Numerical 1

Calculate the value of credit multiplier if the legal reserve deposit ratio is 20%.

(CBSE Sample Question Paper 2019) **(1 mark)**

Solution: Credit Multiplier = 1/Legal Reserve Deposit Ratio = 1/0.2 = 5

Do it yourself 1

Calculate the value of money multiplier if Required Reserve Ratio is 12.5%. **(1 mark)**

[**Ans.** 8]

Numerical 2

If the Reserve Ratio is 20% and the primary deposits are ₹100, what is the value of deposit multiplier and total lending by the banking system?

Given the same amount of initial deposits, if the RBI increased the Reserve Ratio to 25%, what would happen in the economy? Explain. (NCERT) **(4 marks)**

Solution: Deposit multiplier (or Money multiplier or Credit multiplier) = 1/Reserve ratio = 1/20% = 1/0.2 = 5

Credit creation (or Money creation or Deposit creation) = Primary Deposits × 1/Reserve ratio = ₹100 × 5 = ₹500

Total lending by the banking system = 500 – 100 = ₹400

If the RBI increases the Reserve Ratio to 25%, total money creation = ₹100 × 1/0.25 = ₹ 100 × 4 = ₹400

Thus, the banking system would now be able to loan ₹300 only (₹400 – ₹100). It would have to call back some loans to meet the increased reserve requirements. Hence, money supply would fall.

Do it yourself 2

If the Reserve Deposit Ratio is 25% and the initial deposits of the public are ₹2,000, what is the value of deposit multiplier, total deposit creation and total lending by the banking system? **(4 marks)**

[**Ans.** Deposit multiplier = 4; Total deposit creation = ₹8,000 and total lending by the banking system ₹6,000]

Numerical 3

If the total deposits created by commercial banks is ₹50,000 crore, and CRR is 12% and SLR is 8%, then calculate the amount of initial deposit with the bank. **(3 marks)**

Solution: LRR = CRR + SLR = 12 + 8 = 20% = 0.2

Therefore, Money Multiplier = 1/LRR = 1/0.2 = 5

Deposits creation = Initial deposit × 1/LRR

50,000 = Initial deposit × 5

Initial deposit = 50,000/5 = ₹10,000 crore

Do it yourself 3

Total deposits created by commercial banks is ₹12,000 crore and LRR is 25%. Calculate the amount of initial deposits. **(3 marks)**

[**Ans.** ₹3,000 crore]

Numerical 4

Calculate the legal reserve ratio if the initial deposit of ₹ 10,000 crore lead to a creation of total deposits of ₹ 1,00,000 crore. **(3 marks)**

Solution: Deposits creation = Initial deposits × 1/LRR

1,00,000 = 10,000 × 1/LRR

1/LRR = 1,00,000/10,000

1/LRR = 10

LRR = 1/10 = 0.1 or 10%

Do it yourself 4

Calculate the legal reserve ratio if the initial deposit of ₹ 25,000 crore lead to a creation of total deposits of ₹1,25,000 crore. **(3 marks)**

[**Ans.** 20%]

2.3 Central Bank and Its Functions

Central Bank – Meaning

The Central Bank is the apex institution of a country's monetary system. The design and the control of the country's monetary policy is its main responsibility.

India got its Central Bank in 1935. Its name is the 'Reserve Bank of India (RBI)'. It is the apex bank engaged in regulating commercial banks in India.

Functions of the Central Bank

1. Authority of Currency Issue/Bank of issue

The Central Bank is the sole authority for the issue of currency in the country. It promotes efficiency in the financial system. *Firstly*, because this leads to uniformity in the issue of currency. *Secondly*, because it gives Central Bank direct control over money supply.

2. Banker to the Government/Government's Bank

The Central Bank acts as a banker to the government (both Central government as well as State governments). Banker to the government means that the Central Bank gives the same banking facilities to the government which commercial banks give to the general public. The Central Bank does not give such facilities to the general public.

- As the banker to the government, the central bank provides a large number of routine banking functions to the government like maintaining the balances, arranging and managing funds of the government and so on.
- It gives loan to the government.
- It accepts receipts and makes payments for the government.
- It works as agent of the government in matters of collection of taxes, etc.
- It manages public debt.
- It also acts as a financial advisor to the government.

