

Code: 20ES1602

III B.Tech - II Semester – Regular Examinations – JUNE 2023**INTERNET OF THINGS
(INFORMATION TECHNOLOGY)**

Duration: 3 hours

Max. Marks: 70

Note: 1. This paper contains questions from 5 units of Syllabus. Each unit carries 14 marks and have an internal choice of Questions.

2. All parts of Question must be answered in one place.

BL – Blooms Level

CO – Course Outcome

			BL	CO	Max. Marks
UNIT-I					
1	a)	Differentiate between IoT WF and M2M.	L2	CO1	7 M
	b)	Explain the concept of IoT and Digitization.	L2	CO1	7 M
OR					
2	a)	List the limitations and challenges of IoT.	L1	CO1	4 M
	b)	Describe the expanded view of the simplified IoT architecture with a neat diagram.	L2	CO1	10 M
UNIT-II					
3	a)	Classify the physical sensors in IoT.	L2	CO1	7 M
	b)	Explain four common characteristics actuators used for selection.	L2	CO2	7 M
OR					
4	a)	Illustrate the interaction of sensors and actuators with the physical world with a neat diagram.	L3	CO2	7 M

	b)	Explain IEEE 802.15.4 IoT Access technology in detail.	L4	CO2	7 M
UNIT-III					
5	a)	Explain the details of Arduino programming. List the advantages and its applications.	L4	CO3	7 M
	b)	Demonstrate on i) Microcontrollers ii) System-on-Chip.	L3	CO3	7 M
OR					
6	a)	Discuss in detail about hardware features of Arduino board.	L2	CO3	7 M
	b)	Discuss the following: i) Choosing your platform ii) Embedded basic computing.	L2	CO3	7 M
UNIT-IV					
7	a)	Explain and Sketch the address formats of IP, DNS, MAC.	L4	CO4	7 M
	b)	Summarize on : i) Static IP Address ii) Dynamic IP Address.	L2	CO4	7 M
OR					
8	a)	Interpret networked communication between two hosts following the TCP/IP suite with a block diagram.	L3	CO4	7 M
	b)	Compare the IP Networks: IPv4 & IPv6.	L2	CO4	7 M
UNIT-V					
9	a)	Analyse how to implement comet? And how scaling works with comet.	L4	CO5	7 M

	b)	Point out the other protocols available to replace HTTP.	L4	CO5	7 M
OR					
10	a)	Explain the following factors with respect to API: i) API rate limiting ii) Interaction via HTML.	L4	CO5	7 M
	b)	Discuss about how to write new API with an example of timer.	L2	CO5	7 M