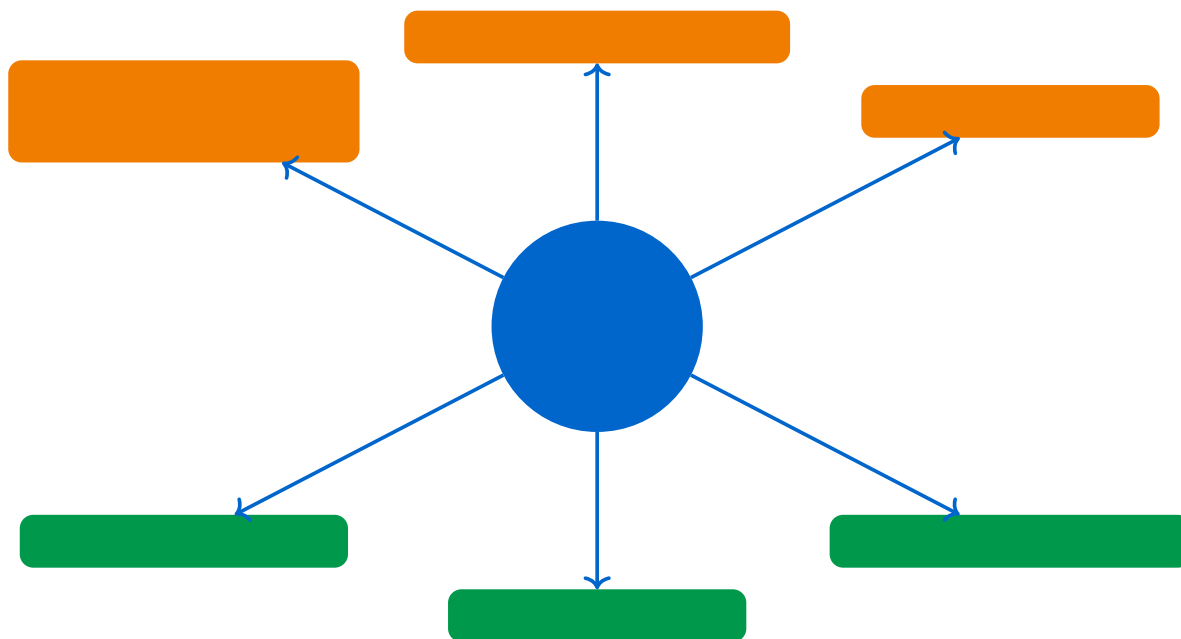
8.5 Function 5: Custodian of Foreign Exchange Reserves

RBI manages India's foreign-exchange reserves (\$610-650 billion as of 2024-25), intervenes in the FX market to smooth the rupee's exchange rate, and administers the Foreign Exchange Management Act (FEMA) 1999.

8.6 Function 6: Lender of Last Resort

When a *solvent* bank faces a sudden liquidity squeeze (depositors withdrawing faster than the bank can sell illiquid loans), RBI advances short-term cash against good collateral, usually at a penalty rate (MSF). This prevents a contagious bank run. Walter Bagehot's classical rule states: *lend freely, against good collateral, at a penalty rate, to solvent institutions only.*

8.7 The Six-Function Wheel



“CBB CFL”: six-function recall

Currency Authority, **B**anker to Government, **B**anker’s Bank, **C**ontroller of Credit, **F**orex Custodian, **L**ender of Last Resort. Say it aloud as “C-B-B-C-F-L” (“Currency, Banker, Banker, Controller, Forex, Lender”) and the order locks in.

Two questions identify the right RBI function in any exam item: *Who controls H ?* points to the Currency Authority function; *Who controls m ?* points to the Controller of Credit function. Together these two cover almost every RBI question on the Class 12 paper.

9 Quantitative Tools 1: CRR and SLR

The first family of credit-control tools targets the **reserve ratio** r inside the money-multiplier formula. By forcing banks to lock away more or fewer rupees as reserves, RBI raises or lowers the multiplier m and therefore M_s .

