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## JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT

TEST -I EXAMINATION- 2025

B.Tech-7<sup>th</sup> Semester (CSE/ECE)

COURSE CODE (CREDITS): 18B1WEC747 (3)

MAX. MARKS: 15

COURSE NAME: INTERNET OF THINGS

COURSE INSTRUCTORS: Dr Rajiv Kumar

MAX. TIME: 1 Hour

*Note: (a) All questions are compulsory.**(b) The candidate is allowed to make Suitable numeric assumptions wherever required for solving problems*

Q.No	Question	CO	Marks
Q1	A) Define the Internet of Things (IoT) and describe its key characteristics and evolution. Include its architectural layers (e.g., perception, network, application) and the enabling technologies that make IoT possible.  B) Explain the concepts of sensing and actuation within IoT systems. Describe a typical sensor node's components (such as microcontroller, transceiver, energy source, sensors) and discuss their roles.	CO-1	2.5 + 2.5
Q2	A) Discuss the basics of wireless technologies commonly used in IoT systems  B) Describe communication protocols used in IoT and Machine-to-Machine (M2M) communication	CO-1	2.5 + 2.5
Q3.	A) Define Wireless Sensor Networks (WSNs) and outline their structure, typical applications, and key characteristics.  B) Explain the role of UAV (Unmanned Aerial Vehicle) Networks in IoT and network communications.	CO-2	2.5 + 2.5