CCS 652 IOT and Cloud Concept Case Study and Application Assignment

1. What is IOT? What are the key components of an IOT system?
2. What are the different layers of the IoT architecture?
3. How do IoT sensors collect and transmit data?
4. What are the different types of IoT devices?
5. What is the key communication protocols used in IoT?
6. What are the different cloud deployment models (public, private, hybrid, community)?
7. What are the different cloud service models (IaaS, PaaS, SaaS)?
8. How does virtualization enable cloud computing?
9. What are the key characteristics of cloud computing?
10. What are the main security risks in IoT devices?
11. What is the importance of authentication and authorization in IoT security?
12. What are the privacy concerns in IoT applications?
13. What is Fog Computing, and how does it compare to Edge Computing?
14. How does 5G impact IoT and cloud computing integration?
15. How does blockchain enhance security in IoT networks?
16. How does blockchain help in securing IoT devices from cyberattacks?
17. How do cloud platforms handle IoT firmware updates and patching?
18. What are the security challenges in cloud-based IoT device management?
19. What are the key wireless communication technologies used in IoT?
20. What are the future trends in IoT and cloud computing?