9.1 Cash Reserve Ratio (CRR)

CRR: cash with the central bank

CRR is the fraction of a bank’s Net Demand and Time Liabilities (NDTL) that must be held in *cash* with the RBI. It earns no interest. As of 2024-25, CRR is 4.5% of NDTL.

Impact channel: A higher CRR raises r , lowers $m = (1 + c)/(c + r)$, contracts M_s .

9.2 Statutory Liquidity Ratio (SLR)

SLR: investments in approved liquid securities

SLR is the fraction of NDTL that must be held in approved *liquid assets* (mainly Government Securities, gold, cash). Unlike CRR, SLR assets earn interest (G-Sec coupon). As of 2024-25, SLR is 18% of NDTL.

Impact channel: A higher SLR also raises r (less cash available for lending), lowers m , contracts M_s .

9.3 CRR vs SLR: The Comparison Table

Feature	CRR	SLR
Form of asset	Cash with RBI	G-Secs, gold, cash (with bank)
Earns interest?	No	Yes (G-Sec coupon)
Held with	RBI	The bank itself
Statutory ceiling	No upper limit in the RBI Act	40% upper limit
Current ratio (2024-25)	4.5%	18%

9.4 Worked Numerical: Impact of a CRR Cut

Setup. $H = \text{Rs. } 1,00,000$ crore, $c = 0.10$, CRR (which is the operative r here) = 5%.

Step 1 (initial). $m = (1.10)/(0.10 + 0.05) = 1.10/0.15 = 7.33$. $M_s = 7.33 \times 1,00,000 = \text{Rs. } 7,33,000$ crore.

Step 2 (RBI cuts CRR to 3%). $m = (1.10)/(0.10 + 0.03) = 1.10/0.13 = 8.46$. $M_s = 8.46 \times 1,00,000 = \text{Rs. } 8,46,000$ crore.

Step 3 (impact). A 2-percentage-point CRR cut pushes M_s up by about Rs. 1,13,000 crore, a 15% expansion. This is why RBI uses CRR sparingly: the impact is large and abrupt.

9.5 Why CRR Hits Harder Than SLR

CRR vs SLR: same direction, different force

A CRR change directly locks away or releases *cash* that banks can lend. An SLR change forces banks to swap loans for G-Secs, but the G-Secs themselves stay on the bank's balance sheet (they just are not loan assets). Both contract credit, but CRR is the sharper tool. Hence RBI typically moves SLR in 25-50 bp steps and CRR in 25-100 bp steps with markets watching closely.

CRR cuts during COVID-19

On 27 March 2020, RBI cut CRR by 100 basis points (from 4% to 3%) for one year, releasing about Rs. 1.37 lakh crore of liquidity into the banking system to fight the COVID-19 demand shock. This is a textbook example of using CRR as a

primary expansionary tool, mirroring the worked numerical above.

SLR is not held with RBI

A common slip is saying "SLR is the cash banks keep with RBI". SLR assets stay *with the bank* (mostly as G-Secs). Only the CRR portion sits with the RBI. Confusing the two costs 1-2 marks per appearance.

10 Quantitative Tools 2: Policy Rates

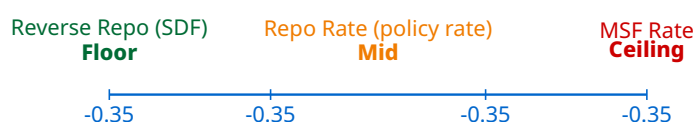
The second family of quantitative tools targets the **cost** of credit by setting the short-term interest rates at which RBI deals with commercial banks. Together they form the **Liquidity Adjustment Facility (LAF) corridor**.

