

## SNS COLLEGE OF ENGINEERING



## (Autonomous) DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

## 19EC621 - IoT and Wireless Sensor Networks

## PART - A & B

- 1. What is Internet of Things (IoT). What are components required to design IoT Device and which device we called IoT device explain with example.
- 2. Explain Internet of Things (IoT) with example.
- 3. Give brief overview of IoT.
- 4. What is vision of IoT?
- 5. Explain four Pillars of IoT and how they are inter-connected with each other?
- 6. What are different challenges of IoT?
- 7. What are different components required for IoT device?
- 8. What is Machine to Machine communication (M2M)?
- 9. Explain different Characteristics of IoT.
- 10. What effect will the internet of things (IoT) have on our daily lives? Explain with any one example of smart device.

Explain Challenges and requirements of IoT device.

- 12. Explain vision of IoT?
- 13. Explain an emerging industrial structure for IoT.
- 14. What are different business and research opportunities for IoT?
- 15. Explain layered architecture of IoT.
- 16. Explain building block of IoT.

- 17. Explain different networking and communication model in IoT.
- 18. What are different wired and wireless connectivity we can used in IoT explain with example.
- 19. Explain wireless sensor network?
- 20. What is relation between WSN and IoT. Explain with example.
- 21. Write note on: RFID, NFC, ZigBee.
- 22. What effect will the internet of things (IoT) have in healthcare? Explain with any one example of smart device.
- 23. What is ZigBee?
- 24. Explain IoT protocol stack.
- 25. Explain in details IoT Architecture layers.
- 26. Explain Near Field Communication (NFC) and RFID.
- 27. Explain TCP/IP vs IoT protocol sack.
- 28. What is requirement of IoT Protocol Standardization?
- 29. Explain with example MQTT Protocol. What is role of MQTT protocol in IoT?
- 30. Write a note on: CoAP, REST, XMPP.
- 31. What are different IoT protocols?
- 32. What is role of Cloud Computing and Big Data in Internet of Things?
- 33. What is IoT Analytics?
- 34. Explain Data visualization and its importance in IoT.
- 35. Explain what are the components and Communication media required for making smart building.
- 36. Difference between Web of Things versus Internet of Things.

- 37. Explain WoT with example.
- 38. Explain Two Pillars of the Web.
- 39. What are different Platform Middleware for WoT?
- 40. What is WoT Portals and Business Intelligence?
- 41. Explain Cloud of Things.
- 42. Why we need of IoT Security.
- 43. Explain issues in IoT security.
- 44. Write a note on: 1) Trust for IoT 2) Security and Privacy for IoT 3) Physical IoT Security.
- 45. Explain on Devices Security and Privacy of IoT cloud.
- 46. What is Role of the Internet of Things for Increased Autonomy and Agility in Collaborative Production Environments?
- 47. Explain IoT Application and Deployment Scenarios in different domains.
- 48. Explain IoT Smart X Applications?
- 49. Write note on: Wearable Smart Cities- Smart Home Smart HealthCare- Agriculture
- Smart Grid.
- 50. Explain with example: Wearable Smart Cities- Smart Home Smart HealthCare-

Agriculture - Smart Grid