

PREFACE

The student handbook enhances the knowledge base of students in terms of financial literacy by conveying an understanding of the basic financial concepts, early methods of a transaction and the evolution of trade. It also covers the importance of collaboration through teamwork and focuses on the importance of a team. The handbook also entails the origin of banking, the transition from coins to paper money, types of bank and major operations and services carried out by banks.

Further, the handbook also emphasises the role and importance of the Reserve Bank of India (RBI) and the Government of India (GoI). It gives insight into the introduction of the digital payments and the various benefits of these services.

An insight into the modes of digital payments is also covered in the handbook providing the students with information on different types of bank cards and their services. The handbook introduces about the PoS, mPoS and ATM machines.

Building upon the context of modes of digital payments, the students are made to understand the role of UIDAI and the importance of Aadhaar, and Aadhaar Enabled Payment System (AePS). It also enables the students to learn about the various forms of digital payments including internet banking, types of internet banking, mobile banking and mobile wallets.

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UNIT 1

TEAM WORK

The objective of this unit is to enable students to appreciate the concept and importance of teams.

This unit focuses on:

- Describing the concept of team
- Explaining the benefits of teamwork

LEARNING OUTCOMES:

Location	Learning Outcome	Knowledge Evaluation	Performance Evaluation	Teaching and Training Method
Classroom	Understand the meaning of team	Describe what a team is	Describe the concept of team and its benefits	Interactive Lecture: Meaning of Team Activity: Speak to a team leader at school and list down the benefits of teamwork
	Identify the critical skills required for effective teamwork	Explain the skills required for effective team work and their importance	Enlist the skills that enable effective team work	Interactive Lecture: Skills for teamwork Activity: Identify the qualities that you appreciate in your sports or house team members
	Identify the benefits of working in a team	Explain the various benefits of working in a team	Describe the benefits that can be achieved when individuals work together as a team	Interactive Lecture: Benefits of teamwork Activity: Recollect an experience of having worked as a team for a project. What are the benefits that you experienced?

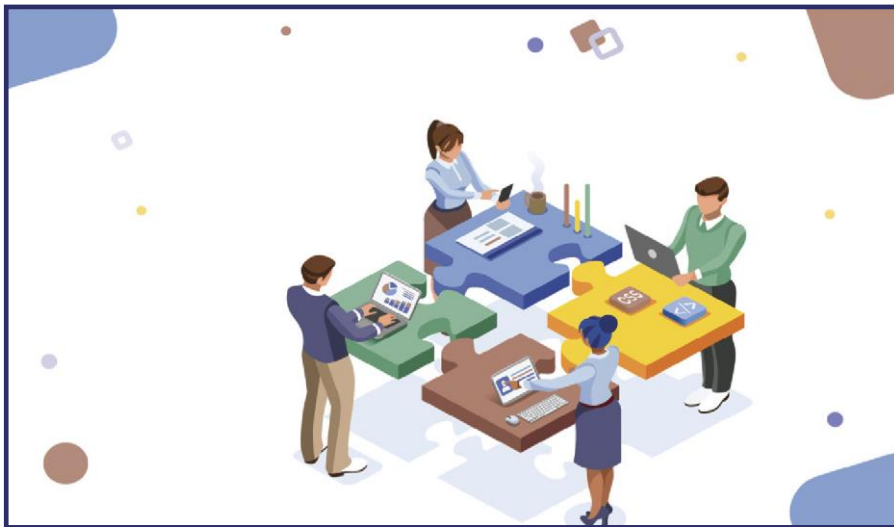
1.1 DEFINING TEAM WORK

A team is defined as a group of people joined together to perform a common goal or objective. Teams can be formed in playgrounds, schools and colleges.

When members of a team perform some work together, it is known as teamwork. The highlight of teamwork is that it is a result of individuals working together in collaboration.

Tasks that may be challenging otherwise can be made simpler and achievable with the use of teams. When a team works together, each member is able to contribute on the basis of his or her unique set of competencies.

Team output is a result of various individuals contributing uniquely and distinctly yet for a common purpose.



1.2 TEAM SKILLS

Teams are a wonderful way for individuals to come together and achieve common goals. However, for this to happen, it is important for the team members to possess and demonstrate specific skills. Let us learn about the kind of skills that are required for teams to work effectively:

- **Communication Skills:** Team members should have the ability to listen attentively and also put across their own thoughts and viewpoints.
- **Interpersonal Skills:** Teams work well when there is harmony within the members, and that becomes possible with the demonstration of interpersonal skills.
- **Feedback Skills:** Giving and receiving feedback are essential skills for teams to work. It involves being able to communicate improvement points to other members while also being able to receive feedback calmly and gracefully.
- **Conflict Resolution:** normal for differences to arise among team members. It is therefore important for members to be able to demonstrate conflict resolution skills so that these differences can be sorted out peacefully, and teamwork is not impacted.



1.3 TEAMS AND GROUPS

How is a team different from a group? Even a group consists of individuals who have common characteristics. However, they may or may not be tied to a common goal or objective. It is an important aspect that differentiates a 'Team' from a 'Group'.

Let's take an example of a team you form while playing a sport such as football. All the team members are driven by the common goal of winning against the other team.



1.4 BENEFITS OF TEAM WORK

When individuals join together as a team, this leads to various benefits such as:

- **Higher Productivity:** Humans are essentially social beings, and when they work together, they tend to work faster and more effectively.
- **Better Cooperation:** Working as a team enables improved levels of cooperation amongst the members as they are able to learn from each other's mistakes and provide support where required.
- **Creativity and Problem Solving:** Teamwork provides opportunities for all members to take advantage of their unique skill-set and propose new creative approaches to solve challenges.
- **Sharing of Work:** When a set of people work as a team, the work burden gets divided amongst the members, and there is reduced risk of stress on any individual.
- **Learning and Motivation:** Everyone in the team is able to learn new things from one another, and this also keeps everyone motivated and focused on the goals.