10.1 The LAF Corridor at a Glance

Four short-term rates that define India's monetary stance

Rate	What it is	Effect of an increase
Repo Rate	Rate at which RBI lends overnight to banks against G-Secs	Borrowing costlier; banks raise lending rates; M_s contracts
Reverse Repo	Rate at which RBI borrows from banks (banks park excess cash with RBI)	Parking cash more attractive; less lending; M_s contracts
MSF Rate	Marginal Standing Facility: emergency overnight borrowing, against SLR-eligible securities, beyond LAF window	Emergency liquidity costlier; ceiling of the corridor
Bank Rate	Long-term rate at which RBI lends to banks (rediscount of bills)	Now mostly aligned to MSF; sets the penal rate for CRR / SLR shortfalls

10.2 The Corridor: Floor, Mid and Ceiling



The MPC sets the Repo Rate; the corridor is automatic: $\text{Reverse Repo} = \text{Repo} - 25 \text{ bps}$; $\text{MSF} = \text{Repo} + 25 \text{ bps}$

10.3 How a Repo-Rate Hike Travels Through the Economy

The transmission chain (in five steps)

1. RBI raises Repo Rate.
2. Banks' cost of overnight borrowing rises.
3. Banks raise the marginal cost of funds-based lending rate (MCLR / EBLR).
4. New loans (housing, auto, working capital) become costlier.
5. Households and firms borrow less; aggregate demand falls; M_s contracts.

10.4 Worked Numerical: Reading a Repo-Hike Announcement

Setup. On a Monetary Policy review day, RBI raises the Repo Rate by 50 bps (from 4.40% to 4.90%). The corridor moves automatically.

Step 1. New Repo Rate = 4.90%.

Step 2. New Reverse Repo Rate = $4.90 - 0.25 = 4.65\%$.

Step 3. New MSF Rate = $4.90 + 0.25 = 5.15\%$.

Step 4 (Bank Rate). Bank Rate is aligned with MSF, so it also moves to 5.15%.

Step 5 (impact on M_s). Banks' overnight funding costs jump by 50 bps. Within 30-60 days the MCLR for new loans typically rises by 30-40 bps, slowing fresh credit growth. The expected effect on M_s is mild contraction, often visible only after one or two quarters.

Repo Rate is the headline policy rate

When a newspaper says "RBI hikes rates", it almost always means the Repo Rate. The other three rates move mechanically with the corridor rule. The Monetary Policy Committee (MPC), chaired by the RBI Governor, votes on the Repo Rate every two months.

Why does the corridor exist?

The corridor caps overnight money-market interest rates: banks will never lend below the Reverse Repo (because they can earn that risk-free from RBI) and never borrow above the MSF (because RBI offers that ceiling). The Repo Rate is the policy mid-point that the MPC moves up or down to steer inflation.

Bank Rate is not the same as Repo Rate

Bank Rate is a long-term rediscount rate, mostly used today as the penal rate for banks falling short of CRR/SLR. Repo Rate is the short-term policy rate set by the MPC. They are aligned in level today but are not the same instrument.

11 Quantitative Tools 3 (OMO) and Qualitative

11.1 Open-Market Operations (OMO)

OMO: RBI buys or sells G-Secs in the open market

OMO Purchase by RBI \Rightarrow RBI pays Rs. X cash to bond sellers \Rightarrow cash enters banks as fresh deposits $\Rightarrow H$ rises $\Rightarrow M_s = m \cdot H$ rises.

OMO Sale by RBI \Rightarrow RBI absorbs Rs. X cash from bond buyers \Rightarrow cash leaves the banks $\Rightarrow H$ falls $\Rightarrow M_s$ contracts.

11.2 OMO vs CRR vs Repo: One-line Comparison

Tool	Targets	Suitability
CRR	r (reserve ratio) inside m	Permanent, sharp liquidity change
Repo Rate	Cost of overnight reserves	Steady, signalling-led demand control
OMO	H (monetary base)	Fine-tuning, day-to-day liquidity management

11.3 Qualitative Tools (Selective Credit Controls)

Quantitative tools change the *total* amount and cost of credit. Qualitative tools change the *direction* of credit, channelling it into priority sectors (agriculture, MSME, exports) and away from speculative use.

