

Program: S.Y.B.Sc CS **Semester:** IV **Program Code:** UGCS02
Course: Internet Of Things **Course Code:** USCS404
Duration: 1 Hour **Examination Pattern:** NEP- Autonomous-External **Max. Marks:** 30

Instructions:

1. All questions are compulsory.
2. Figures to the right indicate full marks.
3. Draw neat diagrams wherever necessary.

Examination:
REGULAR

Q. 1	Attempt any TWO of the following.	[10]	Course Outcome	Knowledge Level
(a)	Define the Internet of Things (IoT). List its key characteristics and scope.		CO5	L1
(b)	Describe the Three-Layer IoT Architecture and explain the function of each layer in detail.		CO1	L2
(c)	Compare and analyze the differences between Physical Design and Logical Design of IoT systems with suitable examples.		CO2	L4
(d)	Illustrate how Cloud Computing acts as an enabling technology in IoT by applying it to a real-world IoT application scenario.		CO4	L3
Q. 2	Attempt any TWO of the following.	[10]	Course Outcome	Knowledge Level
(a)	Define the HTTP protocol and list its key features used in IoT communication.		CO2	L1
(b)	Describe Wireless Sensor Networks (WSN) and summarize the components of its architecture.		CO5	L2
(c)	Analyze the major privacy and data protection challenges in IoT systems and examine their impact on users and organizations		CO5	L4
(d)	Evaluate different cloud platforms used for IoT applications and justify their advantages in real-world implementations.		CO4	L5
Q. 3	Attempt any TWO of the following.	[10]	Course Outcome	Knowledge Level
(a)	Describe Smart "Things" in IoT and explain why unique identifiers are essential for IoT systems.		CO1	L1
(b)	Explain the architecture of ARM processors and discuss their advantages in IoT applications.		CO3	L2
(c)	Analyze the role of sensors and actuators in IoT systems and compare digital and analog sensors with suitable examples.		CO2	L4
(d)	Evaluate the impact of IoT applications in any two domains (Healthcare, Agriculture, Transportation, or Smart Cities) with suitable case studies.		CO5	L5

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