SUMMARY

- A team is defined as a group of people who are joined together to perform a common goal or objective
- When members of a team perform some work together, it is known as teamwork
- There are specific skills that are required to make teams work effectively and each team member contributes uniquely to achieve the common purpose

UNIT 2

INTRODUCTION TO FINANCIAL LITERACY

The objective of this unit is to make students aware of basic financial concepts This unit focuses on:

- Evolution of trade and money
- The concept of barter system
- Needs and Wants

LEARNING OUTCOMES:

Location	Learning Outcome	Knowledge Evaluation	Performance Evaluation	Teaching and Training Method
Classroom/ Museum	Understand basic financial concepts	Explain the meaning of basic financial concepts	Demonstrate the understanding of basic financial concepts	Interactive Lecture: Basic financial terms Activity: Search on the internet to identify other types of accounts offered by banks, apart from the ones listed in this unit
	Summarise the evolution of trade and money	Describe how trade and money evolved across the history of mankind	Articulate concepts such as barter system and how they played a role in the evolution of trade and money	Interactive Lecture: Evolution of trade and money Activity: Explore the collection of ancient coins in a nearby museum. You can also explore online collections at http://www.nationalmuseumindia.gov.in/

2.1 UNDERSTANDING BASIC FINANCIAL CONCEPTS

Money	Money is a recognised medium of exchange in the economy. It is an asset that can be stored and used in the form of currency, or as value.
Currency	Currency is the physical form of money in the form of coins and rupees. Each country typically has its own currency as a medium of exchange, issued by the central bank. In India, the Government of India (GoI) and Reserve Bank of India (RBI) are the issuers of the currency, i.e. Indian Rupees
Bank	A bank is a government authorised financial institution which acts as a custodian of money deposited by account holders and uses the collected funds to extend loans to individuals and businesses while charging interest on the same.
Account	An account is a repository of the funds held by a bank on behalf of the account holder. An account can be of various kinds, and is identified by a unique account number issued to the account holder.
Saving	Savings is the amount of money that is remaining from income, after the expenses are made.
Investment	An investment refers to an asset acquired with the objective of generating income or appreciation.



When you accompany your parents to the market, do you observe how they purchase the various items? Every purchase requires the use of money.

As you are able to observe, money is the accepted medium of exchange. It allows you to buy the things you require, right from basic things such as bread to high-value products such as a car.

In our country, money is used in the form of Indian currency known as 'Rupee'. You would surely have used 'rupees' when you buy food from the school canteen.

2.2 BARTER SYSTEM



Historically speaking, humans have been transacting in goods much before money was invented. Have you ever wondered how these transactions took place?

The answer is 'Barter System'. To understand the Barter System in a simple manner, consider this example:

Satya has two bags of wheat at his home; however, he needs only one of them for his monthly consumption. On the other hand, Ahmad has two bags of rice out of which he is able to spare one. So they meet and decide to exchange the bag of wheat with that of rice. After the barter exchange, Satya and Ahmad both have one bag of rice and wheat each to match their requirement of food.

Have you ever performed a simple barter exchange with your friend or cousin? For example, you have a pack of sketch pens that you do not need, and you exchange the same for a geometry box?

2.3 NEEDS AND WANTS

To better understand the Barter System, it is important to know the meaning of 'Needs' and 'Wants'. In the Satya-Ahmad example, we can see that while Satya needs rice to meet the food requirements of his family, Ahmad needs a bag of wheat for the same purpose. However, rice and wheat are not their 'wants'.

Let us try to understand the same through another example. When you feel hungry, you need food to satisfy your hunger. Therefore, food is your need. However, when you visit the market with your father and you feel tempted to have ice cream. In this situation, ice cream is not your 'need.' However, it is your 'want.'

'Needs' are the essential requirements in our life such as food, clothes and house. On the other hand, 'Wants' are for the things you require to enhance the quality of your life, such as games, music and TVs.

2.4 EVOLUTION OF TRADE

Let us start by understanding the definition of trade. Trade is a financial activity that includes buying and selling various goods and services between two or more people involved in the transaction. Trade can happen between organisations and countries as well. For example, India primarily exports products such as rice and jewellery, and imports petroleum and electronic components.



The evolution of trade across the world has been closely linked with the development of the money system. You would be surprised to know that trade across continents has been prevalent in our world, even in ancient times.

While ancient trade was based on the barter system, there is also evidence of commodities being used in the form of livestock, salt, metal, rare stones et cetera.

Pottery traditions were popular in parts of the world such as Japan, Korea, China, Mexico and many more. The Han Dynasty, which ruled China from 206 BC to 220 AD, opened up the 'Silk Road' trading route between China and Central Asia. Various kinds of merchandise travelled along the Silk Road, making it one of the oldest routes of international trade in the world.

The first non-stop voyages from Egypt to India were initiated at the start of the Common Era. Spices from India came in demand around the world and were the main exports to the western world. The spice trade led to new diplomatic relationships between East and West. It was partly with the spice trade in mind that Christopher set out in 1492 and discovered America.



SUMMARY

- Money is a recognised medium of exchange in the economy.
- A bank is a government authorised financial institution which acts as a custodian of money deposited by account holders
- Historically speaking, humans have been transacting in goods much before money was invented
- While ancient trade was based on the barter system, there is also evidence of commodities being used in the form of livestock, salt, metal, rare stones et cetera.
- The Han Dynasty, which ruled China from 206 BC to 220 AD, opened up the 'Silk Road' trading route between China and Central Asia.

ABBREVIATIONS

Gol	Government of India
RBI	Reserve Bank of India
BC	Before Christ
AD	<i>Anno Domini</i> (Latin for "in the year of the Lord")

UNIT 3

BANKING

The objective of this unit is to make students aware of the purpose and function of Banks This unit focuses on:

- Importance and purpose of Banks
- The various functions performed by Banks

LEARNING OUTCOMES:

Location	Learning Outcome	Knowledge Evaluation	Performance Evaluation	Teaching and Training Method
Classroom	Understand the purpose and functions of Banks	Describe the importance of banks and their purpose as financial institutions	Enlist the functions performed by banks	Interactive Lecture: Role and importance of banks Activity: Discuss with your parents which bank they are associated with and which services they have availed

3.1 EVOLUTION OF MONEY

As you can see that a Barter-like exchange system has its limitations and only works when you have something to offer that the other person needs and vice versa. It may not always be the situation. The limitations of the Barter System led to the evolution of money.

As you may be aware, gold coins were used as a mode of currency in ancient India.



Similarly, different regions in the world have been using other precious/semi-precious products as a unit of trade.

For example, the ancient Aztecs used beans as a trade currency, and Norwegians used butter. Similarly, US colonists used tobacco leaves and animal hides as a form of currency.

Gradually, however, as human civilisation progressed, coins and currency notes came into circulation. In fact, the development of currency has been representative of the development level of an economy across ages.