3. Bankers' Bank

- As the banker to the commercial banks, the Central Bank holds surplus cash reserves of commercial banks.
- It also gives loans to the commercial banks when they are in need of funds.
- The Central Bank also provides a large number of routine banking functions to the commercial banks, like cheque clearing, remittance facilities, etc.
- It also acts as a supervisor and a regulator of the banking system. It makes rules regarding their licensing, branch expansion, liquidity of assets, amalgamation (merging of banks) and liquidation (the winding up of banks), etc. The control is exercised by periodic inspection of banks and the returns filed by them.

What role of RBI is known as 'lender of last resort'?

When commercial banks need more funds in order to be able to create more credit,they may go to market for such funds or go to the Central Bank. Central bank provides them funds through various instruments.

'Lender of Last Resort' refers to the role of the Central Bank (RBI), of being ready to lend to banks, especially when a bank is faced with unanticipated severe financial crises, and due to this central bank is said to be the 'lender of last resort'.

If the central bank refuses to extend this help, there is no option for the bank but to shut down.

Top Tip

Commercial banks are legally required to keep only a fraction of deposits as cash reserves. This is because not all depositors approach the banks for withdrawal of money at the same time, and also that normally they withdraw a fraction of deposits. Secondly, there is a constant flow of new deposits into the banks. Therefore, to meet the daily demand for withdrawal of cash, it is sufficient for banks to keep only a fraction of deposits as cash reserves. However, if suppose all the account-holders want to withdraw their deposits at the same time,the bank will not have enough funds to satisfy the need of every account holder. This situation is called 'bank run'.The bank may approach the Central Bank,which then lends money to meet its emergent needs.

2.4 Quantitative and Qualitative Techniques of Credit Control

1. Bank Rate Policy

Bank Rate is the rate of interest at which Central Bank lends to the commercial banks for long term.

The Central Bank can regulate money supply in an economy by changing the bank rate.

- When the Central Bank has to increase the money supply (during recession/deflation), it lowers bank rate. When Central Bank lowers bank rate, commercial banks also lower their lending rates. Since borrowing becomes cheaper, people may borrow more. This leads to increase in credit creation by banks and thus, rise in money supply in the hands of general public.
- When the Central Bank has to decrease the money supply (during inflation), it raises bank rate. When Central Bank raises bank rate, commercial banks also raise their lending rates. Since borrowing becomes costly, people may borrow less. This leads to decrease in credit creation by banks and thus, reduces the money supply in the hands of general public.

2. Open Market Operations (OMO)

Open Market Operations refers to buying and selling of government securities (bonds) by the Central Bank from/to the general public.

It is an important step which may be undertaken to control money supply in the economy.

- By selling government securities the Central Bank soaks liquidity from the economy because those who buy make payments by cheques to the Central Bank. This reduces the reserves of commercial banks and adversely affects bank's ability to create credit and thus, reduces the money supply in the hands of general public.
- By purchasing government securities, Central Bank releases liquidity in the economy since it pays for it by giving a cheque. This cheque increases cash reserves with banks and thus increases bank's ability to create credit and hence increases the money supply in the hands of general public.

3. Legal Reserve Requirements

Legal Reserve Ratio (LRR) is the minimum reserves that a commercial bank must maintain as per the instructions of the Central Bank.

There are two components of Legal Reserve Ratio (LRR)– Cash Reserve Ratio (CRR) and Statutory Liquidity Ratio (SLR). CRR is the fraction of net total demand and time deposits that commercial banks must keep as cash reserves with the Central Bank. SLR is the fraction of net total demand and time deposits that commercial banks must keep with themselves in the form of liquid assets.

- When the Central Bank raises CRR or SLR or both, less money is left with commercial banks for lending. As lending decreases, the money creation decreases and money supply in the economy decreases.
- When the Central Bank reduces CRR or SLR or both, more money is left with commercial banks for lending. As lending increases, the money creation increases and money supply in the economy increases.

4. Repo Rate

Repo Rate (or Repurchase Rate) is the rate of interest at which Central Bank lends to commercial banks for their short-term requirements.

- An increase in repo rate will force commercial banks to increase their lending rates. It will make borrowings costlier to general public. People may borrow less. Thus, credit creation by banks declines and money supply decreases in the economy.
- A decrease in repo rate will induce commercial banks to decrease their lending rates. It will make borrowings cheaper to general public. People may borrow more. Thus, credit creation by banks increases and money supply increases in the economy.