- **Margin Requirements.** The minimum down-payment a borrower must put up against the collateral. A higher margin discourages lending against that asset. RBI raises margin on gold loans in a speculative spike.
- **Moral Suasion.** Informal persuasion: the Governor calls bank CEOs and “requests” a change in lending behaviour without any rule change. Powerful in concentrated banking systems like India’s.
- **Selective Credit Controls.** Direct caps or rules on specific kinds of loans, e.g., maximum 70% LTV (loan-to-value) on home loans above Rs. 75 lakh.
- **Direct Action and Penalties.** Fines, licence suspension, refusing rediscount, public censure for banks that violate prudential rules.
- **Rationing of Credit.** RBI sets an upper limit on bank borrowing from its window, forcing banks to be more selective in their own lending.
- **Publicity / Guidance.** Public statements on inflation, growth and the rupee shape market expectations and indirectly influence credit flows.

11.4 Quantitative vs Qualitative: The Big Picture

Change total M_s



CRR / SLR
Repo / Reverse Repo / MSF
Bank Rate
Open-Market Operations

Channel credit



Margin requirements
Moral suasion
Selective credit controls
Direct action and penalties

A real OMO calendar

RBI announced OMO purchases of Rs. 40,000 crore of G-Secs in October 2023 to inject durable rupee liquidity into the banking system. The buy auctions were spread across three Wednesdays in tranches of Rs. 10,000-15,000 crore each. The episode shows OMOs are routine fine-tuning instruments, not just crisis tools.

Direction recall: "buy expand, sell contract"

OMO purchase by RBI $\Rightarrow M_s$ expands. OMO sale by RBI $\Rightarrow M_s$ contracts. Mirror image of CRR: cut \Rightarrow expand, raise \Rightarrow contract. Memorise both pairs and you can answer any direction-of-impact MCQ.

Moral suasion is not a quantitative tool

Some students bracket moral suasion with CRR or repo. It is a **qualitative** tool because it shapes the *direction* of credit and works through persuasion, not rule changes. Marker rubric splits half a mark off for this misclassification.

12 Common Mistakes and How to Avoid Them

This chapter is short but trap-heavy. The mistakes below recur in CBSE answer scripts every year. Each one costs 1-2 marks if it lands in a 4-mark or 6-mark answer.

12.1 Definitional Confusions

Six high-frequency definition slips

- **Money supply \neq currency.** M_s includes bank deposits; currency alone is only part of M_1 .
- **Demand deposits \neq all bank deposits.** Demand deposits are chequable balances; time deposits are not part of M_1 .
- **Currency with the public \neq currency in circulation.** The latter includes vault cash with banks; the former does not.
- **Bank Rate \neq Repo Rate.** Bank Rate is the long-term rediscount rate; Repo Rate is the short-term LAF rate.
- **CRR balances are with RBI; SLR balances are with the bank.** Don't swap them.
- **Cheques are not legal tender.** They are fiduciary money; acceptance is voluntary.

12.2 Multiplier and Numerical Errors

Where the multiplier numericals go wrong

- Using $m = 1/r$ when the question gives $c > 0$. The correct formula is $m = (1 + c)/(c + r)$.
- Forgetting that r in the formula represents the effective reserve ratio, which sometimes adds excess reserves to CRR.
- Treating "deposit" as "loan". The first round of Rs. 1000 deposit generates only Rs. 800 in loans (not Rs. 1000).
- Computing m but forgetting to multiply by H to get M_s .
- Reporting M_s in the wrong units (writing crore instead of lakh crore or vice versa).

12.3 Direction-of-Impact and Function Errors

Sign errors that cost direction marks

- OMO purchase by RBI *increases* M_s (not decreases).
- CRR cut *increases* M_s (because m rises).
- Repo Rate cut *increases* M_s (cheaper borrowing).
- Reverse Repo rise *decreases* M_s (banks park more with RBI).
- "Medium of exchange" is a *function*, not a form. The form might be note, coin

or UPI.

- “Fiduciary” means accepted on *trust*, not by law. A cheque is fiduciary; a note is fiat and legal tender.

Quick recall: *Cut* the rate or ratio $\Rightarrow M_s$ up. *Buy* bonds $\Rightarrow M_s$ up. *Sell* bonds $\Rightarrow M_s$ down.

