UNIVERSITY OF PETROLEUM AND ENERGY STUDIES
End Semester Examination, May 2023

Course: International Financial Management   Semester: VI
Program: BBA FAS   Time   : 03 hrs.
Course Code: FINC2014P   Max. Marks: 100

Instructions: This is an OPEN NOTES and OPEN BOOK exam. No electronic screens (such as mobiles, tablets, or laptops) are allowed.

SECTION A
10Qx2M=20Marks

S. No.		Marks	CO
Q 1	Statement of question		**CO1**
	ICICI Bank's international expansion ICICI Bank is one of the largest private sector banks in India and has a significant presence in international markets. The bank's international operations include a presence in 18 countries across Asia, Africa, Europe, and North America. One of the key growth strategies of ICICI Bank for its international operations has been to focus on expanding its retail banking operations in these markets. This has included opening new branches and ATMs, as well as developing digital platforms and mobile banking apps to better serve customers. Another important aspect of ICICI Bank's growth strategy has been to focus on building partnerships and strategic alliances with local banks and financial institutions. This has helped the bank to gain a better understanding of the local market and to establish a presence more quickly. Despite these efforts, ICICI Bank has faced a number of hurdles in its international operations. One of the major challenges has been the intense competition in these markets, which has made it difficult for the bank to gain market share. Additionally, the bank has also faced challenges in complying with the various regulations and laws that are specific to different countries. Another hurdle faced by the bank was the global financial crisis of 2008 and its aftermath, which had a significant impact on the bank's international operations. The bank had to bear significant losses due to the crisis and had to scale back its international expansion plans as a result. In terms of regulatory issues, ICICI Bank has had to comply with the regulations of different countries and international regulatory bodies such as Basel III and FATCA. The bank has also had to comply with the regulations of the Reserve Bank of India (RBI) and the Securities and		

	Exchange Board of India (SEBI), which are the regulatory bodies for the banking and securities industries in India respectively. In conclusion, ICICI Bank has a significant presence in international markets and has focused on expanding its retail banking operations and building partnerships with local banks and financial institutions as a growth strategy. Despite these efforts, the bank has faced several hurdles such as intense competition, complying with regulations and laws of different countries and the global financial crisis of 2008. The bank has also had to comply with the regulations of the Reserve Bank of India (RBI) and the Securities and Exchange Board of India (SEBI) and international regulatory bodies such as Basel III and FATCA.		
i.	What is ICICI Bank's presence in international markets? a. It has a small presence in a few countries. b. It has a significant presence in 18 countries. c. It does not have any presence in international markets. d. It has a presence in all countries around the world.	**2**	
ii.	What is one of the key growth strategies of ICICI Bank for its international operations? a. Focusing on expanding corporate banking operations. b. Scaling back international expansion plans. c. Building partnerships with local banks and financial institutions. d. Ignoring regulatory compliance requirements.	**2**	
iii.	What has ICICI Bank done to better serve customers in its international operations? a. Reduced the number of branches and ATMs. b. Focused only on corporate banking. c. Developed digital platforms and mobile banking apps. d. Ignored customer needs.	**2**	
iv.	What has been one of the major challenges faced by ICICI Bank in its international operations? a. Lack of funding. b. Lack of demand. c. Intense competition. d. Lack of regulatory compliance.	**2**	
v.	What was the impact of the global financial crisis of 2008 on ICICI Bank's international operations? a. No impact at all. b. Significant losses and scaling back of international expansion plans. c. Increased profitability. d. Expansion into more countries.	**2**	
vi.	Which regulatory bodies has ICICI Bank had to comply with in India? a. The Reserve Bank of India (RBI) and the Securities and Exchange Board of India (SEBI). b. The Reserve Bank of India (RBI) and the Financial Conduct Authority (FCA). c. The Securities and Exchange Board of India (SEBI) and the Federal Reserve. d. The Federal Reserve and the European Central Bank (ECB).	**2**	
vii.	What is the main focus of ICICI Bank's growth strategy in its international operations? a. Expanding its investment banking operations. b. Expanding its retail banking operations. c. Ignoring regulatory compliance requirements. d. Building partnerships with international organizations.	**2**	
viii.	How many countries does ICICI Bank have a presence in? a. 5 countries. b. 10 countries. c. 15 countries. d. 18 countries.	**2**	