The earliest coins were made in the kingdom of Lydia (now in Turkey) in the 7th century BC. The use of coins spread rapidly across the world from Lydia to the Africa and Europe. The transition to paper currency is said to have occurred in China during the 10th century.

In ancient India too, metal coins came into circulation around the 6th century BC. Paper currency is said to have been introduced in India by the Mughals in the year 1236 AD.

3.2 BANKS AND THEIR IMPORTANCE

As a young child, you may have used a piggy bank. You deposit a small amount of cash or coins into a piggy bank, and when you open it finally, it reveals a handsome amount for you to use. That is how a bank works in real life too. However, it works according to strict rules and also serves many more functions that are important to individuals and businesses.

To explain in simple words, a bank is an institution where people deposit their funds as savings and are able to withdraw the same when required. In this sense, a bank acts as a 'vault' for safekeeping of funds. There are situations when people may need funds more than their savings to purchase high-value products such as cars, bikes et cetera. In such situations, banks also provide 'loan' to the 'deposit holders'.



3.3 ORIGINS OF BANKING

In ancient human history, banking is said to have started in the temples and palaces of Babylonia even before 2000 BC. Ancient Greeks too developed a system of transferring money in the form of book entries.

Banking in India started in a major way in the form of the Imperial Bank of India in 1921. This was later renamed as the State Bank of India (SBI) in 1955.



3.4 TYPES OF BANKS

Banks are of different types and can be categorised on the basis of their ownership and services they offer:

Central Bank: The Central Bank is an extremely important institution in the financial system of any country. In India, the Reserve Bank of India (RBI) plays the role of the central bank. It is responsible for the overall management of the nation's currency to ensure an adequate supply of genuine notes. As the central bank, RBI also performs various other important functions such as acting as a banker to the government and implementing monetary policies for the country.



Commercial Banks: These include public sector banks owned by the Government and also the private banks. Commercial banks provide a direct interface to the people allowing them to open and manage accounts, to obtain loans and other financial services.

3.5 OPENING A BANK ACCOUNT

A bank account can be opened in the name of an individual singly or jointly with a family member by submitting the following documents:

- Passport size photographs
- Identity proof
- Address proof
- Opening amount

Once the account is opened, the bank provides to the account holder an account number and cheque book to operate the account. Some banks also provide account holders with access to mobile banking.

3.6 TYPES OF BANK ACCOUNTS



Savings Account: These are the accounts opened in banks with the key purpose of inculcating the habit of saving among people. Savings accounts allow maximum flexibility to deposit any amount of their liking, thus making it easy and convenient for common people. This kind of account is popular with students, salaried individuals, and senior citizens. Savings accounts earn a nominal interest which is based on the time period the funds are parked in the account.

Current Account: These accounts are opened by business owners as they meet their requirement for an unlimited number of cash deposits and withdrawals. The important thing to note in case of current accounts is that they do not earn interest. On the other hand, banks charge interest from account holders for an overdraft facility. When banks allow account holders to withdraw more than their account balance in order to meet their business requirements, it is known as an overdraft.



Fixed Deposit: This account type is ideal for depositors who wish to park their funds in the bank for a long period of time. The key benefit of fixed deposit is that it provides a substantially higher rate of interest compared to savings accounts.

Recurring Deposit: Very popular with students, recurring deposits are designed to encourage the habit of regular savings amongst people. These deposits too earn interest higher than savings accounts. An example of a Recurring Deposit is when a depositor plans to deposit a fixed amount of Rs.1000 per month for a period of 24 months. On the completion of the 24 months period, the depositor gets back the base amount of Rs. 24,000, along with the interest amount.

3.7 CHEQUE - AN INSTRUMENT OF EXCHANGE

Cheques have been the most popular instrument for money transfer for many decades. Although today more and more people are using the option of online banking, yet cheques continue to remain at the very core of the banking industry.

Let us understand through a simple example of how cheques work. Let us suppose that you have Rs.25,000 in your bank account in Bank A. You wish to pay Rs.5000 to Ajay using a cheque.

1. You issue a cheque of Rs.5000 to Ajay using the Bank A cheque book
2. Ajay deposits the cheque in his bank, say Bank B
3. Bank B sends the cheque to Bank A
4. Bank A sends the amount of Rs.5000 to Bank B after confirming the cheque details
5. Rs.5000 is now deposited to Ajay's account in Bank B
6. Rs.5000 is reduced from your account in Bank A

Each cheque contains some key elements, which include:

- Name and signature of the person making the payment/account holder
- Name of the person who will receive the payment
- Date on or after which the cheque is valid

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UNIT 4

SECURITY AND MODES OF DIGITAL PAYMENTS

The objective of this unit is to make students aware of the role played by RBI, the concept of digital banking, benefits of PoS and ATM machines, and the various types of banking cards.

This unit focuses on:

- Role and importance of Reserve Bank of India (RBI)
- Introduction to digital banking and the Digital India Initiative
- Description of various types of banking cards
- Definition and benefits of PoS
- Purpose and benefits of ATM machines
- Various forms of digital payments including internet banking and mobile banking
- Digital Platforms: UPI and mobile wallets

LEARNING OUTCOMES:

Location	Learning Outcome	Knowledge Evaluation	Performance Evaluation	Teaching and Training Method
Classroom	Understand the role and importance of RBI	Describe the importance of RBI as a core banking institution	Enumerate the functions performed by RBI	Interactive Lecture: Role and importance of RBI Activity: Visit the RBI website and go to the 'About Us' section and read about the 'Main Functions' of RBI
	Appreciate the benefits of digital banking	Describe the concept and benefits of digital banking	Enlist the benefits of digital banking to consumers	Interactive Lecture: Concept and benefits of digital banking Activity: Watch videos about digital banking on YouTube (Recommended Channel: CNBC Awaaz)

Location	Learning Outcome	Knowledge Evaluation	Performance Evaluation	Teaching and Training Method
Classroom	Describe mobile banking	Explain the concept of mobile banking	Appreciate the role of mobile banking in making transactions simpler	Interactive Lecture: Mobile banking Activity: Request your parent to demonstrate any mobile banking app
	Identify the various kinds of banking cards: Debit, Credit and Prepaid	Describe the benefits of using Debit, Credit and Prepaid Cards	Enlist the purposes and benefits of using banking cards	Interactive Lecture: Purposes and benefits of using banking cards Activity: Have a discussion with your parents on how the use of banking cards and how they have made life convenient
	Define PoS and its benefits	Explain the definition of PoS and its benefits	Enumerate the benefits offered by PoS	Interactive Lecture: Purposes and benefits PoS Activity: Search PoS related information on the internet
	Describe the ATM and the benefits it offers	Explain the function of ATM and its benefits	Appreciate the role played by ATM in today's world	Interactive Lecture: Function and benefits ATM Activity: Ask your grand-parent or another elderly relative on what was the process of withdrawing cash before the prevalence of ATMs

