## K. J. Somaiya Institute of <u>Engineering and Information</u> Technology, Sion, Mumbai-22 (Autonomous College Affiliated to University of Mumbai)

## **End Semester Exam**

Nov - Dec 2023-24

(B. Tech ) Program: Information Technology

Examination: LY Semester: VII

Course Code: ITC702
Duration: 03 Hours

Course Name: Internet of Everything

Max. Marks: 60

## **Instructions:**

(1) All questions are compulsory.

(2) Draw neat diagrams wherever applicable.

(3) Assume suitable data, if necessary.

2	The second secon	Max. Marks	СО	BT level
Q 1	Solve any six questions out of eight:	12		
i)	List the seven layers of IoTWF.	02	COI	2
ii)	Describe IoT component characteristics	02	COI	2
iii)	List the advantages of RFID system	02	CO2	1
iv)	List the advantages and disadvantages of AMQP	02	CO3	1
v)	Describe the prescript you analysis on IoT data	02	CO4	2
vi)	Describe the real time Analytics.	02	CO4	2
vii)	List the benefits of Internet of Behavior IOB	02	CO5	1
yiii)	List the possible attacks based on architecture	02	.CO6	1
Q.2	Solve any four questions out of six.	16		
i)	Describe the age computing and list the advantages.	04	CO1	2
ii)	Analyze and explain the LoWPAN architecture.	04	CO2	4
iii)	Differentiate the MQTT-SN and COAP.	04	CO3	4
iv)	Describe the key challenges in iot analytics and discuss security and scalability in IoT analytics.	04	CO4	2
v)	Describe the m2m communication in detail.	04	CO5	2
vi)	Describe the four attacks on availability.	04	CO6	2

Q.3	Solve any two questions out of three.	16	e Paragona	LEEVO.
i)	Compare IOE with lot and relate the IOE technology to design Smart City.	08	CO1	5
ii)	Describe the operation of MQTT and compare with WebSocket.	08	CO3	4
iii)	Evaluate and design smart warehouse and justify the sensors and protocols used.	08	CO5	6
Q.4	Solve any two questions out of three.	16	3	-59
i)	Describe the Zigbee in detail and relate with Z-wave.	08	CO2	4
ii)	Analyze the cloud computing for iot analytics and list the advantages.	08	CO4	4
iii)	Describe the internet of things as interaction of threads and two attacks based on architecture.	08	CO6	2

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