

JK LAKSHMIPAT UNIVERSITY JAIPUR
INSTITUTE OF ENGINEERING AND TECHNOLOGY
End-Term Examination

Programme: BCA
 Course Name: IOT APPLICATION
 Maximum Marks: 30

Semester: 5th
 Course Code: EE1228
 Time Allowed: 3 Hours

- Do not write anything other than your roll number on question paper.
- Mention all the assumptions for your answers clearly.
- The student, before starting to write the solutions, should please check the question paper for any discrepancy and ensure that they have been delivered the question paper of right course code.
- Total 6 Questions are there.

Sr. No.		Question	Marks	CO
1.		Discuss any two-communication model used in IoT system design in detail with proper figure and diagram.	2.5+ 2.5	1
2	a	Explain the 5-Layered Architecture for IoT also mention associated protocol with each layer	3 + 2	1
	b	Write a brief note on characteristics of Routing Protocol for Low Power and Lossy Networks.	2.5	
3		You are given a task to design an "Smart irrigation system". For the same propose what IoT System Design: IoT Levels and Deployment methodology will be adopted. Provide brief explanation of how the whole system would be working.	3	4
4.	a	How are sensors different from actuators? Also discuss the problem associated with using low cost sensor and how to eradicate these problems?	1 + 1 + 2	3
	b	Why do we need to calibrate a sensor, also discuss the process of sensor calibration	3	3
5		Most of the smart IoT applications are now using "Wireless Sensor Network" structure, briefly discuss how "Wireless Sensor Network" model is used and list the advantages that "Multiple sensor network" contains over single sensor node system.	3	3
6		With increasing demand for smart real time "IoT" applications, Data acquisition and processing had become one of the important aspect of smart "IoT" system design. With help of a neat labeled diagram explain the design and functioning of IoT Sensor Data Acquisition System.	4	1,3,4