4.1 RESERVE BANK OF INDIA - ROLE AND IMPORTANCE



The Reserve Bank of India (RBI) plays a prominent role as the Central Bank of India and has the power to control the monetary situation of the entire country. Apart from the issuance of currency, RBI performs various other important functions that impact the Indian economy in a significant way:

- Implements monetary policies
- Manages foreign exchange reserves
- Acts as banker to the government
- Financial regulation and supervision
- Governs the policies for other banks to follow

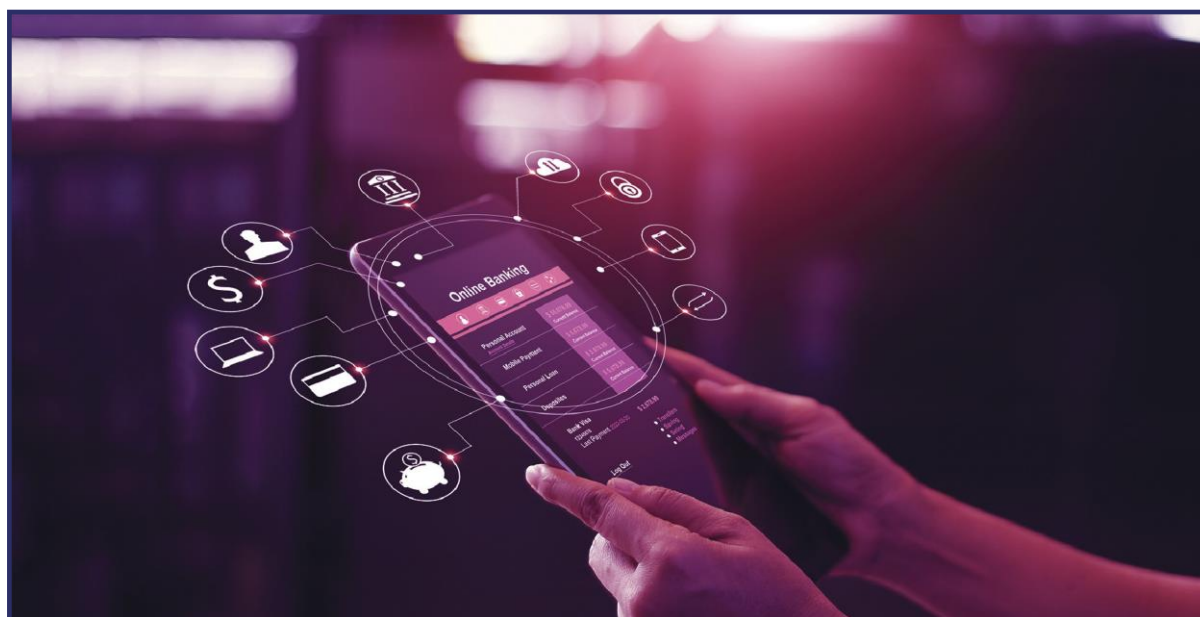
4.2 ABOUT NATIONAL PAYMENTS CORPORATION OF INDIA (NPCI)



National Payments Corporation of India (NPCI) is an umbrella organization for all retail payments in India. Incorporated in the year 2008, NPCI was set up under the guidance and support of Reserve Bank of India (RBI) and Indian Banks' Association (IBA).

NPCI provides infrastructure to the entire banking system of India for both physical and electronic payment and settlement systems.

4.3 INTRODUCTION TO DIGITAL BANKING



Digital banking allows bank customers to avail banking services using the bank's web site on a laptop or through a mobile app on a smartphone/tablet.

These services include:

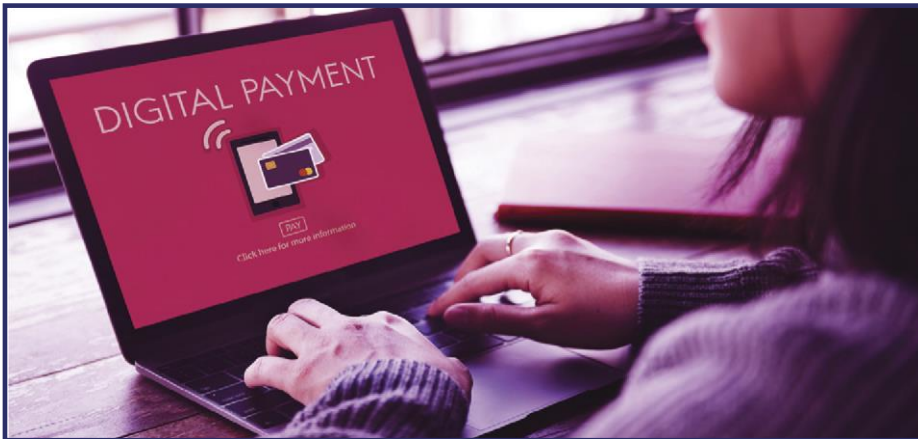
- Checking account balance
- Transferring funds to another account
- Ordering a cheque book
- Changing passcodes

DIGITAL BANKING – DO'S & DON'TS

Let us learn about some do's & don'ts to be observed while performing digital banking:

Do's	Don'ts
<ul style="list-style-type: none">• Keep your user ID and password confidential and do not reveal to anyone• Memorise your user ID and password instead of noting down anywhere• Log off completely and clear your system cache after every session• Register for SMS alerts to keep track of transactions on your account	<ul style="list-style-type: none">• Do not use an email message to log in to your banking account; Always use the official website• Do not reveal personal information to anyone over email/SMS/phone call• Do not use the 'Remember Password' feature provided by browsers to save your banking password

