


Name:			
Enrolment No:			
UPES End Semester Examination, May 2023			
Course: Wireless Sensor Networks and IoT Standards Semester : IV Program: BTech CSE spl. IoT Course Code: CSIS2008		Time : 03 hrs. Max. Marks: 100	
SECTION A (5Qx4M=20Marks)			
S. No.		Marks	CO
Q1	Draw neatly the OSI model.	4	CO1
Q2	Describe in brief about IEEE802.11.	4	CO2
Q3	Compare CoAP with HTTP?	4	CO2
Q4	Write the four methods used by HTTP protocol.	4	CO1
Q5	Write any four transmission parameters with terminology used in CoAP.	4	CO2
SECTION B (4Qx10M= 40 Marks)			
Q6	Demonstrate how scalability and security is a major challenge in IoT?	10	CO3
Q7	Describe and draw the four major components of LoRaWAN ?	10	CO3
Q8	Illustrate how radio signals are generated in the physical layer?	10	CO4
Q9	Compare the ZigBee Technologies with WiFi technologies? OR Draw the pin connection between the Arduino and the LCD display as per the SPI protocol. Highlight the connected pin names as well.	10	CO2
SECTION-C (2Qx20M=40 Marks)			
Q10	Critically analyze the advantage and disadvantage of parallel data communication in comparison to the serial data communication? Also discuss about the various application areas for parallel data communication	20	CO4
Q11	With the help of the diagram of the data frame format, explain the purpose of various bits in CAN Bus protocol? OR Critically analyze how cloud technologies can be used for IoT applications?	20	CO3