(Multiple Choice Questions)

Question No.			Questions	Marks
1	i		What does the Internet of Things (IoT) primarily aim to achieve?	1
		a	A. Bluetooth speakers	
		b	Cloud Computing	
		c	Word processors	
		d	Digital marketing	
	ii		What does “Time for Convergence” refer to in IoT context?	1
		a	Merging of networks	
		b	Multiple technologies like sensors, AI, cloud working together	
		c	End of wired networks	
		d	Single OS for IoT device	
	iii		What does the concept "Towards the IoT Universe" emphasize?	1
		a	Restricting IoT to cities	
		b	Expanding IoT to all domains	
		c	Using only Wi-Fi	
		d	Disconnecting IoT from the internet	
	iv		What is the vision of IoT?	1
		a	More mobile apps	
		b	Connecting physical objects to the internet	
		c	Reducing smartphone usage	
		d	Eliminating computers	
	v		What is the focus of IoT Strategic Research and Innovation Directions?	1
		a	Social media growth	
		b	Fewer sensors	
		c	Future IoT advancements	
		d	Offline devices	
	vi		Which is NOT a typical IoT application?	1
		a	Smart Homes	
		b	Industrial Automation	

		c	Online Gaming	
		d	Healthcare Monitoring	
	vii		Which protocol is relevant to Future Internet Technologies in IoT?	1
		a	IPv4	
		b	IPv6	
		c	FTP	
		d	SMTP	
	viii		Which is part of IoT Infrastructure?	1
		a	Celebration Layer	
		b	Perception Layer	
		c	Entertainment Layer	
		d	Input Layer	
	ix		What is a major design challenge in IoT?	1
		a	Unlimited storage	
		b	Compact and energy-efficient devices	
		c	Running social media	
		d	File printing	
	x		Which is a common security challenge in IoT?	1
		a	Fast internet	
		b	UI design	
		c	Cybersecurity and privacy	
		d	Device painting	
	xi		What is the primary goal of a Wireless Sensor Network (WSN)?	1
		a	Play games	
		b	Store large data	
		c	Monitor and collect data from the environment	
		d	Improve web design	
	xii		Which of the following is a key feature of WSN communication?	1
		a	Wired Ethernet	
		b	Centralized communication	
		c	Short-range wireless multi-hop communication	
		d	Infrared only	

	xiii		What is a major challenge in wireless medium access in WSNs?	1
		a	Printing errors	
		b	Traffic congestion	
		c	Collision avoidance and energy efficiency	
		d	Storage capacity	
	xiv		Which MAC protocol is designed specifically for low power consumption in WSNs?	1
		a	ALOHA	
		b	S-MAC	
		c	TCP/IP	
		d	HTTP	
	xv		What is the role of routing protocols in WSNs?	1
		a	Painting sensor nodes	
		b	Managing energy budgets	
		c	Finding optimal paths for data delivery	
		d	Encrypting data	
	xvi		Which of the following is a **flat routing protocol** used in WSNs?	1
		a	LEACH	
		b	AODV	
		c	Directed Diffusion	
		d	OLSR	
	xvii		In sensor deployment, what is a key difference between deterministic and random deployment?	1
		a	Random uses GPS	
		b	Deterministic places nodes at specific locations	
		c	Random has better battery life	
		d	Deterministic is wireless only	
	xviii		Node discovery in WSN is primarily used to:	1
		a	Track delivery trucks	
		b	Connect with unknown neighboring nodes	
		c	Charge batteries	
		d	Connect to satellites	
	xix		What is the main goal of data aggregation in WSNs?	1

		a	Increasing latency	
		b	Reducing data redundancy and saving energy	
		c	Boosting sensor brightness	
		d	Splitting the data packets	
	xx		Data dissemination in WSNs refers to:	1
		a	Broadcasting sensor firmware	
		b	Sending control or query messages efficiently	
		c	Turning off idle nodes	
		d	Encrypting all traffic	
	xxi		How does the M2M value chain differ from the IoT value chain in terms of scalability and flexibility?	1
		a	M2M supports real-time analytics better than IoT	
		b	IoT is less scalable than M2M	
		c	IoT value chains offer broader interoperability and cloud integration	
		d	M2M value chains are more user-centric	
	xxii		Which factor best explains the rise of global information monopolies in the international IoT value chain?	1
		a	Decentralization of cloud services	
		b	Local-only manufacturing	
		c	Dominance of data ownership by few tech giants	
		d	Lack of industrial interest	
	xxiii		While designing an IoT architecture, what would be the most effective step to ensure device interoperability?	1
		a	Create closed protocols	
		b	Use proprietary firmware	
		c	Adopt international communication standards	
		d	Limit device access to intranet only	
	xxiv		What is a key difference in architectural design when transitioning from M2M to IoT systems?	1
		a	Removal of cloud computing	
		b	Increased use of point-to-point communication	
		c	Addition of layered, service-based architecture	
		d	Limited protocol support	
	xxv		When evaluating IoT standards, which	1

