**Internet of Things- Question Bank**

1. Explain domain model of IoT in detail.
2. Explain IoT reference model in detail with protocols at each layer.
3. Write a short note on architecture of IoT with explanation of different layers.
4. Explain Internet of Things with its applications.
5. Describe characteristics of M2M technology and explain how M2M and IoT differ.
6. Why interoperability is required for IoT system? Explain with its key points.
7. Write a note on Wireless Sensor Network.
8. Why protocol is required in IoT? Explain IoT protocol stack with diagram.
9. Describe in detail: Characteristics of IoT
10. List down application domains of IoT with brief description.
11. List all IoT connecting technologies and describe 6LoWPAN and RFID in detail.
12. Write a note on MQTT and CoAP with diagram.
13. Differentiate: Zigbee and Z-wave.
14. What is sensor? Explain in detail.
15. Which are the functional components of IoT system?
16. Describe different types of actuators.
17. Explain node behavior and dynamic misbehavior of node.
18. What is a smart home? What are the functions of IoT based smart home? Which sensors are required to make smart home?
19. Explain Interoperability issue with its types.
20. What is the value chain of Internet of Things? Describe it in detail with its advantages and disadvantages.
21. What is use of IoT communication model? Explain any two with diagram.
22. Explain data management for IoT? Describe any two methods in detail.
23. Discuss in detail: Security, Privacy and Trust issues in IoT.
24. How Big Data and serialization is used for value creation in IoT?
25. Describe M2M technology in detail. Differentiate IoT and M2M.
26. Explain domain model of IoT? Describe its significance.
27. Why standardization is required for IoT system? Explain with its key points.
28. What is smart Health? Discuss use of IoT in smart health using all use cases of the health industry.
29. Which are Hardware and Software components of IoT? How do these components get synchronized in an IoT based application?
30. Why data management is a crucial aspect in IoT? Describe any two methods in detail.
31. How Big Data and Cloud Computing is used for value creation in IoT?
32. What is Internet of Things (IoT).
33. What are components required to design IoT Device and which device we called IoT device explain with example.
34. Explain Internet of Things (IoT) with example.
35. Give a brief overview of IoT.
36. What are different challenges of IoT?
37. What are different components required for IoT device?
38. What is Machine to Machine communication (M2M)
39. Explain Challenges and requirements of IoT device.
40. Explain vision of IoT?
41. Explain an emerging industrial structure for IoT.
42. What are different business and research opportunities for IoT?
43. Explain layered architecture of IoT.
44. Explain building block of IoT.
45. Explain different networking and communication model in IoT.
46. What is relation between WSN and IoT. Explain with example.
47. Explain IoT protocol stack.
48. Explain in details IoT Architecture layers.
49. What is requirement of IoT Protocol Standardization?
50. Explain with example MQTT Protocol. What is role of MQTT protocol in IoT?
51. Write a note on : CoAP, REST, XMPP.
52. What are different IoT protocols?
53. What is the role of Cloud Computing and Big Data in Internet of Things?
54. What is IoT Analytics?
55. Explain Data visualization and its importance in IoT.
56. Why we need of IoT Security.
57. Explain issues in IoT security.
58. Write a note on:1) Trust for IoT 2)Security and Privacy for IoT 3)Physical IoT Security.
59. Explain Arduino with any 5 functions of it.
60. Describe Raspberry Pi with its GPIO.
61. What is cloud computing? Explain its service models.
62. Describe different types of clouds in cloud computing.
63. What is sensor cloud? How it is advantageous?
64. How IoT and cloud computing is integrated?
65. What is Big Data? Why it needs to be integrated with IoT?
66. Mention advantages and disadvantages of use of Big Data in IoT?

Also, refer presentations of Unit no. 4 & 5.