

# Makerere University

## College of Computing and Information Sciences

### *Test 2: Attempt all Questions*

- 1) Explain the difference between Adaptation and adoption
- 2) Evaluate the pros and cons of IP adoption versus adaptation
- 3) What major challenges do constrained nodes and networks pose for IoT connectivity in the last mile.
- 4) While the Internet Protocol is key for a successful Internet of Things, constrained nodes and constrained networks mandate optimization at various layers and on multiple protocols of the IP architecture. What are some of these optimizations already available from the market or under development by the IETF?
- 5) Explain the key differences between TCP and UDP. What are the key challenges of using TCP with IoT/Constrained Networks?
- 6) Explain the operation of the Message Queuing Telemetry Transport (MQTT) and Constrained Application Protocol (CoAP). What are the key differences of these protocols?