

FIOT BIT BANK

MULTIPLE CHOICE

1. Wireless technologies uses
- a. infrared rays
 - b. Audio frequency
 - c. optical
 - d. All of the above

ANS: D PTS: 1

2. Different wireless technologies in IoT
- a. IEEE 802.15.4
 - b. Zigbee
 - c. MQTT
 - d. all of the above

ANS: D PTS: 1

3. The wireless technology of IEEE 802.15.4 characteristics are
- a. physical, data link layer
 - b. data link, network layer
 - c. application, transport
 - d. none of the above

ANS: A PTS: 1

4. MAC stand for
- a. multiple Access control
 - b. Media Access control
 - c. Memory access control
 - d. Medium access control

ANS: B PTS: 1

5. The IEEE 802.15.4 standard can control
- a. power
 - b. Data rate
 - c. Collisions
 - d. transmission power

ANS: D PTS: 1

6. The topologies used in IEEE 802.15.4 standard are
- a. Star
 - b. mesh
 - c. Tree
 - d. Star and peer-to-peer

ANS: D PTS: 1

7. The central co-ordinator can communicate with
- a. remote nodes
 - b. end nodes
 - c. external network
 - d. all of the above

ANS: C PTS: 1

8. Which topology can communicate with each other
- a. star topology
 - b. mesh topology
 - c. tree topology
 - d. none of the above

ANS: B PTS: 1

9. 4. IPv6 header is ____ as bigger than IPv4.

- a. 2
- b. 8
- c. 4
- d. 6

ANS: A PTS: 1

10. An IPv6 address is made of ____ bits.

- a. 238
- b. 160
- c. 128
- d. 138

ANS: C PTS: 1

11. Every block of IPv6 is converted into 4-digit ____ numbers.

- a. Binary
- b. Octal
- c. Decimal
- d. Hexadecimal

ANS: D PTS: 1

12. ____ are used for communication among IPv6 hosts on a link (broadcast segment) only

- a. Global unicast address
- b. Unique local address
- c. Local link address
- d. All of the above

ANS: C PTS: 1

13. IPv6 headers have ____ Fixed Header.

- a. one
- b. Two
- c. Three
- d. More than One

ANS: A PTS: 1

14. 26. Which of the following field is intended to prevent packets from looping indefinitely in the network?

- a. Time to live
- b. Header
- c. Hop limit
- d. None of the above

ANS: C PTS: 1

15. A ____ is a device that forwards data that is not specifically addressed to it.

- a. Network
- b. Switch
- c. Link
- d. Router

ANS: D PTS: 1

16. 43. ICMPv6 stands for ____.

- | | |
|---|---|
| a. Intranet Controller Model Protocol version 6 | c. Internet Controller Message Protocol version 6 |
| b. Internet Control Model Protocol version 6 | d. Internet Control Message Protocol version 6 |

ANS: D PTS: 1

17. MQTT is mainly used for _____

- | | |
|-------------------------|---------------------------|
| a. M2M communication | c. Internet communication |
| b. Device communication | d. Wireless communication |

ANS: A PTS: 1

18. Which is an open standard?

- | | |
|---------|---------|
| a. CoAP | c. XMPP |
| b. MQTT | d. HTTP |

ANS: B PTS: 1

19. MQTT is _____ oriented.

- | | |
|------------|------------|
| a. Data | c. Network |
| b. Message | d. Device |

ANS: B PTS: 1

20. Standard ports of MQTT are _____

- | | |
|--------|--------------|
| a. I2C | c. USART |
| b. SSL | d. d) TCP/IP |

ANS: D PTS: 1

21. Full form of MQTT _____

- | | |
|--|--------------------------------------|
| a. Message Queuing Telemetry Transport | c. Message Queue Telegram Transport |
| b. Message Queuing Telegram Transport | d. Message Queue Telemetry Transport |

ANS: A PTS: 1

22. What are the key components of a M2M system?

- a. Vortex DDS
- b. Smart Homes
- c. Sensors and Wi-Fi
- d. Protocols

ANS: C PTS: 1

23. Request field is present in which message format?

- a. Request message
- b. Response message
- c. Both request and response
- d. Neither request nor response

ANS: A PTS: 1

24. URI and content type support is which protocol feature?

- a. SPI
- b. UDP
- c. HTTP
- d. d) CoAP

ANS: D PTS: 1

25. ZigBee is a _____ task group.

- a. Body Area Network
- b. Personal Area Network
- c. Mesh Area Network
- d. Coexistence Area Network

ANS: B PTS: 1

26. 3. Which is not a type of ZigBee Devices?