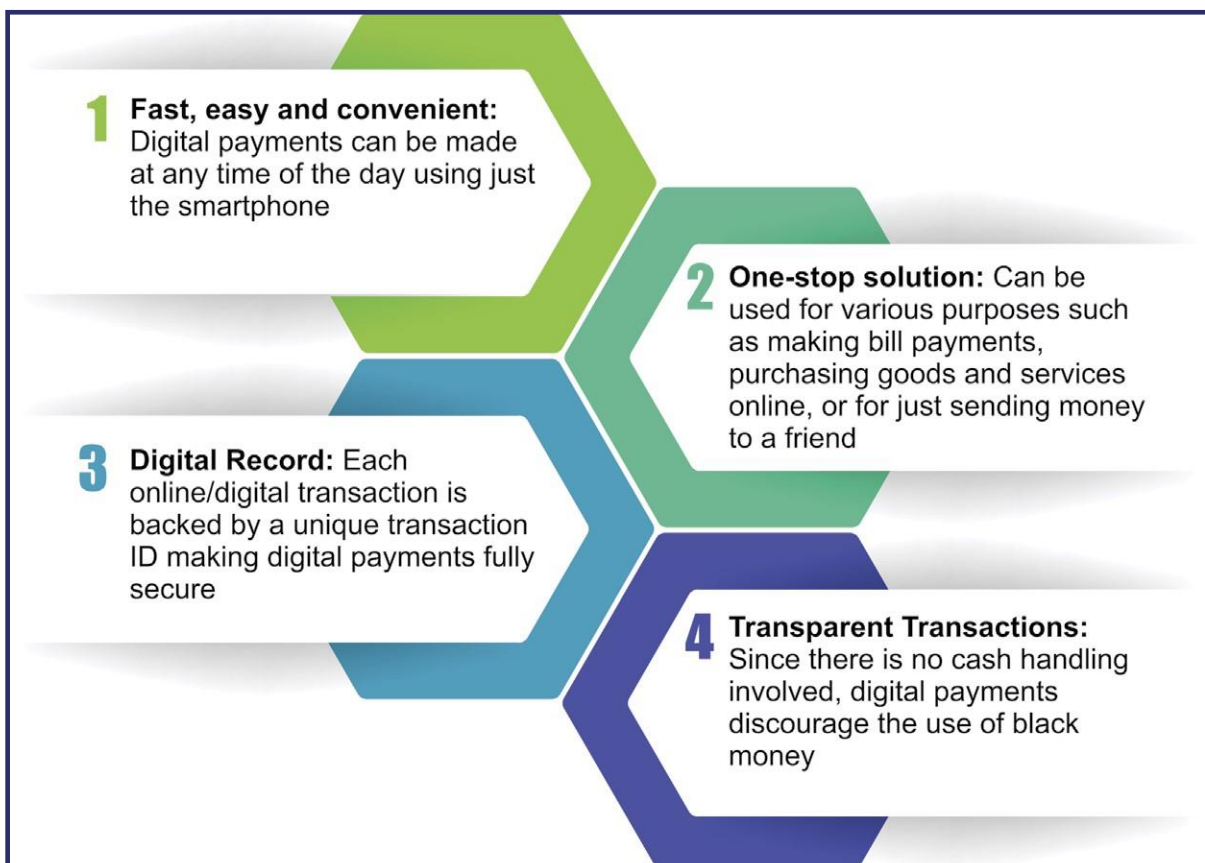
4.4 UNDERSTANDING DIGITAL PAYMENTS



Digital Payments refers to transferring an amount of money to another individual, business or organisation through the internet without the requirement to handle physical cash.

4.4.1 BENEFITS OF DIGITAL PAYMENTS

The trend of digital payments has revolutionised the world of business and lives of people. It has brought in a new era of flexibility of convenience. Let us discuss the many benefits of digital payments.



4.4.2 MODES OF DIGITAL PAYMENTS – CARD BASED

The objective of this section is to make students aware of banking cards, Point of Sale (PoS) and ATM machines

In the previous sections, you have learnt about the importance of banks and the various services they offer. Apart from cheques, banking cards are also important tools for making convenient transactions. Let's learn about them...

Debit Cards: Debit cards serve a dual purpose. They allow the account holders to perform banking transactions through the ATM machine such as deposits, cash withdrawals and access account information.



Image source: <https://www.npci.org.in/npci-in-news/knowledge-centre>

Credit Cards: As the name suggests, credit cards are instruments that provide instant credit to the cardholders. When a credit card is used for making a transaction, the amount is not deducted from the bank account but is provided as credit by the issuing bank. The cardholder is provided with a time period; generally a month, to pay back the amount to the bank.

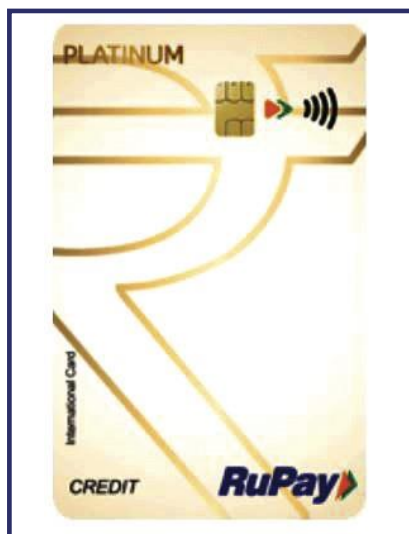


Image source: <https://www.npci.org.in/npci-in-news/knowledge-centre>

Prepaid Cards: These are 'stored value' cards that are charged with a specific amount. The prepaid cardholder is allowed to transact for the value stored in the card. For example, if the card has a value of Rs.5000, once that value is used up for purchases, more value needs to be added to the card.

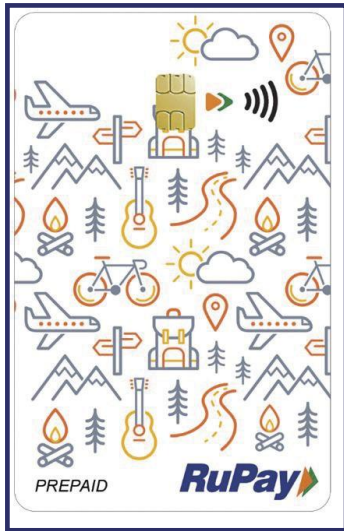


Image source: <https://www.npci.org.in/npci-in-news/knowledge-centre>

GUIDELINES FOR THE USE OF BANKING CARDS

Instruments like debit, credit and prepaid cards indeed offer a high level of convenience while making transactions; however, all the same, it is also important to follow guidelines during their use.

