Unit 9

I. Choose the correct answer (each question carries 1 mark)

1. The main function of money is:
a) Saving
b) Expenditure
c) Medium of Exchange
d) Investment
2. The bank which acts as monetary authority of India
a) RBI
b) NABARD
c) RRB
d) IDBI
3. The banks which are part of the money creating system of the economy
a) Bankers
b) Commercial Banks
c) RBI
d) None of the above
4. The rate at which the RBI lends money to commercial banks against security is called:
a) Bank Rate
b) Repo Rate
c) Reverse Repo Rate
d) None of the above

II. Fill in the blanks (Each question carries 1 mark)
1. Economic exchanges without the use of money are referred to as____barter sytem__________
2. ____RBI___________ is the only institution which can issue currency in India
3. _____Govt of India_____________ Issues coins in India
4. The principal motive for holding money is to carry out___transcations_______
5. M1 and M2 are known as __narrow money____________

III. Match the following (Carries five marks)

A	B
1. SLR	a) Government of India
2. Circulation of Coin	b) Statutory Liquidity Ratio
3. Money	c) Broad Money
4. M3 and M4	d) Repo
5. Repurchase Agreement	e) Medium of Exchange

A	B
SLR	Statutory Liquidity Ratio
Circulation of Coin	Government of India
Money	Medium of Exchange
M3 and M4	Broad Money
Repurchase Agreement	Repo

IV. Answer the following questions in a sentence or word. (Each question carries 1 mark)

1. What do you mean by barter system?

Economic exchanges without the mediation of money are referred to as barter exchanges.

2. Give the meaning of money

Money is the commonly accepted medium of exchange

3. What is Time deposit?

Fixed deposits, have a fixed period to maturity and are referred to as time deposits

4. What is fiat money?

Currency notes and coins are therefore called fiat money. They do not have intrinsic value like a gold or silver coin

5. Write the meaning of high powered money.

The total liability of the monetary authority of the country, RBI, is called the monetary base or high powered money

6. Expand CRR

Cash Reserve Ratio

7. What is bank rate?

RBI uses a certain interest rate called the Bank Rate to control the value of rdr (Reserve deposit ratio)

V. Answer the following questions in 4 sentences (Each question carries 2 marks)

1. Mention two functions of money

The first and foremost role of money is that it acts as a medium of exchange

Money also acts as a convenient unit of account.

2. Give the meaning of SLR and CRR

SLR is staturory liquidity ratio. It is the money a bank must maintain in its own reserve

CRR is cash reserve ratio. It is the money a bank must maintain in RBI

3. State the credit control instruments of RBI

RBI purchases (or sells) government securities to the general public in a bid to increase (or decrease) the stock of high powered money in the economy.

RBI often uses its instruments of money creation for stabilising the stock of money in the economy from external shocks. Suppose due to future growth prospects in India investors from across the world increase their investments in Indian bonds which under such circumstances, are likely to yield a high rate of return.

4. Mention the two motives of demand for money.

The principal motive for holding money is to carry out transactions. If you receive your income weekly and pay your bills on the first day of every week, you need not hold any cash balance throughout the rest of the week; you may as well ask your employer to deduct your expenses directly from your weekly salary and deposit the balance in your bank account.

When interest rate comes down, more and more people expect it to rise in the future and anticipate capital loss. Thus, they convert their bonds into money giving rise to a high speculative demand for money. Hence speculative demand for money is inversely related to the rate of interest

5. How does bank rate influence money supply?

RBI uses a certain interest rate called the Bank Rate to control the value of rdr. Commercial banks can borrow money from RBI at the bank rate when they run short of reserves. A high bank rate makes such borrowing from RBI costly and, in effect, encourages the commercial banks to maintain a healthy rdr.

6. What role of RBI is known as ‘Lender of Last Resort’?

The Reserve Bank of India plays a crucial role here. In case of a crisis like the above it stands by the commercial banks as a guarantor and extends loans to ensure the solvency of the latter. This system of guarantee assures individual account-holders that their banks will be able to pay their money back in case of a crisis and there is no need to panic thus avoiding bank runs. This role of the monetary authority is known as the lender of last resort.

VI. Answer the following questions in 12 sentences. (Each question carries 4 marks)

1. Briefly explain the functios of money.

The first and foremost role of money is that it acts as a medium of exchange. Barter exchanges become extremely difficult in a large economy because of the high costs people would have to incur looking for suitable persons to exchange their surpluses. Money also acts as a convenient unit of account.

