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**Internal Assessment Test IV – Feb. 2022**

<b>Sub:</b>	<b>Internet of Things</b>							<b>Sub Code:</b>	<b>20MCA32</b>
<b>Date:</b>	<b>01/02//2022</b>	<b>Duration:</b>	<b>90 min's</b>	<b>Max Marks:</b>	<b>50</b>	<b>Sem:</b>	<b>III</b>	<b>Branch:</b>	<b>MCA</b>

**Note : Answer FIVE FULL Questions, choosing ONE full question from each Module**

		MARKS	OBE	
			CO	RBT
<b>PART I</b>				
1	Define IOT. Explain the different evolutionary phases of internet <b>OR</b>	[10]	CO1	L2
2	Explain the core IOT functional Stack.	[10]	CO1	L2
<b>PART II</b>				
3	List and explain different type of sensors with an example. <b>OR</b>	[10]	CO2	L2
4	List out the limitations of the smart objects in WSNs and explain the data aggregation in WSN with a neat diagram.	[10]	CO2	L2

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**PART III**

5 Explain Edge analytics in detail with a neat diagram.

**OR**

6 What are different types of data and also explain the 4 different types of analysis with the neat diagram and an example

**PART IV**

7 Explain Formal Risk analysis structures (OCTAVE & FAIR)

**OR**

8 What is big data analytics. And explain the elements of HADOOP with a neat diagram

**PART V**

9 Explain the communication criteria's in detail

**OR**

10 What is ZigBee protocol stack? Explain 802.15.4 physical layer, MAC layer and security

[10]	CO4	L2
[10]	CO4	L2
[10]	CO4	L2
[10]	CO4	L2
[10]	CO2	L2
[10]	CO2	L2

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[10]	CO4	L2
[10]	CO4	L2
[10]	CO4	L2
[10]	CO2	L2
[10]	CO2	L2

## Scheme of Evaluation



### Internal Assessment Test IV – Feb. 2022

<b>Sub:</b>	<b>Internet of things</b>					<b>Sub Code:</b>	<b>20MCA32</b>		
<b>Date:</b>	<b>01/02//2022</b>	Duration:	90 mins	Max Marks:	50	<b>Sem:</b>	III	<b>Branch:</b>	MCA

Question	Description	Marks Distribution	Max Marks
1	<p><b>Define IOT. Explain the different evolutionary phases of internet</b>                      IOT Definition                      4 evolutionary phases : Connectivity, Networked economy, Immersive experience, Internet of things with diagram</p>	2 6 2	10
2	<p><b>Explain the core IOT functional Stack</b>                      Things layer                      Communications network layer                      Application and analytics layer</p>	3 5 2	10
3	<p><b>List and explain different type of sensors with an example.</b>                      10 sensors with definition &amp; example</p>	10*1	10
4	<p><b>List out the limitations of the smart objects in WSNs and explain the data aggregation in WSN with a neat diagram.</b>                      limitations of the smart objects in WSNs                      data aggregation in WSN                      diagram</p>	4 4 2	10
5	<p><b>Explain Edge analytics in detail with a neat diagram</b>                      Edge core analytics components with Explanation                      Diagram</p>	7 3	10
6	<p><b>Explain the advantages of IP as a network layer.</b>                      The key advantages of the IP for the Internet of Things:</p> <ul style="list-style-type: none"> <li>• Open and standards-based</li> <li>• Versatile</li> <li>• Ubiquitous</li> <li>• Scalable</li> <li>• Manageable and highly secure</li> <li>• Stable and resilient</li> <li>• Consumers’ market adoption</li> <li>• The innovation factors</li> </ul>	10	10
7	<p><b>Explain Formal Risk analysis structures (OCTAVE &amp; FAIR)</b>                      Octave allergo steps and phases                      FAIR explanation</p>	7 3	10
8	<p><b>What is big data analytics. And explain the elements of HADOOP with a neat diagram</b>                      Diagram                      big data analytics definition</p>	2	10

	HADOOP with a neat diagram	8	
9	<b>Explain the communication criteria's in detail</b> Range Frequency bands Power consumption Topology Constrained devices	2*5	10
10	<b>What is ZigBee protocol stack? Explain 802.15.4 physical layer, MAC layer and security</b> ZigBee protocol stack 802.15.4 physical layer, MAC layer and security	3 7	10