

- Note: - (1) All questions are compulsory.  
 (2) Figures to the right indicate full marks  
 (3) Answer to each question must be on a new page

Q.1)	<b>Attempt any 4 out of 6</b>	<b>20M</b>
a)	Define IOT and Characteristics of IOT	CO1-R
b)	Explain architecture of M2M.	CO1-A
c)	Write a short note on NFC and RFID.	CO1-R
d)	List and Explain types of IOT Communication Models.	CO1-U
e)	Write difference between IOT and M2M.	CO1-R
f)	Write a short note on Lightweight M2m	CO1-R
Q.2)	<b>Attempt any 4 out of 6</b>	<b>20M</b>
a)	Compare SPI and I2C.	CO2-U
b)	Write a short note on UPnP.	CO2-R
c)	Which sensor is used for detection of gas and explain its working?	CO2-R
d)	What is the role of actuator in IOT?	CO2-A
e)	List features of MQTT.	CO2-U
f)	Write a short note on Sensor Technology.	CO2-R
Q.3)	<b>Attempt any 4 out of 6</b>	<b>20M</b>
a)	Define IOT levels.	CO3-U
b)	Write a short note on node RED.	CO3-R
c)	Describe Cloud for IOT.	CO3-A
d)	List and Explain different types of WSNs.	CO3-A
e)	What are the Benefits of Edge Computing.	CO3-U
f)	Write a short note on Fog Computing.	CO3-R
Q.4)	<b>Attempt any 5 out of 6</b>	<b>15M</b>
a)	Compare APU and GPU.	CO1-U
b)	Write a short note on IOT protocols.	CO1-R
c)	Write a short note on Analog and digital sensors.	CO1-R
d)	Explain UART and I2C.	CO2-A
e)	Explain 5G and Edge Computing.	CO3-R
f)	Write a short note on Cloud Computing.	CO3-R

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