The value of all goods and services can be expressed in monetary units. When we say that the value of a certain wristwatch is Rs 500 we mean that the wristwatch can be exchanged for 500 units of money, where a unit of money is rupee in this case. If the price of a pencil is Rs 2 and that of a pen is Rs 10 we can calculate the relative price of a pen with respect to a pencil, viz. a pen is worth $10 \div 2 = 5$ pencils.

The same notion can be used to calculate the value of money itself with respect to other commodities. In the above example, a rupee is worth $1 \div 2 = 0.5$ pencil or $1 \div 10 = 0.1$ pen.

Thus if prices of all commodities increase in terms of money which, in other words, can be regarded as a general increase in the price level, the value of money in terms of any commodity must have decreased – in the sense that a unit of money can now purchase less of any commodity. We call it a deterioration in the purchasing power of money.

Money is not perishable and its storage costs are also considerably lower. It is also acceptable to anyone at any point of time. Thus money can act as a store of value for individuals. Wealth can be stored in the form of money for future use. However, to perform this function well, the value of money must be sufficiently stable.

2. Explain the functions of RBI.
   a) Monopoly of Note issue: Under Section 22 of the RBI act, only RBI has the right to use notes of all denominations. RBI follows a minimum reserve system while issuing currency notes since 1956. It must maintain reserve of gold, silver, and minimum reserve of Rs. 200 crores. At least Rs. 115 crore must be in the form of gold and remaining in foreign exchange.
   b) Banker to the government: The RBI being the apex monitory body must work as an agent of the central and state governments. It performs various banking function such as to accept deposits, taxes and make payments on behalf of the government. It works as a representative of the government even at the international level. It maintains government accounts, provides financial advice to the government.
   c) Banker's Bank: The RBI being an apex monitory institution has obligatory powers to guide, help and direct other commercial banks in the country. The RBI can control the volumes of banks reserves and allow other banks to create credit in that proportion. Every commercial bank must maintain a part of their reserves with its parent's viz. the RBI.

d) Lender of last resort: the RBI helps commercial banks in times of financial crisis. When commercial banks are unable to get financial assistance from any source RBI comes to their rescue. That is, commercial banks can approach RBI for loans. This role of RBI saves commercial banks from going bankrupt.
e) Clearing house: RBI acts as a clearing house for transfer and settlement of mutual claims of commercial banks. As it keeps cash reserves of all commercial banks, it is easy for them to settle each other's debts or transfer funds from one bank to another through RBI.
f) Leader of Money market: RBI regulates the money market. It controls activities of the money market where commercial banks and financial institutions participate.
g) Controller of credit: Commercial bank in the country creates credit according to the demand in the economy. But if this credit creation is unchecked or unregulated then it leads the economy into inflationary cycles. On the other credit creation is below the required limit then it harms the growth of the economy. As a central bank of the nation the RBI must look for growth with price stability.
h) Custodian of foreign exchange reserves: the RBI maintains reserve of gold, silver, and foreign exchange to back the issue of currency notes and meet international payments. It maintains exchange rates and enforces exchange control and restrictions imposed by the government.

3. Write a note on the legal definitions of money.

Money supply, like money demand, is a stock variable. The total stock of money in circulation among the public at a particular point of time is called money supply. RBI publishes figures for four alternative measures of money supply, viz. M1, M2, M3 and M4.

They are defined as follows M1 = CU + DD

M2 = M1 + Savings deposits with Post Office savings banks

M3 = M1 + Net time deposits of commercial banks M4 = M3 +Total deposits with Post Office savings organisations (excluding National Savings Certificates) where, CU is currency (notes plus coins) held by the public and DD is net demand deposits held by commercial banks.

The word 'net' implies that only deposits of the public held by the banks are to be included in money supply. The interbank deposits, which a commercial bank holds in other commercial banks, are not to be regarded as part of money supply.

M1 and M2 are known as narrow money. M3 and M4 are known as broad money. These gradations are in decreasing order of liquidity. M1 is most liquid and easiest for transactions whereas M4 is least liquid of all. M3 is the most commonly used measure of money supply. It is also known as aggregate monetary resources

4. Write the meaning of Transaction Motive, Speculative Motive of Demand for money and Liquidity Trap.

The principal motive for holding money is to carry out transactions. If you receive your income weekly and pay your bills on the first day of every week, you need not hold any cash balance throughout the rest of the week; you may as well ask your employer to deduct your expenses directly from your weekly salary and deposit the balance in your bank account. But our expenditure patterns do not normally match our receipts. People earn incomes at discrete points in time and spend it continuously throughout the interval

People have the tendency to hold wealth by means of property, bullion, bonds, etc. A person holding bonds can confront various fluctuations in the market in the form of capital gains or capital losses. The demand for money in order to meet these speculative needs is defined as speculative demand for money. Interest rate represents the opportunity cost of holding the money.

