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School of Computing Science and Engineering

Bachelor of Technology in Computer Science and Engineering

Mid Term Examination - May 2024

Duration : 90 Minutes

Max Marks : 50

Sem VI - G1UC620B - Embedded Technology and IoTGeneral Instructions*Answer to the specific question asked**Draw neat, labelled diagrams wherever necessary**Approved data hand books are allowed subject to verification by the Invigilator*

- 1) State the difference between IoT and WSN. K2 (2)
- 2) State the difference between IoT and M2M. K1 (3)
- 3) How do you see the IoT evolving over the next 5-10 years and what impact will it have on society and the economy? K2 (4)
- 4) Discuss the various types of IoT sensors and how they differ in terms of their function, features and applications. K2 (6)
- 5) Explain the role of MQTT IoT-specific communication protocols in IoT-based systems K3 (6)
- 6) Explain the role of IoT levels in the development of smart cities and how they can be used to improve urban planning and management K3 (9)
- 7) Describe the challenges of IoT deployment and the factors that need to be considered for successful deployment K4 (8)
- 8) Elaborate how the 8051 microcontroller communicates with external devices. K4 (12)

OR

- Explain the working principle and circuit description of PIR sensor with suitable application K4 (12)