ix.	What has ICICI Bank done to establish a presence more quickly in local markets? a. Reduced the number of branches and ATMs. b. Focused only on corporate banking. c. Developed digital platforms and mobile banking apps. d. Built partnerships with local banks and financial institutions.	2	
x.	What are some of the hurdles faced by ICICI Bank in its international operations? a. Intense competition, complying with regulations and laws of different countries, and the global financial crisis of 2008. b. Lack of demand, lack of funding, and ignoring customer needs. c. Focusing only on corporate banking and reducing the number of branches and ATMs. d. Building partnerships with international organizations and ignoring regulatory compliance requirements.	2	
	SECTION B **4Qx5M= 20 Marks**		
Q	Statement of question (refer to the case of ICICI Bank above).		**CO2**
2	What growth strategies has ICICI Bank adopted for its international operations, and what challenges has it faced in implementing them?	5	
3	How has ICICI Bank navigated regulatory issues in its international operations?	5	
4	What impact did the global financial crisis of 2008 have on ICICI Bank's international operations?	5	
5	How has ICICI Bank responded to the challenges it has faced in its international operations?	5	
	SECTION-C **3Qx10M=30 Marks**		
Q	Statement of question		**CO3**
	The Impact of FinTech on Financial Services in Emerging Economies In recent years, FinTech companies have begun to disrupt the traditional financial services industry in emerging economies. These companies, which use technology to deliver financial services more efficiently and at lower cost, have begun to challenge established financial institutions in countries such as India, China, and Brazil. One such company is XYZ FinTech, a digital payments and money transfer company based in India. XYZ FinTech has developed a mobile app that allows users to easily and securely make payments and transfer money. The company has quickly gained a large customer base in India, where many people lack access to traditional banking services. The success of XYZ FinTech has had a significant impact on the financial services industry in India. Established banks and other financial institutions have been forced to respond to the threat posed by FinTech companies like XYZ FinTech. Some have responded by developing their own digital platforms and services, while others have partnered with FinTech companies to bring new services to market.		

However, the impact of FinTech is not limited to digital payments and money transfer. Other FinTech companies have begun to disrupt other areas of the financial services industry, such as lending, insurance, and investment management. For example, a peer-to-peer lending platform in China has been able to provide loans to individuals and small businesses that would not have been able to access credit from traditional banks.

The impact of FinTech on the financial services industry in emerging economies has been significant. These companies have been able to reach customers that were previously underserved or unserved by traditional financial institutions. They have also been able to deliver services more efficiently and at lower cost than traditional financial institutions. As a result, the financial services industry in emerging economies is becoming more inclusive and providing better services to a broader range of customers.

However, it's important to note that as the fintech industry grows, it also faces challenges such as regulations, security and privacy concerns, and the need to navigate different cultural and economic environments.

This case can be used to discuss the impact of FinTech on the financial services industry in emerging economies, the challenges faced by traditional financial institutions, the regulatory and legal environment, and the opportunities and challenges for FinTech companies.

6	Discuss the regulatory and legal environment for FinTech companies operating in emerging economies.	**10**	
7	Evaluate the opportunities and challenges for FinTech companies operating in emerging economies.	**10**	
8	Discuss the impact of FinTech on the financial services industry in emerging economies, with a particular focus on India.	**10**	

SECTION-D
2Qx15M= 30 Marks

Q	Statement of question		**CO4**
	Emergence of the Metaverse/Web3
The boundaries between our digital and physical worlds are blurring. How and where we learn, work, and shop are transforming.
What was once static and boring is becoming dynamic and magical.
Precedence Research estimates the metaverse market will reach $1.3 trillion by 2030. Recently, Citibank provided an estimate 10x bigger, saying that the metaverse could be worth $13 trillion with up to 5 billion users by 2030.
While Web2 allowed us to transfer data in the form of documents, photos and videos, Web3 will emerge as the internet of value, built on blockchain, NFTs, DAOs, and the metaverse allowing us to transmit ownership.
The metaverse is a social and ownership layer on the internet, providing self-sovereign identity, connecting people, places, and things.
It will guarantee authenticity and chain of title (ownership) across time and space via blockchain.
Metaverse/Web3 is powered by a convergence of AI, blockchain, VR, AR, and 5G networks. It will transform how we live our everyday lives, impacting every industry from retail and advertising, to education and entertainment.		

This decade: "Artists and storytellers will be to Web3, what software engineers were to Web2."

Here we will discuss how the web has evolved, what exactly the metaverse is, how it's structured, and what its impact will be.

WEB1, WEB2... EVOLVING TO WEB3

To better understand what the metaverse is, it helps to put it in the context of the overall evolution of the web.

Web 1.0

Web 1.0 was the earliest version of the world wide web that lasted from roughly 1991 to 2004.

This early version of the web is often described as "read-only." Most of what people did on Web 1.0 was read static web pages that were manually coded with HTML. You can think of Web 1.0 as a giant, "slightly-interactive" brochure or digital encyclopedia.

Examples of Web 1.0 include initial versions of blogs, message boards, and portals like America on Line (AOL).

Web 2.0

Web 2.0, also known as the "read-write" or social web, is characterized by software applications like Gmail and Google Docs, and social media platforms such as Facebook and Twitter.

It emerged due to the lack of interactivity between creators and users of Web 1.0, and it's the version of the web that most people experience today.