The speculative demand for money is inversely related to the interest rate. When interest rate on securities is very high then people expect interest rates to fall in future. This implies that in future bond prices will rise indicating capital gain to the bond holders.

To maximise the capital gain, more people will convert their cash balances into bonds, thereby leading to a low speculative demand for money.

On the contrary, when interest rates are low, people expect interest rates to rise in future, then bond prices will fall in the future, indicating capital loss to the bondholders. Hence, to minimise the capital loss, people tend to convert bonds into money, resulting in high speculative demand for money.

This shows that the speculative demand for money is inversely related to the interest rate.

Liquidity trap is a situation in which speculative demand function is infinitely elastic; it is explained as follows:

The price of a bond has an inverse relationship with the market interest rate. If the interest rate is very high and people expect it to fall in the future, then the bond prices will rise being inversely related to the interest rate. In order to earn capital gains in future, people will purchase bonds (as bonds are cheaper) and hence the speculative demand for money will become low.

On the contrary, if the interest rate is low and people expect it to rise in future, then the bond prices will fall and in order to avoid capital loss, people will sell their bonds and convert their bonds into idle cash balances. Liquidity trap is an extreme case of the latter situation.

When the interest rates are very low, then everyone expect interest rates to go up in future. Thus, to avoid capital loss, everybody prefers to maintain cash balance and not bond.

Consequently, the speculative demand for money is infinitely elastic. In this situation, if the additional money is pumped into the economy, then, this will only satisfy the thirst for money, without increasing the demand for bonds.

Pumping additional money in this situation will further exaggerate the condition as this will further reduce the interest rate below r_{min}.

The relationship between speculative demand for money and the rate of interest is given as

$$M_s^d = \frac{r_{\max} - r}{r - r_{\min}}$$

VII. Answer the following questions in 20 sentences (each question carries 6 marks)

1. Explain the functions of money. How does money overcome the shortcomings of a barter system?

The main functions of money are as follows:

a. Medium of exchange: Money acts as a medium of exchange as it facilitates exchange through a common medium, i.e. currency. In other words, money helps in the buying and selling of goods. For example, a person can sell his goods to another for money and that person can use money to purchase goods of his choice. Money solves the problem of double coincidence of wants.
b. Unit of value: The values of goods can be measured in terms of money. It is a common medium through which we can calculate the value of each and every good. The value of a good in terms of money is called the price. In barter system the lack of a common denominator for measuring values of goods was a major drawback.
c. Store of value: This function explains the importance of money as value storage. This implies that wealth in the form of money can be stored easily as a medium of exchange for future use. For example, money can be stored in banks for meeting emergency and future needs.
d. Standard of deferred payments: Payments can easily be made through the medium of money. In other words, it is very difficult to pay back a loan in terms of goods and services. However, with the advent of money the payments of loans or interests can easily be made.

Money overcomes the shortcomings of barter system in the following manner:

a. Money solves the problem of double coincidence of wants. For example, if a person needs wheat in exchange of tea, then he/she must search for a person who is ready to trade wheat for tea. Money made the need for such searches redundant.

b. In barter system, it was very difficult to measure the value of one good in terms of another. For example, it is difficult to calculate the value of a cow in terms of wheat.
c. It was very difficult to store goods, especially perishable goods (fruits, meat, etc.) for the purpose of value storage. Money serves this purpose.
d. The contractual or future payments are much difficult to be made in barter system. For example, a worker working on contract basis could not be paid in terms of rice or chairs.

2. Write the story of Goldsmith Lala on the process of deposit and loan (credit) creation by commercial banks.

RBI acquires assets against these liabilities. The process can be understood easily if we consider a simple stylised example. Suppose RBI purchases gold or dollars worth Rs 5. It pays for the gold or foreign exchange by issuing currency to the seller. The currency in circulation in the economy thus goes up by Rs 5, an item that shows up on the liability side of the balance sheet. The value of the acquired assets, also equal to Rs 5, is entered under the appropriate head on the Assets side. Similarly, RBI acquires debt bonds or securities issued by the government and pays the government by issuing currency in return. It issues loans to commercial banks in a similar fashion.

