

K. J. Somaiya Institute of Technology, Sion, Mumbai-22
(Autonomous College Affiliated to University of Mumbai)

Subject Code: AIDLC6053

Subject Name: Internet of Things

Date: 22/05/2024

May – June 2024				
(B.Tech.) Program: <u>Artificial Intelligence & Data Science</u>				
Examination: TY Semester: <u>VI</u>				
Course Code: <u>AIDLC6053</u>		Course Name: Internet of Things		
Duration: 2.5 Hours		Max. Marks: 60		
Instructions:				
(1) All questions are compulsory.				
(2) Draw neat diagrams wherever applicable.				
(3) Assume suitable data, if necessary.				
		Max. Marks	CO	BT level
Q 1	Solve any six questions out of eight:	12		
i)	How does the classification of IoT as level 1 to 5 happen? Explain.	2	1	R
ii)	Compare the packet format of IPv4 and IPv6.	2	2	R
iii)	List the different environmental issues in IoT based design.	2	3	U
iv)	What refers to acquiring the data from IOT/M2M devices?	2	4	U
v)	Which sensors can detect presence or absence of vehicle in smart parking system?	2	5	R
vi)	What are the advantages of IoT in energy monitoring system.	2	6	U
vii)	Justify the statement “MQTT follows the publish – subscribe pattern”.	2	2	U
viii)	Explain Face Recognition using IoT.	2	6	R
Q.2	Solve any four questions out of six.	16		
i)	What are the challenges in building an application with IoT?	4	1	U
ii)	What is Internet Protocol? How many classes are there in IPv4?	4	2	U
iii)	Describe in short various steps in IoT design methodology.	4	3	U
iv)	Explain cloud computing paradigm for data collection and storage.	4	4	U
v)	Short note on ESP32/8266.	4	5	U
vi)	Explain Home Automation using IoT.	4	6	D
Q.3	Solve any two questions out of three.	16		
i)	Draw and Explain basic block diagram of IoT.	8	1	U