- One must be observant while using an ATM card to withdraw cash. Ensure that there is no other person who may be watching while you enter the PIN
- Credit cards should be used only for convenience, and the cardholder must ensure to pay back the card dues in time to avoid the heavy interest
- Banking cards must be kept very safe and not allowed to go into wrong hands to avoid misuse
- Card PIN numbers must not be shared with anyone

4.5 VARIOUS CHANNELS FOR ACCEPTANCE OF CARD BASED DIGITAL PAYMENTS

4.5.1 POINT OF SALE (POS)



PoS is a system that automatically keeps track of each sale transaction and the amount received from the customer. It also enables card based transactions.

4.5.2 MPOS - MOBILE POINT OF SALE

Unlike traditional PoS, mPoS provides great technological advantages. It is a mobile phone-based application that is designed for simple use by the merchant. With an extremely intuitive interface, the menus and functions on an mPoS are easy to use.

4.5.3 SOFT POS

Soft PoS is an innovative payment acceptance segment, which uses 'Tap-on-Phone' technology. This technology allows merchants to accept payment from contactless cards directly on their Near Field Communication (NFC)-enabled android mobile devices via software based payment application, without the requirement for any additional connected hardware.

4.5.4 E-COMMERCE PAYMENT

Whenever there is a purchase of goods and services online through an electronic medium without the use of cash or cheques, it is known as e-commerce payment. You might have observed your parents purchasing things online using their smartphone with the help of a mobile application. That is a popular example of E-commerce.

E-commerce payment offers various benefits in the form of:

- Security
- Efficiency
- Convenience
- User-friendliness

4.5.5 AUTOMATED TELLER MACHINES (ATMS)



ATMs enable bank account holders to withdraw cash, check balance, and do other banking transactions at their own convenient time without the need of bank staff involvement.

ATM – BENEFITS TO CUSTOMERS

On the same lines, ATMs offer a host of benefits to the customers/account holders. These include:

1. Reduced visits to the bank branch
2. Shorter travel time as ATMs are situated nearby
3. Convenient access to cash 24x7
4. Additional services such as balance inquiry, mini statement, PIN change, etc.
5. With ATM being interoperable, customers can visit any bank ATM to withdraw cash, do balance inquiry, PIN change, etc.

4.6 MODES OF DIGITAL PAYMENTS - BIOMETRIC BASED

The objective of this section is to enable students to understand the significance of UIDAI and Aadhaar while also learning about Micro ATMs.

4.6.1 UNIQUE IDENTIFICATION AUTHORITY OF INDIA (UIDAI)



The government of India has taken a strong step in the direction of securing digital transactions through the launch of Unique Identification Authority of India (UIDAI). Launched as a statutory authority in the year 2016, the UIDAI initiative is aimed to - wards issuing a unique identity document named as 'Aadhaar' (also known as UID) to all citizens of India. UIDAI's key objective is to eliminate duplicate and fake identities, allowing for individual authentication and verification in an easy and cost-effective way.

4.6.2 AADHAAR ENABLED PAYMENT SYSTEM (AEPS)



Aadhaar Enabled Payment System (AePS) is a payment system operated by NPCI. AePS empowers a bank customer to access his/her Aadhaar enabled bank account to perform basic banking transactions like balance enquiry, cash deposit, cash with - drawal, mini statement & Aadhaar to Aadhaar fund transfers through a business corre spondent. Aadhaar Enabled Payment System (AePS) is a payment system operated by NPCI.

4.6.3 MICRO ATMS - A PERFECT SOLUTION FOR RURAL AND HINTER LANDS

Micro ATMs are handheld devices available with authorised banking correspondents (also known as bank mitras) allowing Aadhaar holders to perform basic banking transactions. Fingerprint and/or Retina/Iris of the customer are used to authenticate a customer. Micro ATMs are portable and can be carried anywhere in just one hand.

4.7 MODES OF DIGITAL PAYMENTS - MOBILE BASED BANKING AND OTHERS

The objective of this section is to enable students to learn about the various forms of digital payments including internet banking, mobile banking, and digital platforms such as UPI and mobile wallets.

4.7.1 INTERNET BANKING



Internet banking allows you to transact on your bank account over the internet using your laptop, tablet or smartphone. When you transfer an amount using Internet Banking, it can be done through different methods, including:

- National Electronic Fund Transfer (NEFT)
- Real-Time Gross Settlement (RTGS)
- Immediate Payment Service (IMPS)

NATIONAL ELECTRONIC FUND TRANSFER (NEFT)

National Electronic Funds Transfer (NEFT) is a nation-wide centralised payment system owned and operated by the Reserve Bank of India (RBI). The payment mode enables companies and individuals to transfer funds electronically to other companies and individuals.

The account holder needs to register the beneficiary account details such as account holder name, account type (savings etc.), account number and Indian Financial System Code (IFSC) which helps to identify individual bank branches.

REAL-TIME GROSS SETTLEMENT (RTGS)

RTGS is a real-time settlement system which allows for fast processing of money transfer between any two accounts. 'Real Time' means the processing of instructions at the time they are received; 'Gross Settlement' means that the settlement of funds transfer instructions occurs individually. The payments made via RTGS are final and irrevocable.

The RTGS system is primarily meant for large value transactions. The minimum amount to be remitted through RTGS is ₹ 2,00,000/- with no upper limit.

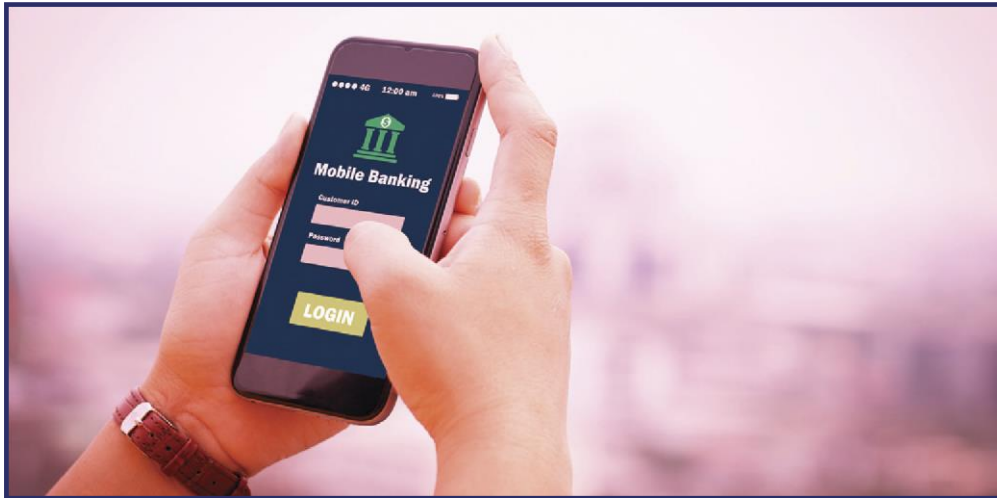
IMMEDIATE PAYMENT SERVICE (IMPS)



IMPS is a product made available by the National Payments Corporation of India (NPCI). It allows for 24x7 instant funds transfer service that can be accessed on multiple channels like Mobile, Internet, ATM and SMS.