			consideration is most important for long-term system adaptability?	
		a	Cost of implementation	
		b	Brand compatibility	
		c	Support for cross-domain integration	
		d	Number of devices used	
	xxvi		If you were to create a new IoT value chain model, which of the following would be a critical component to include from the beginning?	1
		a	Only device layer	
		b	Manual data processing	
		c	Edge computing and cloud services integration	
		d	Exclusion of security protocols	
	xxvii		What is the primary purpose of an IoT architecture?	1
		a	To define marketing goals	
		b	o organize physical design of sensors	
		c	To structure and manage IoT systems effectively	
		d	To connect mobile phones to IoT	
	xxviii		Which layer in the IoT Reference Model is responsible for processing and analytics?	1
		a	Device Layer	
		b	Service Layer	
		c	Application Layer	
		d	Communication Layer	
	xxix		How does the IoT Reference Architecture help in system design?	1
		a	By replacing all protocols	
		b	By giving a standard framework for interoperability and scalability	
		c	By defining branding strategies	
		d	By simplifying coding syntax	
	xxx		In the Functional View of IoT Reference Architecture, which component manages real-time data processing?	1
		a	User Interface	
		b	Network Manager	
		c	Service Enablement Layer	

		d	Device Registry	
	xxxi		What is the focus of the Information View in IoT architecture?	1
		a	Device installation	
		b	Data models and flow between components	
		c	Packaging sensors	
		d	Reducing hardware cost	
	xxxii		When evaluating Deployment and Operational View, what key aspect should be prioritized?	1
		a	Marketing strategy	
		b	Cost of application	
		c	Scalability and performance in real-world environments	
		d	UI/UX design	
	xxxiii		Which of the following is an example of applying the Deployment View in an IoT project?	1
		a	Analyzing data trends	
		b	Mapping services to actual devices and networks in the field	
		c	Writing code for a sensor	
		d	Creating user manuals	
	xxxiv		When designing a new IoT system, which architectural view is most useful to define user interaction with the system?	1
		a	Deployment View	
		b	Functional View	
		c	User Interaction View	
		d	Information View	
	xxxv		What is the main goal of IoT applications in value creation?	1
		a	Increase app downloads	
		b	Create smarter and data-driven services/products	
		c	Reduce digital presence	
		d	Focus only on hardware	
	xxxvi		What feature distinguishes the Arduino from the Raspberry Pi	1
		a	Arduino runs a full OS	
		b	Raspberry Pi is used for low-level sensor tasks	

		c	Raspberry Pi supports multitasking and runs an OS	
		d	Arduino has HDMI output	
	xxxvii		Which statement best describes Fog Computing?	1
		a	All data is stored in personal devices	
		b	Fog computing processes data closer to the source before sending it to the cloud	
		c	Fog computing replaces cloud computing	
		d	It only works with Bluetooth	
	xxxviii		How does IoT enhance the efficiency of Connected Vehicles?	1
		a	By reducing engine size	
		b	Through real-time data exchange for navigation, safety, and diagnostics	
		c	By increasing fuel consumption	
		d	By disabling GPS	
	xxxix		What role does data aggregation play in smart cities?	1
		a	Distributes unprocessed data	
		b	Collects and processes data to reduce redundancy and improve decision-making	
		c	Slows down network traffic	
		d	Prevents public access to services	
	xxxx		What defines a "Brownfield IoT" solution in industry?	1
		a	A new IoT design from scratch	
		b	Use of IoT in agriculture	
		c	Integrating IoT into existing legacy systems	
		d	Creating smart cities	
	xxxxi		Which aspect is crucial to master for successful IoT business implementation?	1
		a	Ignoring cloud costs	
		b	Limiting data analysis	
		c	Monetization and user experience	
		d	Reducing device size	
	xxxxii		How does serialization contribute to value creation in IoT with Big Data?	1
		a	By duplicating data	
		b	By anonymizing all datasets	

		c	By uniquely identifying and tracking products or objects	
		d	By increasing battery life	
	xxxxiii		How is IoT transforming the healthcare industry?	1
		a	Decreases patient data accuracy	
		b	Allows remote monitoring and real-time diagnostics	
		c	Encourages manual processes	
		d	Disables health records	
	xxxxiv		In a smart home management system, what is a key value IoT brings?	1
		a	Increasing manual tasks	
		b	Automating home systems for energy efficiency and convenience	
		c	Eliminating internet use	
		d	Only lighting control	
	xxxxv		What is a primary privacy concern in the Internet of Things?	1
		a	Slow processing	
		b	Device cost	
		c	Unauthorized access to personal data	
		d	Low battery life	
	xxxxvi		Which aspect of governance is essential in IoT systems?	1
		a	Graphic design	
		b	Policy enforcement and data ownership regulations	
		c	Increasing signal strength	
		d	Removing encryption	
	xxxxvii		In the context of smart cities, how is trust built in IoT data platforms?	1
		a	By using only local servers	
		b	Through open data models, transparency, and citizen participation	
		c	By hiding data usage	
		d	Using only wired connections	
	xxxxviii		What does the Smartie approach focus on in IoT security?	1
		a	High-cost hardware	

		b	Lightweight smart objects with user-defined data control policies	
		c	Offline operations	
		d	Monolithic systems	
	xxxxix		Why is secure data aggregation critical for smart cities?	1
		a	To speed up mobile apps	
		b	To allow uncontrolled access	
		c	o prevent tampering and ensure integrity of combined sensor data	
		d	To delete data immediately	
	xxxxx		What is the first step towards creating a secure IoT platform?	1
		a	Ignoring firmware updates	
		b	Implementing strong authentication and access control	
		c	Removing encryption	
		d	Reducing network coverage	