With Web 2.0, the focus is mass participation and interactivity, with people creating and posting their own content instead of passively reading. It also saw the advent of Software as a Service (SaaS) models and dynamic programming technologies.

However, one of the drawbacks of this version of the web is the centralization of user data and information by big tech companies. This has been a key driver in the development of the next iteration of the web…

Web 3.0

The defining aspect of Web 3.0, or Web3, is decentralization.

With Web3, also referred to as the "read-write-own" web, users own, monetize, and use their data for their own benefit. Web3's focus on decentralization means that users can interact in a secure way, exchanging everything from money to information, without the need for intermediaries such as banks and large tech companies.

As I mentioned above, artists and storytellers will be the key content creators of Web3.

From innovative ownership and monetization mechanisms, to new digital worlds and communities, not to mention the explosion of new technologies and apps, creatives will thrive in Web3.

3 core technologies power Web3:

•   Blockchain, providing a public, permanent, and universal single source of truth

•   Digital Assets that are issued on a blockchain, representing value portability and permanence

•   Smart Contracts that contain conditional programming code that create utility by facilitating self-executing applications

One of the key decentralized technologies that Web3 enables is the metaverse.

And while many people use the terms Web3 and metaverse interchangeably, they are different. So before discussing everything that will be possible in the metaverse, let's define some terms.

SO, WHAT EXACTLY IS THE METAVERSE?
Here are the definitions of the metaverse from 3 leaders in the space:
Definition #1: Mathew Ball (CEO, Epyllion)
According to Matthew Ball from an interview on McKinsey's At the Edge podcast, here's how he thinks about the Metaverse and Web3...
The Metaverse: "The Metaverse is a massively scaled and interoperable network of real-time rendered 3D virtual worlds and environments which can be experienced synchronously and persistently by an effectively unlimited number of users with an individual sense of presence, and with continuity of data, such as identity, history, entitlements, objects, communications, and payments."
"Well, Web3, by definition, succeeds Web 2.0. The metaverse, by definition, succeeds our current computing and networking paradigm. The fact that they both succeed what we experience as the internet today naturally intertwines the two."
Definition #2: Cathy Hackl (Founder, Journey)
Cathy Hackl, known as "The Godmother of the Metaverse," takes an expansive view of the metaverse.
The Metaverse: Hackl sees it as the convergence of our physical and digital lives. In a way, it's a matter of our digital lifestyles, which we've been experiencing through our phones and computers, catching up to our physical lives.
She acknowledges that most people tend to associate the metaverse with AR and VR, but those aren't the only entry points. Blockchain, 5G, edge computing, and many other technologies all contribute to a new kind of experience.
"To me, the metaverse is also about our identity and digital ownership. It's about a new extension of human creativity in some ways."
Definition #3: Eric Pulier (Founder, CEO, VAtom)
Pulier is a brilliant entrepreneur and visionary, having built the first NFT and founded over 1 companies. For Pulier, the next generation of the internet and the metaverse "will bring people, places, and things to the web—providing a new canvas for human imagination and vast business opportunities."
So, how does this differ from previous discussions of immersive environments and AR and VR?
Taking into account his notion that the metaverse will involve new ways of interacting with people, places, and things, Pulier likes to take each of those in turn.
Metaverse + People: Regarding people, in the metaverse you can assume your own avatar or persona, and you own your data so that you can move from one experience to another with your sense of self intact.

Metaverse + Your Stuff: As Pulier points out, in the past in games, you had the sense that if a given game dies, then your goods would go with it. But in the metaverse, you get to take all your stuff (digital assets, objects) from place to place.
Metaverse + Places: Finally, in the metaverse, place isn't limited to VR. Instead, Pulier envisions virtual spaces, the 3D web that is now allowing us to create a

different type of experience. Added to this new sense of place is the social element. Here's how Pulier explains it:

"… what I call true social, meaning that when you talk about Instagram and these other social platforms, you're interacting with information, which then interacts with other people, you don't really get the sense that you were there with somebody doing something and having that experience. So, this is different, you add these elements together, and there's a different sense of experience."

THE ROLE OF DAOS, IDENTITY & NFTS

DAOs, identity, and NFTs are components or experiences often discussed in relationship to the metaverse. Let's discuss each in turn...

Decentralized Autonomous Organizations (DAOs)

DAOs are a new organizational structure built with blockchain and formed for a common purpose, which can range from investing in startups to buying NFTs.

A DAO is "decentralized" because there isn't a Board of Directors or a CEO. Instead, it's as if each shareholder of a company could vote on every one of the company's actions. Once a DAO is formed, it's run by its members, typically using crypto tokens. These tokens come with rights attached to them, such as the ability to vote on certain decisions or manage a common treasury.

It's "autonomous" because it is powered by smart contracts that automatically execute to move the organization toward the organization's goals.