Suppose RBI wishes to increase the money supply. It will then inject additional high powered money into the economy in the following way. Let us assume that RBI purchases some asset, say, government bonds or gold worth Rs H from the market.

It will issue a cheque of Rs H on itself to the seller of the bond. Assume also that the values of cdr and rdr for this economy are 1 and 0.2, respectively. The seller encashes the cheque at her account in Bank A, keeping Rs H/2 in her account and taking Rs H/2 away as cash. Currency held by the public thus goes up by H/2.

Bank A's liability goes up by Rs H/2 because of this increment in deposits. But its assets also go up by the same amount through the possession of this cheque, which is nothing but a claim of the same amount on RBI. The liability of RBI goes up by Rs H, which is the sum of the claims of Bank A and its client, the seller, worth Rs H/2 and Rs H/2, respectively.

Thus, by definition, high powered money increases by Rs H. The process does not end here. Bank A will keep Rs 0.2H/2 of the extra deposit as reserve and loan out the rest, i.e. Rs (1–0.2)H/2 = Rs 0.8H/2 to another borrower.

The borrower will presumably use this loan on some investment project and spend the money as factor payment. Suppose a worker of that project gets the payment. The worker will then keep Rs 0.8H/4 as cash and put Rs 0.8H/4 in her account in Bank B.

Bank B, in turn, will lend Rs 0.64H/4. Someone who receives that money will keep 0.64 8 H in cash and put 0.64H/8 in some other Bank C. The process continues ad infinitum.

3. Explain the open market operation.

RBI purchases (or sells) government securities to the general public in a bid to increase (or decrease) the stock of high powered money in the economy. Suppose RBI purchases Rs 100 worth government securities from the bond market. It will issue a cheque of Rs 100 on itself to the seller of the bond.

The seller will deposit the cheque in her bank, which, in turn, will credit the seller's account with a balance of Rs 100. The bank's deposits go up by Rs 100 which is a liability to the bank. However, its assets also go up by Rs 100 by the possession of this cheque, which is a claim on RBI. The bank will deposit this cheque to RBI which, in turn, will credit the bank's account with RBI with Rs 100.

The changes in RBI's balance sheet are shown in Table 3.4. Total liability of RBI, or, by definition, the supply of high powered money in the economy has gone up by Rs 100.

If RBI wishes to reduce the supply of high powered money it undertakes an open market sale of government securities of its own holding in just the reverse fashion, thereby reducing the monetary base.

Assets (sources) – Rs		*Liability (uses) – Rs*	
All Other Assets	0	Currency	0
Government Securities	+ 100	Deposits of Commercial Banks with RBI	+ 100
Monetary Base (sources)	+ 100	Monetary Base (uses)	+ 100

4. Requirement of reserves acts as a limit to money creation. Explain.

The Currency Deposit Ratio: The currency deposit ratio (cdr) is the ratio of money held by the public in currency to that they hold in bank deposits. cdr = CU/DD. If a person gets Re 1 she will put Rs 1/(1 + cdr) in her bank account and keep Rs cdr/(1 + cdr) in cash. It reflects people's preference for liquidity. It is a purely behavioural parameter which depends, among other things, on the seasonal pattern of expenditure. For example, cdr increases during the festive season as people convert deposits to cash balance for meeting extra expenditure during such periods.

The Reserve Deposit Ratio: Banks hold a part of the money people keep in their bank deposits as reserve money and loan out the rest to various investment projects. Reserve money consists of two things – vault cash in banks and deposits of commercial banks with RBI.

Banks use this reserve to meet the demand for cash by account holders. Reserve deposit ratio (rdr) is the proportion of the total deposits commercial banks keep as reserves.

Keeping reserves is costly for banks, as, otherwise, they could lend this balance to interest earning investment projects.

However, RBI requires commercial banks to keep reserves in order to ensure that banks have a safe cushion of assets to draw on when account holders want to be paid. RBI uses various policy instruments to bring forth a healthy rdr in commercial banks.

The first instrument is the Cash Reserve Ratio which specifies the fraction of their deposits that banks must keep with RBI. There is another tool called Statutory Liquidity Ratio which requires the banks to maintain a given fraction of their total demand and time deposits in the form of specified liquid assets.

Apart from these ratios RBI uses a certain interest rate called the Bank Rate to control the value of rdr. Commercial banks can borrow money from RBI at the bank rate when they run short of reserves. A high bank rate makes such borrowing from RBI costly and, in effect, encourages the commercial banks to maintain a healthy rdr.