COER University
END SEMESTER EXAMINATION, EVEN SEM 2022-23

Time : 3 hours
Total Marks : 100
Program Name : BBA
Semester : IV
Course Name : Internet of Things
Course Code : SOC244

Note: All questions are compulsory. No student is allowed to leave the examination hall before the completion of the time.

Q. No 1	Attempt Any Four Parts. Each Question Carries 5 Marks.	CO	BL
(a)	Define the term "Internet of Things" (IoT) and explain the characteristics of IoT.	CO 1	1
(b)	What is the DNA of IoT? How does it contribute to the overall functionality of IoT?	CO 1	2
(c)	What is Web 3.0 view of IoT? How does it differ from previous versions of the web?	CO 1	2
(d)	What are various Communication Models in IoT? Describe any two of them.	CO 1	2
(e)	Explain how the "four pillars" of IoT systems work together to enable their functionality and define them.	CO 1	1

Q. No 2	Attempt Any Four Parts. Each Question Carries 5 Marks.	CO	BL
(a)	Differentiate between M2M and WSN protocols.	CO 2	2
(b)	Describe the importance of protocol standardization for IoT. What is AMQP protocol and its use in IoT systems?	CO 2	2
(c)	Provide an overview of IEEE802.15.4 and explain its relevance in IoT communications.	CO 2	2
(d)	Describe the network layer and APS layer in IoT communication. Elaborate how identifiers play an important role in IoT.	CO 2	3
(e)	Discuss the features and functionalities of BACNet protocol in the context of IoT applications.	CO 2	2

Q. No 3	Attempt Any Four Parts. Each Question Carries 5 Marks.	CO	BL
(a)	Describe the different types of IoT devices and deployment models.	CO 3	3
(b)	Provide an overview open-source IoT stack. Explain its architecture and key components.	CO 3	3
(c)	What is a resource model in the context of IoT? How does it facilitate abstraction and interoperability?	CO 3	3
(d)	Discuss the role of middleware in IoT architecture and its impact on system performance and scalability.	CO 3	3
(e)	Discuss the importance of security measures in IoT architecture and the potential risks associated with insecure deployments.	CO 3	3

Q. No 4	Attempt Any Two Parts. Each Question Carries 10 Marks.	CO	BL
(a)	Examine the contribution of Web of Things (WoT) to the development of smart agriculture.	CO 4	4
(b)	Discuss the role of WoT portals in providing user interfaces and business intelligence in the context of IoT applications.	CO 4	2
(c)	What are the two pillars of the Web and how do they work?	CO 4	4

Q. No 5	Attempt Any Two Parts. Each Question Carries 10 Marks.	CO	BL
(a)	How can we implement IoT to enhance the security of a building?	CO 5	5
(b)	Explore the role of software agents in resource management for the Internet of Things. How do software agents contribute to autonomous decision-making and coordination of IoT devices?	CO 5	3
(c)	What is Industrial Io T? Explain how you will design a smart water management system for agriculture using IoT.	CO 5	3

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