- a. A. Zigbee Coordinator Device
- b. B. Zigbee Router
- c. C. Zigbee Start Device
- d. D. Zigbee End Device

ANS: C PTS: 1

27. Which ZigBee Device is used for passing the data between devices?
- a. Zigbee Coordinator Device
 - b. Zigbee Router
 - c. Zigbee End Device
 - d. None of the above

ANS: B PTS: 1

28. Which of the following is true according to Zigbee Standard?

- a. Low Power Consumption
- b. Low Data Rate
- c. Short-Range
- d. All of the above

ANS: D PTS: 1

29. Which of the following are Advantages of Zigbee?

- a. Designed for low power consumption
- b. easy implementation
- c. Provides network security
- d. All of the above

ANS: D PTS: 1

30. Zigbee architecture is a combination of _____ layers.

- a. 4
- b. 5
- c. 6
- d. 7

ANS: C PTS: 1

31. Which of the following are not Applications of zigbee?

- a. Home Automation
- b. Medical Data Collection
- c. Software Reading System
- d. Industrial Control Systems

ANS: C PTS: 1

32. Which is lowest layer in Zigbee architecture?

- a. Physical layer
- b. Medium Access Control layer
- c. Network layer
- d. Application layer

ANS: A PTS: 1

33. Which is highest layer in Zigbee architecture?

- a. Physical layer
- b. Medium Access Control layer
- c. Network layer
- d. Application layer

ANS: D PTS: 1

34. Which ones are the Vs of Big Data?:

- a. volume
- b. variety
- c. velocity
- d. all of the above

ANS: D PTS: 1

35. What are the main components of Big Data?

- a. YARN
- b. HDFS
- c. Map Reduce
- d. all of the above

ANS: D PTS: 1

36. Which one is not an example of social media application that handles big data

- a. face book
- b. twitter
- c. Youtube
- d. SMS

ANS: D PTS: 1

37. Which one is not a big data analytic techniques?

- a. Machine Learning
- b. Regression Analysis
- c. computer
- d. Data Mining

ANS: C PTS: 1

38. Which one is the biggest size of data below

- a. Megabytes
- b. petabytes
- c. terabytes
- d. kilobytes

ANS: B PTS: 1

39. Which technique is sometimes referred to as a decision tree?
- a. Data science
 - b. Big data
 - c. Classification of tree analysis
 - d. Natural Language

ANS: C PTS: 1

40. Arrange Mb, Kilobyte, Petabyte, Exabyte, Gb and Terabyte in order of size from lowest to highest
- a. Kilobyte, Gb, Mb, Terabyte, Petabyte, Exabyte
 - b. Kilobyte, Mb, Petabyte, Terabyte, Gb, Exabyte
 - c. Kilobyte, Mb, Gb, Terabyte, Petabyte, Exabyte
 - d. Mb, Kilobyte, Terabyte, Gb, Petabyte, Exabyte

ANS: C PTS: 1

41. Which one is not an example of IoT application?
- a. Home Automation
 - b. Agriculture
 - c. Health and fitness
 - d. walking

ANS: D PTS: 1

42. According to Bilal (2018), the term Internet of Things (IoT) is expressed through a simple formula such as:
- a. IoT= Services+ Data+ Networks + Sensors.
 - b. IoT= Services+ Data+ computer + Sensors.
 - c. IoT= Human + Data+ Networks + Sensors
 - d. IoT= Services+ Data+ Networks + Computer.