For example, the Decentraland metaverse, a 3D world where all property and assets are represented by tradable NFTs, is organized as a DAO. Every constituent of Decentraland has voting power based on their holdings of MANA, LAND, and NAME in the metaverse, and all these assets have associated crypto tokens.

Decentraland's voting formula favors landholders. Each LAND parcel gives 2,000 units of voting power, where each MANA provides only 1 VP. And what the community can vote on ranges from organizing land auctions and sales fees to the addition of new wearables for users' avatars.

Identity

Because the "metaverse" encompasses multiple digital worlds (or many metaverses), an accurate and widely accepted system of identity authentication is critical to creating a unified user experience across all elements of the metaverse.

Verified and interoperable identities allow users to hop from one metaverse to another, bringing their avatars and digital assets or objects with them, just as a person's identity remains the same when traveling from one city to another in the physical world.

One of the main methods for doing this is called "self-sovereign identity" (SSI). SSIs are digital identities that users create and manage using digital wallets, without having to rely on third-party providers. The identities are authenticated and verified using public-key cryptography that is anchored on the blockchain.

A key benefit of SSIs is that they remove the need to maintain personal information on a central database, thereby addressing data security and privacy issues.

Ultimately, SSIs bring a new level of decentralized, transparent, and verified trust that's key to creating an open and unified metaverse.

Non-fungible Tokens (NFTs)

While NFTs have been all the rage from CryptoPunk to Bored Apes, there is a more critical definition of NFTs and their use in the metaverse.

An NFT represents a unique digital item that you own completely—it's immutable, original, secure, and verifiable via the blockchain.
For example, you can think of NFTs like the certificate of authenticity you might get if you bought an expensive price of art. The piece of art itself could be copied or even stolen, but your certificate of authenticity would still prove that you are the owner of the original.

Eric Pulier has taken this concept of an NFT to a new level.
Pulier and his team at Vatom created the first Smart NFT back in 2015. It's programmable and dynamic, so it's network-aware and can respond to real-time events.
As he put it, "It's the difference between a watch and a smartwatch. While a regular watch only tells time, a smart watch interacts with you, gives you goals, communicates and reacts to applications in the cloud, and can reward you based on the actions you take."
Smart NFTs are innovating the relationships between businesses and customers, and are creating new approaches to community building and customer engagement.
For Pulier, the "Smart NFT Wallet will be the most powerful human communication tool since the invention of the internet itself."
In an interview earlier this year, Pulier laid out the 3 applications of Smart NFTs that he's most excited about:
1. Customer Relationship Management (CRM): Smart NFTs allow brands to develop direct channels to indivisible customers and deliver personalized, interactive content and benefits. This helps them activate and nurture long-term relationships more effectively.
For example, if a Los Angeles Lakers fan will be more likely to stick with the brand if they see that a Smart NFT … "can send them immediate rewards every time the Lakers win a game, exclusive access to meet a player, new forms of vibrant online communities, discounts on merchandise and the ability to create their own content and share it with others."
2. Direct Payments: Pulier sees Smart NFTs and Web3 revolutionizing the payments industry. For instance, an artist or creator can be paid directly for their work, so they can earn a living without third-party intermediaries taking a share of their compensation. Smart NFTs and universal Wallets will enable people to pay creators voluntarily.
But the benefits extend beyond business and the creative community. One-third of the world's population is "un-banked" or "under-banked," meaning they have limited or no access to financial services. Direct payments and access to a universal Wallet mean that these people will now have an opportunity to get paid for their work—whether it's translating a sentence from one language to another or teaching a skill.
3. Communities: Web3 and the Metaverse will also revolutionize our idea of online communities. These technologies add an ownership and social layer onto what we currently experience as the internet. DAOs are one example of this.
As Pulier notes, companies, and organizations are realizing that their future depends on creating "participatory communities of interest that want to engage because of alignment with purpose and authentic personal interests."
Advertising, marketing, and loyalty will eventually roll into what he calls "value for time."

	Pulier gives the example of the ComicCon Metaverse: "This is a global group of enthusiasts, creators, and fans who want to express creativity, engage in commerce, and explore new adventures together, as a community. By providing them with a platform to build, buy, and interact, the Comic Con Metaverse is a good example of what literally millions of other groups will be doing in the near future." IMPLICATIONS & FINAL THOUGHTS The metaverse could be worth up to $13 trillion by the end of this decade, but we can already see the impact it's having. With a newly built stack and an interface built from numerous converging technologies, the metaverse will transform every facet of our everyday lives: from the way we organize and access our data, to our social and business interactions, to the way we train employees and educate our children.		
9	What is the Metaverse and how will it impact various industries?	**15**	
10	How has the web evolved from Web1.0 to Web3.0, and what are the defining characteristics of Web3.0?	**15**	