

PSG COLLEGE OF ARTS AND SCIENCE
(AUTONOMOUS)

MSc DEGREE EXAMINATION MAY 2024
(First Semester)

Branch- COMPUTER SCIENCE

META-VERSE NEAR FUTURE TECHNOLOGIES

Maximum : 75 Marks

Time : Three Hours

SECTION-A (10 Marks)

Answer ALL questions

ALL questions carry EQUAL marks

(10 x 1=10)

Module No.	Question No.	Question	K Level	CO
1	1	The Virtual environment where it reacts for the user with virtual glasses without physical sensation is called as i) Interactive environment ii) Non-immersive VR iii) Semi immersive VR iv) 3D environment	K1	CO1
	2	It is a mediated environment which creates the sensation in a user of being present in a surrounding. i) WWW ii) VR iii) HMD iv) GUI	K1	CO1
2	3	The very first concept which was used to validate the transaction and add a new block to the blockchain is called as i) Pow ii) PoS iii) digital sign iv) DFT	K1	CO1
	4	The technologies used by Block chain for the security of the data in Metaverse i) Symmetric key & Prime functions ii) Asymmetric-key & Hash function iii) Symmetric key & Hash function iv) Hash function & math functions	K1	CO1
3	5	The Immersive VR devices are : select the best suitable answer from the given below i) Mouse, Printer ii) Tablet, Joystick iii) Helmet, Gloves, Glasses iv) Pointer, touch pen, voice input	K4	CO2
	6	The type of AR technique where the image gets life when it is scanned is called as i) Projection based AR ii) Recognition based AR iii) Location based AR iv) Outlining AR	K1	CO1
4	7	What are the characteristics of NFT? i) Unique, Indivisible, Immutable ii) Divisible and Mutable iii) Flexible and Stable iv) Security & 3D perspective	K1	CO1
	8	Which is most relevant to NFTs? A) NFTs enable the digital representation of physical assets B) They are unique cryptographic tokens that exist on a blockchain C) They can be traded D) They can be exchanged i) A,B,C,D ii) A & B iii) B & C iv) C & D	K1	CO1
5	9	What is the major difference between NFT and Cryptocurrency? i) NFTs are physical tokens, while cryptocurrencies are digital ii) NFTs are used for authentication, while cryptocurrencies are used for transactions iii) NFTs are non-interchangeable and non-divisible, while cryptocurrencies are fungible iv) NFTs represent ownership of a digital item, while cryptocurrencies are a medium of exchange	K1	CO1

Cont...

5	10	Which gaming company is the world leader in gaming and perfectly positioned for metaverse platforms? i) Tencent Games ii) GSN Games iii) Alien Worlds iv) Unity	K3	CO3
---	----	---	----	-----

SECTION -B (35 Marks)

Answer ALL questions

ALL questions carry EQUAL Marks

(5 X 7 = 35)

Module No.	Question No.	Question	K level	CO
1	11.a.	Write about the technologies involved in the Metaverse in a brief.	K3	CO3
	(OR)			
	11.b.	Explain the concept of Virtual Reality in short.		
2	12.a.	Illustrate the history of Blockchain.	K4	CO2
	(OR)			
	12.b.	Narrate your understanding about Centralized Vs Decentralized Metaverse.		
3	13.a.	Expound on XR,VR,AR and MR.	K4	CO2
	(OR)			
	13.b.	Summarize on the Blockchain Identity Management in Metaverse in detail.		
4	14.a.	What do you understand about the benefits of NFTs.	K5	CO4
	(OR)			
	14.b.	Explain the buy and sell of Opensea in NFT.		
5	15.a.	Discuss about the Virtual learning in Metaverse.	K5	CO4
	(OR)			
	15.b.	Illustrate the functionality of digital identity and E-commerce in metaverse with an example.		
			K4	CO2

SECTION -C(30 Marks)

Answer ANY THREE questions

ALL questions carry EQUAL Marks (3 X 10 = 30)

Module No.	Question No.	Question	K Level	CO
1	16	Discuss on i) Technologies involved in Metaverse ii) Layers of Metaverse iii) Applications of Metaverse	K4	CO2
2	17	How the Blockchain technology influences the Metaverse and what is the significance of Blockchain?	K4	CO2
3	18	What is the virtual world and virtual environment? How did these virtual key technologies are used to replace the reality?	K4	CO2
4	19	Summarize the research on social media twitter for NFTs.	K6	CO5
5	20	Write about the Social interactions and Travel in Metaverse. Explain with suitable example.	K3	CO3