5. Reverse Repo Rate

When the commercial banks have surplus funds they can deposit the same with the central bank and earn interest. The rate of interest paid by the Central Bank on such deposits is called Reverse Repo Rate.

- When Reverse Repo Rate is raised, it encourages the commercial banks to park their funds with the central bank. This has the negative effect on the lending capability of the commercial banks.
- Lowering Reverse Repo Rate has the opposite effect which raises demand for borrowings from the commercial banks.

6. Margin Requirement on Loan

Margin Requirement on loan refers to the difference between current market value of the security offered and amount of loan granted by banks.

If the margin imposed by the Central Bank is 40%, then the bank is allowed to give a loan only up to 60% of the value of the security. By altering the margin requirements, the Central Bank can alter the amount of loans made against securities by the banks.

- Lowering margin requirement enables borrowers to secure larger amount of funds from the banks, thereby increases money supply in the economy.
- Raising margin requirement forces borrowers to secure less amount of funds from the banks, thereby decreases money supply in the economy.

Key Terms

Bank rate – Bank rate is the rate of interest at which commercial banks can borrow from the Central Bank.

Open market operations – Sale and purchase of government securities in the open market by the Central Bank(RBI).

Repo rate – The rate at which commercial banks borrow money from the Central Bank for a short period by selling their financial securities to the Central Bank.

Reverse repo rate – The rate at which Central Bank borrows money from commercial banks.

Margin requirement on loan – The difference between the current value of the security offered and amount of loan granted.

Objective Type Questions 2.4

1. The RBI can influence money supply by changing the rate at which it gives loans to the commercial banks for long-term periods. This rate is called the __________ in India. *(Choose the correct alternative)*
   (a) Bank Rate
   (b) Repo Rate
   (c) High powered money
   (d) Lending Rate
2. The central bank controls money supply of the country through various methods, like bank rate, open market operations and variations in ________. *(Fill in the blank)*
3. ___________ refers to buying and selling of bonds issued by the Government in the open market by the central bank on behalf of the Government. *(Fill in the blank)*
4. When RBI buys a Government bond in the open market, it __________ the money supply in the economy. (increases/decreases) *(Fill in the blank with correct option)*
5. When the central bank buys the government security through an agreement which has a specification about date and price of resale of this security. This type of agreement is called a (i)_______ . The interest rate at which the money is lent in this way is called the (ii)_____ . *(Fill in the blanks)*
6. When the Central bank sells the government security through an agreement which has a specification about the date and price at which it will be repurchased. This type of agreement is called a (i)_______. The rate at which the money is withdrawn in this manner is called the (ii)_______ . *(Fill in the blanks)*
7. If the RBI increases the bank rate, money supply in the economy _________. (increases/decreases) *(Fill in the blank with correct option)*
8. Repo rate is the rate at which (CBSE 2017) *(Choose the correct alternative)*
   (a) commercial banks purchase government securities from the central bank
   (b) commercial banks can take loans from the central bank
   (c) commercial banks can keep their deposits with the central bank
   (d) short-term loans are given by commercial banks
9. The ratio of net total demand and time deposits that a commercial bank has to keep with Reserve Bank of India is called: (CBSE 2017) *(Choose the correct alternative)*
   (a) Statutory liquidity ratio
   (b) Deposit ratio
   (c) Cash reserve ratio
   (d) Legal reserve ratio

10. Which of the following is not a Quantitative Method of credit control? *(Choose the correct alternative)*
    (a) Open Market Operations
    (b) Margin Requirements
    (c) Variable Reserve Ratio
    (d) Bank Rate Policy

11. __________ is the rate at which the Central Bank borrows funds from commercial banks. *(Choose the correct alternative)*
    (a) Cash Reserve Ratio
    (b) Statutory Liquidity Ratio
    (c) Bank Rate
    (d) Reverse Repo Rate

12. __________ is the ratio of deposits which banks keep with themselves. *(Choose the correct alternative)*
    (a) Cash Reserve Ratio
    (b) Statutory Liquidity Ratio
    (c) Bank Rate
    (d) Reverse Repo Rate

13. __________ is the rate at which commercial banks borrow short-term funds from the Central Bank by selling their financial securities to the Central Bank. *(Choose the correct alternative)*
    (a) Cash Reserve Ratio
    (b) Statutory Liquidity Ratio
    (c) Bank Rate
    (d) Repo Rate