ANS: A PTS: 1

43. Which one is not part of a 3 Layer Architecture of IoTs?
- a. perception layer
 - b. processing layer
 - c. network layer
 - d. application layer

ANS: B PTS: 1

44. Which one is not part of IoT Architecture?
- a. Gateway
 - b. control application
 - c. television
 - d. user application

ANS: C PTS: 1

45. Which one is not part of devices that are used in Home automation system?
- a. Indoor cameras
 - b. Alarms
 - c. sensors
 - d. wood

ANS: D PTS: 1

46. A _____ is used for storing the data generated by connected devices in its original format.
- a. Data lake
 - b. Data
 - c. Notebook
 - d. library

ANS: A PTS: 1

47. The network layer is responsible for _____ to other smart things, network devices, and servers, and is also used for transmitting and processing sensor data.
- a. reading
 - b. processing
 - c. connecting
 - d. writing

ANS: C PTS: 1

48. 57. The _____ layer is responsible for delivering application specific services to the user.
- a. human
 - b. application
 - c. data
 - d. None

ANS: B PTS: 1

49. Which one is not part of the IoT architecture?
- a. Notebook
 - b. Gateway
 - c. Data analytics
 - d. Data ware house

ANS: A PTS: 1

50. Most cars today are becoming increasingly connected through the inclusion of _____
- a. gears
 - b. double rear wheel
 - c. weight
 - d. smart sensors

ANS: D PTS: 1

51. Big data storage is a storage infrastructure designed specifically to _____ very large amounts of data and enables real-time data analytics.
- a. collect and process
 - b. store, manage and retrieve
 - c. manipulate and send
 - d. manipulate and send

ANS: B PTS: 1

52. Companies apply big data _____ to get greater intelligence from metadata.
- a. Analytics
 - b. Process
 - c. section
 - d. storage

ANS: A PTS: 1

53. Facebook Tackles Big Data With _____ based on Hadoop
- a. Project Prism
 - b. Project Big
 - c. Prism
 - d. Project Data

ANS: A PTS: 1

54. Hadoop is open source software written in the Java programming language.
- a. PHP programming language
 - b. C++ and C programming language
 - c. Java programming language
 - d. HTML and JavaScript programming language

ANS: C PTS: 1

55. _____ tools need to secure data in-transit and data at-rest, and more importantly, these needs to be achieved across massive data volumes.
- a. Computer
 - b. User access control
 - c. firewall
 - d. Encryption

ANS: D PTS: 1

56. _____ is a collection of Java libraries and utilities that are required by/common for other Hadoop modules, which contain all the necessary Java files and scripts required to start Hadoop.
- a. Open source
 - b. Hadoop Common
 - c. Real-time
 - d. Distributed computing.

ANS: B PTS: 1

57. ___ framework is a Resource Manager basically used for job scheduling and efficient cluster resource management It takes the responsibility of providing the computational resource (e.g., CPU storage memory devices, etc.) required for application executions.
- a. Hadoop MapReduce B. Hadoop Common C. Hadoop Distributed File System (HDFS) D. Hadoop Yet Another Resource Navigator (YARN).
 - b. Hadoop Common
 - c. Hadoop Distributed File System (HDFS)
 - d. Hadoop Yet Another Resource Navigator (YARN).

ANS: D PTS: 1

58. According to analysts, for what can traditional IT systems provide a foundation when they're integrated with big data technologies like Hadoop?
- a. Big data management and data mining
 - b. Data warehousing and business intelligence
 - c. Management of Hadoop clusters
 - d. collecting and storing unstructured data

ANS: A PTS: 1

59. All of the following accurately describe Hadoop, EXCEPT:
- a. Open source
 - b. Java Based
 - c. Real-Time
 - d. Distributed computing approach.

