

Question Bank

Subject: Internet of Things & Cloud Computing

Subject Code: BTEC-907A-18

Semester: 7th

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1. What are the applications of IoT devices?
2. Write about any two IoT enabled smart devices available in the market.
3. What are the different classes of networks?
4. What do you mean by subnetting?
5. Write about the functional blocks of IoT.
6. Explain IPv4 frame format with the help of suitable diagram.
7. Draw the TCP/IP protocol suite and describe the functions of different layers of TCP/IP model.
8. Discuss sensor node interfacing with the help of suitable diagram.
9. Discuss IoT application in security systems.
10. What is the role of smart phones in IoT?
11. Discuss different types of clouds?
12. Discuss MQTT protocol in detail.
13. Discuss frame format of cloud computing.
14. Write about remote control applications of IoT.
15. What is the role of server in internet?
16. What is the use of HTTP protocols?
17. What is the role of smart phones in IoT?
18. Discuss the frame format of HTTP protocol.
19. Discuss frame format of cloud computing.
20. Describe client- server model with the help of suitable example.
21. What are the security challenges in cloud computing?
22. State the purpose and characteristics of web services in cloud computing
23. List out the Features of IoT.
24. State the characteristics of IoT.
25. List out the interfaces used in IoT?
26. Define data and information.
27. Build the physical design of IoT.
28. Define Wireless Sensor Networks.
29. Determine the basic operations in IoT.
30. List out various protocol used in Application layer.
31. Compare TCP and UDP.
32. Discuss Cloud computing.
33. Differentiate between Logical and physical design of IoT.
34. Tabulate various protocols used in Link layer of IoT.
35. Define IoT.
36. Differentiate between data and information in IoT.
37. Recall the advantages & disadvantages of IoT.

38. List out the I/O interfaces used in IoT.
39. Define IoT. Identify and explain in detail about IoT
40. Explain the physical and logical design of IoT in detail.
41. Summarize the various IoT enabled technologies
42. Demonstrate the IOT Components with neat diagram.
43. Define IoT. Summarize the various applications of IoT.
44. Describe the characteristics and physical design of IoT.
45. Discuss about IoT communication model.
46. Design the protocol layer of IoT and explain various protocols used in each layer.
47. Explain various trends in Information and Communication Technologies.
48. State the function of gateway.
49. State the function of Data Acquisition.
50. Define cloud computing.
51. Define clustering.
52. What is the need of Network? and Explain in detail the LAN and WAN.
53. Define cloud computing? And explain the various services provided by the cloud.
54. Justify the significant of IoT systems.
55. Give details about IoT physical devices and Endpoints.
56. Illustrate the building blocks of IoT device.
57. Name the different IoT platforms.
58. What is the purpose of actuators in IoT?
59. Name the Need For sensors in IoT.
60. Draw and explain the building blocks of IoT device
61. Give the evolutionary phases of IoT.
62. Discuss the challenges faced by Internet of Things.
63. Summarize the characteristics of IoT.
64. List the applications of IoT.
65. Illustrate the IoT Reference model.
66. Give IoT Data Management and Compute Stack.
67. Generalize the “things” in IoT.
68. What is the purpose of Sensors, Actuators and Smart Objects.
69. Classify the different types of Sensors.
70. Describe the IoT enabling Technologies with suitable explanations.
71. Describe the process of Connecting Smart Objects
72. Describe in detail (i) MEMS – Micro Electro Mechanical Systems. (ii) Sensor Networks.
73. Compare the two IoT Architectures briefly.
74. Formulate the evolutionary trend of IoT with necessary illustration.
75. What are the challenges and requirements faced by the IoT systems
76. Demonstrate the use of MQTT.
77. Analyse in detail the IoT Application protocol and their characteristics with suitable illustration.
78. Write about IoT system building blocks.
79. Give an example IoT device and explain briefly.
80. Write about the vision of internet of things
81. Discuss various IOT enabled Smart devices available in the market.

82. Write about different Hardware and Software tools required for IOT application development.
83. Give an overview of IOT based on Texas instruments Hardware platforms and IDE's for development.
84. Discuss TCP/IP Layers and their relative Protocols,
85. Discuss IP addressing and give details about IPV4 addressing.
86. Discuss IP Address Classification
87. Discuss Subnetting with the help of suitable example.
88. Discuss Local IP and Gateway IP
89. Write about the function of DNS server.
90. Differentiate TCP & UDP Communication
91. Discuss various encryption standards.
92. Give an overview of MAC Address.
93. Write a note on Web server and its types,
94. What is the role of servers over internet,
95. Discuss client server communication model with Example.
96. Give an overview of HTTP protocol.
97. Draw the diagram of sensor interfacing with network.
98. Discuss the need of Cloud services in IOT and discuss different Cloud storage services.
99. Write about the cloud Data processing and frame format,
100. What is the Role of Smart phones in IOT,
101. Give some examples on home automation and Smart city development.
102. Give an introduction to clouds like Temboo, Blynk and Pubnub
103. What is the Remote Monitoring & Sensing.
104. Discuss MQTT Protocol,
105. Discuss IoT applications in home, infrastructures, Healthcare, Transport, buildings, security and in Industries.