14. If an economy is to control recession, which of the following can be appropriate? *(Choose the correct alternative)*
    (a) Reducing Repo Rate
    (b) Reducing CRR
    (c) Both (a) and (b)
    (d) None of (a) and (b)

15. What will be the effect of increase in the 'Repo Rate' on the money supply? *(Choose the correct alternative)*
    (a) Money supply will increase
    (b) Money supply will decrease
    (c) Money supply will remain same
    (d) Money supply will initially increase and then it will decrease

16. The central bank can increase availability of credit by: *(Choose the correct alternative)*
    (a) Raising repo rate
    (b) Raising reverse repo rate
    (c) Buying government securities
    (d) Selling government securities

17. Statutory liquidity ratio is the ratio of demand deposits of a commercial bank which it has to keep in the form of specified liquid assets. *(True/False)*

18. Reverse repo rate is the rate at which the Central Bank lends funds to banks. *(True/False)*

19. To increase the money supply in the economy, Central Bank reduces the margin requirement. *(True/False)*

20. Qualitative instruments of credit control includes: *(Choose the correct alternative)*
    (a) Margin Requirement
    (b) Bank Rate
    (c) CRR
    (d) Open Money Operations

21. Quantitative instrument of monetary policy includes: *(Choose the correct alternative)*
    (a) Margin Requirement
    (b) Bank Rate
    (c) Statutory Liquidity Ratio
    (d) Both (b) and (c)
22. During deflation, it is advisable to ___________. *(Choose the correct alternative)*
    (a) Lower the bank rate and purchase of securities in the open market
    (b) Increase the bank rate and purchase of securities in the open market
    (c) Decrease in bank rate and sale of securities in the open market
    (d) Increase in bank rate and sale of securities in the open market
23. Which of the following will increase the supply of money? *(Choose the correct alternative)*
    (a) Fall in bank rate
    (b) Sale of securities in open market
    (c) Increase in the cash reserve ratio
    (d) Increase in Repo rate
24. To curb inflation, the RBI should___________. *(Choose the correct alternative)*
    (a) Reduce the bank rate
    (b) Reduce the Repo rate
    (c) Sell the government securities
    (d) Reduce the Reverse Repo rate
25. To soak the liquidity from the market ___________. *(Choose the correct alternative)*
    (a) Government securities should be purchased
    (b) Government securities should be sold
    (c) Repo rate should be decreased
    (d) Cash reserve ratio should be decreased
26. Which of the following changes by the Central Bank can increase the money supply? *(Choose the correct alternative)*
    (a) Increase in Repo Rate
    (b) Increase in CRR
    (c) Purchase of government securities in the open market
    (d) Sale of government securities in the open market
27. Name the credit control method which refers to the difference between the amount of loan and market value of the securities offered by the borrower against the loan. *(Choose the correct alternative)*
    (a) Selective credit control
    (b) Moral Suasion
    (c) Margin requirement
    (d) Legal reserve requirements

Answers

Objective Type Questions 2.4

1. (a) Bank Rate
2. Reserve ratios
3. Open Market Operations (OMO)
4. increases
5. (i) Repurchase agreement or Repo (ii) Repo Rate
6. (i) Reverse Repurchase Agreement or Reverse Repo
   (ii) Reverse Repo Rate
7. decreases
8. (b) commercial banks can take loans from the central bank
9. (c) Cash reserve ratio
10. (b) Margin Requirements
11. (d) Reverse Repo Rate
12. (b) Statutory Liquidity Ratio
13. (d) Repo Rate
14. (c) Both (a) and (b)
15. (b) Money supply will decrease
16. (c) Buying government securities

17. False: Statutory liquidity ratio is the ratio of net total demand and time deposits that commercial banks must keep with themselves in the form of specified liquid assets.
18. False: Reverse repo rate is the rate at which the Central Bank borrows funds from banks.
19. True: Decrease in margin requirements enhances the borrowing capacity of public, which raises the money supply in the economy.
20. (a) Margin Requirement
21. (d) Both (b) and (c)
22. (a) Lower the bank rate and purchase of securities in the open market
23. (a) Fall in bank rate
24. (c) Selling the government securities
25. (b) Government securities should be sold
26. (c) Purchase of government securities in the open market
27. (c) Margin requirement