

THE KAVERY ENGINEERING COLLEGE*(An Autonomous Institution)***B.E/B.TECH DEGREE END SEMESTER THEORY EXAMINATIONS, APRIL/MAY 2026****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)**

<i>Q.No</i>	<i>Questions</i>	<i>BLT</i>	<i>CO</i>	<i>Marks</i>
1.	List any four enabling technologies of the Internet of Things.	L1	1	2
2.	Sketch and label the IoT reference model.	L3	1	2
3.	Define smart objects in IoT.	L1	2	2
4.	Mention the key applications of control units in IoT devices.	L2	2	2
5.	List the methods used for IPv6 addressing.	L1	3	2
6.	Classify the IoT communication protocols.	L2	3	2
7.	List the operating systems supported by Raspberry Pi.	L1	4	2
8.	Define GPIO.	L1	4	2
9.	List the key features of smart cities.	L1	5	2
10.	Define smart agriculture.	L1	5	2

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

<i>Q.No</i>	<i>Questions</i>	<i>BLT</i>	<i>CO</i>	<i>Marks</i>
11.	a Explain the two architecture supported by OneM2M and IoTWF with necessary diagrams.	L4	1	16
	Or			
	b Analyze the hierarchical model of Edge, Fog, and Cloud Computing with relevant illustrations.	L4	1	16
12.	a Explain the various functional blocks of the IoT ecosystem in detail	L2	2	16
	Or			
	b Explain any two communication modules used in IoT.	L2	2	16
13.	a Summarize the 6LoWPAN protocol used in IoT.	L2	3	16
	Or			
	b Explain the concept of cloud computing in IoT in detail.	L2	3	16
14.	a Describe the hardware components of Raspberry Pi with the help of a neat diagram.	L2	4	16
	Or			
	b Illustrate the signal transmission using GPIO pins with a diagram and example.	L3	4	16

15.	a	Explain the business models for the internet of things.	L2	5	16
		Or			
	b	Explain home automation system based on IoT with a suitable block diagram.	L2	5	16