

[3 hrs]

[80Marks]

- Note: 1. Question 1 is compulsory  
2. Answer any three out of remaining questions  
3. Assume suitable data where required

Q1	Solve any 4	
a)	Explain functional blocks of IoT.	5
b)	Explain the importance of IoT Data Analytics.	5
c)	Write a short note on Near Field Communication.	5
d)	Define the following i) Fog Computing ii) Internet of Behaviour (IoB).	5
e)	Differentiate briefly Physical design of IoT and Logical design of IoT.	5
Q2		
a)	Explain the IOT enabled Home Automation system with respect to sensors, Actuators, framework, protocols, data analysis and security.	10
b)	Explain the following terms i) CoAP ii) Data Lakes.	10
Q3		
a)	Explain the architecture of LoRaWAN with its major Characteristics	10
b)	Illustrate the components of IEEE 802.11 architecture with advantages	10
Q4		
a)	Explain effective Data Visualization methods With suitable example	10
b)	Explain in brief the MQTT Architecture with Advantages.	10
Q5		
a)	State the Comparison's of all Protocols used in IOT for cloud Edge.	10
b)	Describe the Architecture of Advanced Message Queuing Protocol (AMQP) with major application.	10
Q6		
a)	Elaborate briefly the simplified 3 layered IoT architecture with neat diagram,	10
b)	Describe the role of NoSQL in IoT Data Analytics Challenges.	10