The key feature of IMPS is that it is available at all times. The transaction fee for IMPS is nominal, and it allows a transfer limit of Rupees 2 lakhs per transaction.

4.7.2 - MOBILE BANKING - BANK IN YOUR POCKET



Most popular banks today offer the facility of Mobile Banking. It is offered in the form of a dedicated and secure app that provides the following key services:

- Checking of the account balance
- Making funds transfer
- Bill payments and card payments
- Service requests such as ordering cheque books

UNIFIED PAYMENTS INTERFACE (UPI)

A system developed by the National Payments Corporation of India (NPCI), UPI helps combine the power of multiple bank accounts into one single mobile app. UPI helps in seamless fund routing and merchant payments. In addition, it also caters to the “Peer to Peer” collect request which can be scheduled and paid as per requirement and convenience.



establishment. A popular example of a mobile wallet in use today is PayTM.

4.7.4 UNSTRUCTURED SUPPLEMENTARY SERVICE DATA (USSD)



Unstructured Supplementary Service Data (USSD) allows users without a smartphone or data/internet connection to use facilities such as mobile banking by using the *99# code. The key objective of this innovative technology is to allow financial inclusion of the less privileged sections of the society and integrate them into mainstream banking.

4.8 OTHERS - NATIONAL AUTOMATED CLEARING HOUSE – NACH (EARLIER KNOWN AS ELECTRONIC CLEARING SERVICE)

The National Payments Corporation of India (NPCI) offers to banks, financial institutions, Corporates and Government/s a service termed as “National Automated Clearing House (NACH)” which includes both Debit and Credit.

NACH (Debit) and NACH (Credit) aims at facilitating interbank high volume, debit/credit transactions, which are repetitive in nature, electronically using the NPCI service.



SUMMARY

- The Reserve Bank of India (RBI) plays a prominent role as the Central Bank of India and has the power to control the monetary situation of the entire country
- National Payments Corporation of India (NPCI) is an umbrella organization for all retail payments in India.
- Digital banking allows the bank customers to avail banking services using the bank's website on laptop or through a mobile app on a smartphone.
- Digital Payments refers to transferring an amount of money to another individual, business or organisation through the internet without the requirement to handle cash.
- PoS is a system that automatically keeps track of each sale transaction and the amount received from the customer.
- Whenever there is a purchase of goods and services online through an electronic medium without cash or cheques, it is known as e-commerce payment.
- ATMs enable bank account holders to withdraw cash, check balance, and do other banking transactions at their own convenient time.
- Aadhaar Enabled Payment System (AePS) is a payment system operated by NPCI.
- Micro ATMs are handheld devices available with authorised banking correspondents (also known as bank mitras) allowing Aadhaar holders to perform basic banking transactions.
- Internet banking allows you to transact on your bank account over the internet using your laptop, tablet or smartphone.
- Most popular banks today offer the facility of Mobile Banking. It is offered in the form of a dedicated and secure app that provides the following key services:
 - The UPI interface makes it extremely easy and convenient to make payments using the Quick Response codes or QR codes.
 - As the name suggests, a mobile wallet is a virtual wallet in the form of a mobile app that allows you to make purchases simply by scanning the QR code at the merchant establishment.
- Unstructured Supplementary Service Data (USSD) allows users without a smartphone or data/internet connection to use facilities such as mobile banking by using the *99# code.
- NACH (Debit) and NACH (Credit) aims at facilitating interbank high volume, debit/credit transactions, which are repetitive in nature, electronically using the NPCI service.

UNIT 5

Saving and investing are two essential financial strategies that help you build wealth, achieve your goals, and secure your financial future. Although they are often discussed together, they are distinct concepts.

SAVING

Saving involves setting aside money for future use. The primary goal is to preserve your money in a safe, liquid form, which means it's easily accessible when you need it. Savings are typically low-risk and are held in accounts like:

- **Savings accounts:** Offered by banks with interest, but often with lower returns compared to other options.
- **Money market accounts:** A higher interest savings account, usually with higher minimum balance requirements.
- **Certificates of Deposit (CDs):** Time deposits with fixed interest rates and maturity periods.
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KEY CHARACTERISTICS OF SAVING:

- **Low risk:** Your money is safe and usually insured (up to a certain limit).
- **Liquidity:** You can easily access your savings when needed.
- **Short-term focus:** Saving is ideal for short-term goals (e.g., emergency funds, vacations, down payments).

INVESTING

Investing, on the other hand, involves using your money to buy assets that have the potential to grow in value over time. Investments usually come with higher risks but also the potential for higher returns. Common investment vehicles include:

- **Stocks:** Buying shares of companies to benefit from their growth and earnings.
- **Bonds:** Lending money to organizations (governments or corporations) in exchange for regular interest payments.
- **Mutual funds & ETFs:** Pooled investments managed by professionals that invest in various assets, like stocks or bonds.

- **Real estate:** Investing in property with the expectation of rental income or appreciation in value.
- **Retirement accounts:** Accounts like IRAs and 401(k)s designed for long-term retirement savings, often with tax advantages.

KEY CHARACTERISTICS OF INVESTING:

- **Higher risk:** The value of investments can fluctuate, and there is the possibility of losing money.
- **Long-term focus:** Investing is usually a strategy for long-term goals like retirement or funding education.
- **Potential for higher returns:** Investments can generate returns that outpace inflation, helping your wealth grow over time.

KEY DIFFERENCES BETWEEN SAVING AND INVESTING:

Aspect	Saving	Investing
Goal	Preserve money for future use.	Grow wealth over time.
Risk	Low risk, often insured.	Higher risk, potential for losses.
Liquidity	High liquidity, easy to access.	Lower liquidity, may take time to sell.
Return	Low return, interest or small dividends.	Potential for high return (capital gains, dividends).
Time Horizon	Short-term (emergency fund, purchases).	Long-term (retirement, education).