12.4 What CBSE Markers Specifically Reward

Answer-writing rubric used by CBSE examiners

- State the definition in one underlined or bold sentence first.
- Add the formula in display style if any (e.g., $M_s = m \cdot H$).
- Give a short example or numerical to anchor the definition.
- For 4-mark questions, write four distinct points; for 6-mark, write four points + a worked example.
- For direction-of-impact questions, mention *both* the channel (r or H or cost-of-credit) *and* the final sign on M_s .

13 Formula Sheet (One-Page Appendix)

A single reference page that compresses every formula, identity and ratio you need for revision the night before the exam.

13.1 Money Supply Identities

M_1 to M_4 (memorise the climb)

- M_1 = Currency with the Public + Demand Deposits with the Banking System + Other Deposits with RBI
- $M_2 = M_1$ + Savings Deposits with Post Office Savings Banks
- $M_3 = M_1$ + Net Time Deposits with the Banking System
- $M_4 = M_3$ + Total Post-Office Deposits (excl. NSCs)
- Magnitude: $M_1 < M_2 < M_3 < M_4$. Liquidity: $M_1 > M_2 > M_3 > M_4$.

13.2 High-Powered Money

Monetary base

$H = C + R$ where C = currency with the public, R = bank reserves (vault cash + CRR balances with RBI).

13.3 Money Multiplier and Money Supply

The two-line core of credit creation

General: $m = \frac{1+c}{c+r}$, $M_s = m \cdot H$

Simple (no leakage): $m = \frac{1}{r}$, $M_s = \frac{H}{r}$

With $r = 0.04$ and $c = 0$: $m = 25$. With $r = 0.05$, $c = 0.15$: $m = 5.75$.

13.4 Reserve and Policy Ratios (2024-25 levels)

CRR, SLR and the LAF corridor

- CRR = 4.5% of NDTL (cash with RBI, no interest)
- SLR = 18% of NDTL (G-Secs / gold / cash with the bank, earns coupon)
- Repo = Policy mid (illustrative 4.40 to 6.50% across recent cycles)
- Reverse Repo = Repo – 25 bps (floor of the LAF corridor)
- MSF = Repo + 25 bps (ceiling of the LAF corridor)
- Bank Rate \approx MSF (penal rate for CRR/SLR shortfalls)

13.5 Quantitative vs Qualitative Tools

Quick-glance tool list

Quantitative (change total M_s): Bank Rate, Repo, Reverse Repo, MSF, CRR, SLR, OMO.

Qualitative (channel credit): Margin requirements, Moral suasion, Selective credit controls, Direct action, Rationing of credit, Publicity.

13.6 Direction-of-Impact Table

RBI Action	Channel	Effect on M_s	Stance
CRR raised	$r \uparrow, m \downarrow$	Contracts	Tight
CRR cut	$r \downarrow, m \uparrow$	Expands	Easy
Repo raised	Cost \uparrow	Contracts	Tight
Repo cut	Cost \downarrow	Expands	Easy
OMO purchase	$H \uparrow$	Expands	Easy
OMO sale	$H \downarrow$	Contracts	Tight
SLR raised	$r \uparrow, m \downarrow$	Contracts	Tight

13.7 Glossary of Symbols

Symbol legend used throughout this chapter

- H = High-powered money / monetary base
- M_s = Money supply (total stock of money in circulation)
- m = Money multiplier
- r = Reserve-to-deposit ratio of banks
- c = Currency-to-deposit ratio of the public
- NDTL = Net Demand and Time Liabilities of a bank
- LAF = Liquidity Adjustment Facility (Repo + Reverse Repo window)
- MSF = Marginal Standing Facility (emergency overnight lending against SLR securities)
- MPC = Monetary Policy Committee (six-member panel that votes on the Repo Rate)

14 Past Year Question (PYQ) Trend 2019-2024

CBSE has tested Money and Banking every single year. The pattern below summarises the last six board cycles to help focus revision on the highest-yield items.

