

THE KAVERY ENGINEERING COLLEGE*(An Autonomous Institution)***B.E/B.TECH DEGREE END SEMESTER THEORY EXAMINATIONS, APRIL-MAY 2025***Sixth Semester**Electrical and Electronics Engineering***OCS352- IOT Concepts and Applications***Regulations - 2021***Duration : 3 Hrs****Maximum : 100 Marks****PART – A (ANSWER ALL QUESTIONS) (Marks 10*2=20)**

Q.No	Questions	BLT	CO	Marks
1.	Mention the three layers of IoT architecture.	L1	1	2
2.	What are the fundamental components of an IoT system?	L2	1	2
3.	Interpret the term smart object.	L2	2	2
4.	What is the use of ZigBee in IoT?	L3	2	2
5.	Give the application of cloud computing in IoT.	L3	3	2
6.	What does IPV6 mean and how does it work?	L2	3	2
7.	List available models in Raspberry pi.	L2	4	2
8.	What are the factors to be considered to select an OS for IoT?	L2	4	2
9.	Define business models for the IoT.	L1	5	2
10.	List few real time applications of IoT in day to-day life.	L1	5	2

PART – B (ANSWER ALL QUESTIONS) (Marks 5*16 = 80)

Q.No	Questions	BLT	CO	Marks
11.	a i Point out the important features of M2M architecture with diagrams.	L1	1	8
	ii Elaborate about IoT world forum architecture? What is its impact on IoT?	L2	1	8
	Or			
	b i Illustrate in detail the core IoT functional stack with necessary sketch.	L1	1	8
	ii Summarize about fog computing and its application in IoT.	L2	1	8
12.	a Explain the functions of various units in an IoT eco system with neat block diagram.	L3	2	16
	Or			
	b Describe any two communication modules used in IoT with necessary diagrams along with its applications.	L3	2	16

13.	a	Discuss the features of 6LoWPAN and MQTT used in IoT protocols.	L2	3	16
		Or			
	b	With a real time, example explain the role of embedded system in IoT and Industrial IoT.	L2	3	16
14.	a	Exemplify the role of Raspberry Pi architecture for IoT deployment system along with its salient features.	L3	4	16
		Or			
	b	Discuss the architecture of Arduino and its interfacing using GPIO pins with necessary block.	L3	4	16
15.	a	Examine the benefits of IoT in smart mobility and transport with a suitable mind map.	L4	5	16
		Or			
	b	Analyze the importance of big data analytics in IoT and how it is realized.	L4	5	16