

School of Computing Science and Engineering

Bachelor of Technology in Computer Science and Engineering
Semester End Examination - Jun 2024

Duration : 180 Minutes
Max Marks : 100

Sem VI - R1UC605C - Cloud based IoT Systems

General 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 differences between PaaS and SaaS. K1(2)
- 2) Analyze the impact of lightweight protocols on IoT device performance. K2(4)
- 3) Compare CoAP-SMS and CoAP-MQ in terms of communication efficiency. K2(6)
- 4) Explain key adaptations in IoT OSI model, emphasizing network protocols. K3(9)
- 5) Compare and elaborate the features of Raspberry PI & Arduino. K3(9)
- 6) Define Information model and controller service for smart parking IoT system K5(10)
- 7) Explain about generic IoT block diagram and elaborate about each layer involved in IoT layers K4(12)
- 8) Develop a comprehensive IoT solution combined with cloud computing to optimize public transportation systems for urban mobility. Describe the integration of IoT sensors in vehicles and infrastructure for real-time monitoring and traffic management. K5(15)
- 9) Design an automatic refrigerator light system with LED, switch & raspberry pi and write a python program to support the working of that design. K5(15)
- 10) Develop a architectural view of IoT Architecture with each components in detail & state any 10 IoT application sector working in detail. K6(18)