

School of Computing Science and Engineering

Department of Computer Application

Mid Term Examination

Exam Date: 26 Sep 2023

Time : 90 Minutes

Marks : 50

Sem V - E1UA501T - Foundation of Internet of Things

Your answer should be specific to the question asked

Draw neat labeled diagrams wherever necessary

- 1) Write about Arduino software program sketches. K2 (2)
- 2) Distinguish IEEE 802.15.4g and IEEE 802.15.4e. K1 (3)
- 3) Mention the interfaces in Raspberry Pi. K2 (4)
- 4) Explain the role of MQTT IoT-specific communication protocols in IoT-based systems. K2 (6)
- 5) Examine the role of edge computing in IoT networks and its significance in reducing latency, improving real-time processing, and conserving bandwidth. K3 (6)
- 6) Can you outline the typical lifecycle of an IoT device, including its deployment, data collection, transmission, and eventual end-of-life considerations? K3 (9)
- 7) What are the main ways in which IoT differs from traditional M2M (Machine-to-Machine) communication? K4 (8)
- 8) Compare IoT with traditional embedded systems, highlighting the key differences and similarities between the two. K4 (12)

OR

What are the key differences between IoT and traditional computing paradigms, such as client-server architecture or standalone devices? K4 (12)