14.1 Year-by-Year Topic Map

Year	Topic	Question Type	Marks	Difficulty
2019	Functions of Money + CRR impact on credit	Theory + explain	3+4	Easy/Med
2020	M_1 to M_4 composition; Multiplier $m = 1/r$	Theory + numerical	4+6	Easy/Med
2021	Quantitative vs Qualitative tools compare	Theory	4	Medium
2022	Repo Rate mechanism; Credit creation (5 rounds)	Explain + numerical	3+6	Med/Hard
2023	RBI Lender of Last Resort; HPM components	Theory	4+3	Easy/Med
2024	OMO direction; Fiat/Fiduciary/Legal Tender	Explain + theory	4+4	Medium

14.2 Pattern Insights

- One **theory question on functions of money** appears every two years (3 or 4 marks).
- One **credit-creation or multiplier numerical** appears in roughly 75% of papers (6 marks).
- One **tool-of-monetary-policy question** (CRR, SLR, Repo or OMO) appears every year (3 or 4 marks).

- Definition-style questions (legal tender, fiat money, M_3 composition) recur as 1-mark MCQs in the new pattern.
- Application questions (“what would RBI do if inflation rises”) have grown in weight under the 2024 sample paper.

14.3 Topic-Weight Forecast (Next Cycle)

Topic	Expected weight (%)
RBI Tools (CRR, SLR, Repo, OMO)	30
Multiplier and Credit Creation	25
Money Supply (M_1 to M_4)	18
Forms and Legal Tender	15
Functions of Money	12

How recent monetary policy has moved

Between May 2022 and February 2023, the MPC raised the Repo Rate from 4.00% to 6.50% in six successive moves, the sharpest tightening cycle since 2010. CRR was held at 4.50% throughout. The episode is a textbook example of using the policy rate (not the reserve ratio) as the headline anti-inflation tool, in line with Flexible Inflation Targeting since 2016.

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15 Quick Recall and Mnemonics

The last page of the chapter is a compact set of recall hooks for the night-before-exam read.

15.1 Mnemonic Catalogue

Four chapter-defining mnemonics

(a) MUSS \Rightarrow Medium of exchange, Unit of account, Store of value, Standard of deferred payment (functions of money).

(b) CBBCFL \Rightarrow Currency authority, Banker to Government, Banker's Bank, Controller of credit, Forex custodian, Lender of last resort (six functions of RBI).

(c) $M_1 < M_2 < M_3 < M_4$ in size; $M_1 > M_2 > M_3 > M_4$ in liquidity (money-supply ordering).

(d) Cut \rightarrow Expand, Sell \rightarrow Contract (direction of CRR/Repo and OMO actions on M_s).

15.2 30-Second Chapter Summary

Read this once on the morning of the exam

- **Why money?** Cures four barter problems (no double coincidence, no unit, no store, no deferred payment).
- **Four functions (MUSS):** Medium of exchange, Unit of account, Store of value, Standard of deferred payment.
- **Money supply:** M_1 to M_4 ; M_3 is RBI's policy anchor. Fiat money has value by state decree; cheques are fiduciary, not legal tender.
- **High-powered money:** $H = C + R$. **Multiplier:** $m = (1+c)/(c+r)$. $M_s = m \cdot H$.
- **RBI six functions:** Currency authority, Banker to Government, Banker's Bank, Controller of credit, Forex custodian, Lender of last resort.
- **Tools:** Quantitative = CRR, SLR, Repo, Reverse Repo, MSF, Bank Rate, OMO. Qualitative = Margin, Moral suasion, Selective credit controls, Direct action.
- **Direction:** Cut a rate or ratio $\Rightarrow M_s$ expands. Sell G-Secs in OMO $\Rightarrow M_s$ contracts.

15.3 Connection to Next Chapter

The money-supply M_s derived here feeds directly into Chapter 4, Income Determination, where it shifts the IS-LM equilibrium. The CRR-Repo-OMO toolkit reappears in Chapter 5 (Government Budget) as the monetary side of the policy mix.

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