WHEN TO SAVE VS. INVEST

- **Save** if you need to preserve money for short-term goals, emergencies, or if you don't want to risk losing principal.
- **Invest** if you have long-term goals and can tolerate the risks associated with market fluctuations. This helps beat inflation and grow wealth over time.

AN EXAMPLE STRATEGY:

1. **Establish an emergency fund:** Start by saving at least 3–6 months' worth of expenses in a high-yield savings account. This provides a cushion in case of emergencies.
2. **Invest for the future:** Once you've established a savings cushion, start investing for long-term goals (e.g., retirement, buying a house). Consider a mix of investments based on your risk tolerance.

FINAL THOUGHTS:

Both saving and investing are important components of a well-rounded financial plan. Saving provides security and peace of mind, while investing helps you build wealth over time. Balancing both according to your needs and financial goals will lead to greater financial stability and growth.

Budgeting is the process of creating a plan for how to allocate your income and expenses over a specific period, typically monthly or yearly. It helps you manage your finances effectively, ensuring that you live within your means, save for future goals, and avoid unnecessary debt.

WHY BUDGETING IS IMPORTANT:

1. **Control Over Your Money:** Budgeting helps you track your income and spending, giving you control over where your money goes.
2. **Achieve Financial Goals:** It helps you allocate funds for short-term and long-term financial goals like saving for an emergency fund, buying a house, or retirement.
3. **Reduce Financial Stress:** Knowing where your money is going each month can reduce anxiety and give you peace of mind.
4. **Avoid Debt:** A budget can help you prioritize paying off debt or avoid accumulating unnecessary debt.
5. **Prepare for the Future:** It helps you plan for both expected and unexpected expenses, ensuring that you're prepared for emergencies.

HOW TO CREATE A BUDGET:

1. **Track Your Income:** Start by listing all your sources of income. This includes your salary, any side income, or passive income (e.g., investments or rental income). Your monthly income will be the starting point for your budget.
2. **List Your Expenses:** Write down all your monthly expenses. These can be divided into:
 - **Fixed Expenses:** Regular, consistent costs, such as rent/mortgage, utilities, car payments, insurance, etc.
 - **Variable Expenses:** Costs that can fluctuate each month, like groceries, dining out, transportation, entertainment, and clothing.
 - **Discretionary Expenses:** Optional spending that you can adjust based on your budget, such as vacations or luxury items.
3. **Subtract Expenses from Income:** After listing your income and expenses, subtract the total expenses from your total income. This tells you whether you're living within your means or if you're overspending.
4. **Set Financial Goals:** Decide what you want to achieve with your budget. Your goals might include:
 - Building an emergency fund.
 - Paying off debt.
 - Saving for a major purchase (e.g., home or car).
 - Contributing to a retirement account (401(k), IRA).
5. **Prioritize Savings and Debt Repayment:** Aim to save a portion of your income each month (typically 10-20%) and prioritize paying down high-interest debt. This is crucial for financial health.
6. **Adjust and Balance:** If your expenses exceed your income, you'll need to make adjustments. Cut back on discretionary spending, find ways to reduce fixed expenses, or look for opportunities to increase income.
7. **Review and Track Regularly:** Budgeting is an ongoing process. Regularly track your spending and adjust as needed. You can use spreadsheets, budgeting apps (e.g., Mint, YNAB, or EveryDollar), or even pen and paper.

TYPES OF BUDGETING METHODS:

1. The 50/30/20 Rule:

- **50% to Needs:** This includes expenses you can't live without (housing, utilities, food, transportation).
- **30% to Wants:** Expenses that are nice to have but are not essential (e.g., dining out, entertainment, luxury items).
- **20% to Savings and Debt Repayment:** Set aside 20% for savings, investments, and paying down debt.

2. Zero-Based Budgeting:

- This method requires assigning every dollar of your income to a specific expense or savings goal, so your income minus your expenses equals zero. This method can be highly effective if you want to ensure that every dollar is accounted for, but it requires detailed planning.

3. Envelope System:

- This is a physical budgeting method where you allocate a certain amount of cash for various categories of spending (e.g., groceries, entertainment) and place it in envelopes. Once the envelope is empty, you can't spend any more in that category for the month.

4. The Pay-Yourself-First Method:

- In this method, you prioritize savings and investments before covering other expenses. Once your savings goals are met, you then pay for necessary expenses and discretionary spending.
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TIPS FOR SUCCESSFUL BUDGETING:

- **Be Realistic:** Ensure that your budget reflects your actual spending habits. Overestimating savings or underestimating expenses can lead to frustration.
- **Track All Expenses:** Record every purchase, no matter how small. It's easy to overlook things like coffee or small online purchases, but they add up quickly.
- **Cut Back on Unnecessary Spending:** Look for areas where you can trim back—subscriptions, dining out, or impulse buys.
- **Build an Emergency Fund:** Aim to save at least 3–6 months of living expenses in case of unexpected emergencies.

- **Review Regularly:** Life changes, and so should your budget. Review your budget monthly to ensure you're staying on track and making progress toward your goals.
- **Celebrate Milestones:** Recognize when you hit key milestones, like paying off a debt or saving for a specific goal. This helps keep you motivated.

EXAMPLE OF A SIMPLE MONTHLY BUDGET:

Category	Amount	Notes
Income	\$3,500	Salary + Side Hustle
Fixed Expenses		
Rent/Mortgage	\$1,200	
Utilities	\$150	
Insurance	\$100	
Variable Expenses		
Groceries	\$300	
Transportation	\$150	Gas, public transit, etc.
Entertainment	\$100	Dining out, movies, etc.
Savings & Debt		
Emergency Fund	\$250	
Debt Repayment	\$200	Paying down credit card debt
Retirement Savings	\$300	Contributing to IRA/401(k)
Total Expenses	\$2,700	
Remaining	\$800	Can be saved or used for other goals

FINAL THOUGHTS:

Budgeting is an essential financial tool that helps you take control of your money, avoid debt, and achieve your financial goals. Whether you're saving for an emergency, paying off debt, or investing for retirement, a budget is your roadmap to financial success. The key is consistency and regularly reviewing and adjusting your budget to fit your life.