

ANURAG Engineering College

(An Autonomous Institution)

III B.Tech I Semester Regular Examinations, December – 2024

IOT ARCHITECTURES AND PROTOCOLS**(ELECTRONICS AND COMMUNICATION ENGINEERING)****Time: 3 Hours****Max. Marks: 60****Section – A (Short Answer type questions)****(10 Marks)****Answer All Questions**

	Course Outcome	B.T Level	Marks
1. How scalability is a key characteristic of IoT	CO1	L1	1M
2. Why is adaptability important in IoT systems?	CO1	L2	1M
3. What is SDN, and how does it support IoT networks?	CO2	L1	1M
4. List the components of the M2M value chain.	CO2	L2	1M
5. How is ICMP used for diagnostics in IoT networks?	CO3	L2	1M
6. List the challenges in implementing DASH7 in large-scale industrial IoT systems?	CO3	L1	1M
7. What is the difference between TLS and DTLS?	CO4	L2	1M
8. Explain the difference between HTTP and MQTT as session layer protocols.	CO4	L2	1M
9. What is the function of ETSI M2M in IoT standardization?	CO5	L2	1M
10. List the main features of OMA protocols?	CO5	L1	1M

Section B (Essay Questions)**Answer all questions, each question carries equal marks.****(5 X 10M = 50M)**

11. A) Explain the Characteristics of IoT.	CO1	L2	10M
OR			
B) Discuss how the transition from device-level to system-level IoT can improve operational efficiency.	CO1	L3	10M
12. A) Compare the roles of SDN and NFV in IoT infrastructure.	CO2	L3	10M
OR			
B) Discuss about the IoT Architecture components.	CO2	L2	10M
13. A) Compare the addressing schemes of IPv4 and IPv6 for IoT devices.	CO3	L3	10M
OR			
B) Discuss the trade-offs between using DHCP and static IP addressing in IoT networks.	CO3	L2	10M
14. A) Discuss the DTLS and TLS for constrained IoT devices?	CO4	L2	10M
OR			
B) How does MPTCP ensure robustness in IoT systems with multiple interfaces?	CO4	L2	10M
15. A) Compare oneM2M and ETSI M2M in terms of their approach to IoT standardization.	CO5	L3	10M
OR			
B) Discuss the challenges of integrating multiple service layer protocols in a unified IoT architecture.	CO5	L2	10M