ANS: C PTS: 1

60. Which of the following is an example of an IoT application in healthcare?
- a. Online shopping for medical supplies
 - b. Remote patient monitoring
 - c. Electronic medical record management
 - d. Telemedicine consultations

ANS: B PTS: 1

61. What is a smart home in IoT?
- a. A home that is equipped with IoT devices and system
 - b. A home that is powered by renewable energy source
 - c. A home that uses advanced security systems
 - d. A home that is completely automated

ANS: A PTS: 1

62. Which of the following is an example of an IoT application in agriculture?
- a. Online crop sales platform
 - b. Farm management software
 - c. Weather forecasting app
 - d. Smart irrigation system

ANS: D PTS: 1

63. What is edge computing in IoT?
- a. A process of analyzing data at the source of generation, rather than sending it to a centralized location
 - b. A process of analyzing data on a remote server
 - c. A process of storing data on a local device
 - d. A process of transmitting data over a wired network

ANS: A PTS: 1

64. Which of the following is a disadvantage of IoT?
- a. Increased efficiency and productivity
 - b. Improved decision-making and analytics
 - c. Privacy and security concerns
 - d. Greater connectivity and collaboration

ANS: C PTS: 1

65. Which of the following is an example of an IoT application in transportation?
- a. Online ticket booking system
 - b. GPS navigation system
 - c. Traffic management software
 - d. Automotive diagnostic tool

ANS: B PTS: 1

66. Which of the following is an example of an IoT application in retail?
- a. Online advertising platform
 - b. Customer relationship management system
 - c. Inventory management system
 - d. Point of sale system

ANS: C PTS: 1

67. Which of the following is an example of an IoT application in energy management?
- a. Online billing and payment platform
 - b. Smart grid technology
 - c. Energy efficiency audit software
 - d. Renewable energy generation system

ANS: B PTS: 1

68. Which of the following is an example of an IoT application in home automation?
- a. Smart lighting system
 - b. Online grocery delivery service
 - c. Smart home security system
 - d. Virtual reality entertainment system

ANS: A PTS: 1

69. Which of the following is an example of an IoT application in environmental monitoring?
- a. Shipping and tracking software
 - b. Customer relationship management software
 - c. Product design and development software
 - d. all of the above

ANS: A PTS: 1

70. Which of the following is an example of an IoT application in sports?
- Online ticket sales platform
 - Wearable fitness tracker
 - Virtual reality sports training system
 - Social media marketing platform
- ANS: B PTS: 1
71. Which of the following is an example of an IoT application in smart cities?
- Online citizen engagement platform
 - Traffic management software
 - Public transportation scheduling system
 - Waste management system
- ANS: D PTS: 1
72. Which of the following is an example of an IoT application in the hospitality industry?
- Online hotel booking platform
 - Room temperature control system
 - Hotel guest experience management software
 - Restaurant reservation system
- ANS: B PTS: 1
73. Which of the following is an example of an IoT application in industrial automation?
- Online industrial equipment marketplace
 - Automated manufacturing system
 - Supply chain management software
 - Warehouse management system
- ANS: B PTS: 1
74. Which of the following is an example of an IoT application in finance?
- Online banking platform
 - Financial planning software
 - Investment management platform
 - Cryptocurrency exchange
- ANS: A PTS: 1
75. Which of the following is an example of an IoT application in real estate?
- Online property listing platform
 - Smart home automation system
 - Property management software
 - Real estate market analysis platform
- ANS: B PTS: 1
76. Which of the following is an example of an IoT application in education?
- Online learning platform
 - Learning management system
 - Student information system
 - Student engagement platform
- ANS: B PTS: 1
77. Which of the following is an example of an IoT application in gaming?
- Online gaming platform
 - Virtual reality gaming system
 - Gaming analytics platform
 - Gaming content management system
- ANS: B PTS: 1

78. Which of the following is an example of an IoT application in logistics?
- a. Online logistics marketplace
 - b. Automated warehouse system
 - c. Freight tracking and management software
 - d. Shipping and delivery management system

ANS: C PTS: 1

79. Which of the following is an example of an IoT application in entertainment?
- a. Online streaming platform
 - b. Music composition and production software
 - c. Film and video production software
 - d. Live event ticketing and management platform

ANS: A PTS: 1

80. Which of the following is an example of an IoT application in security?
- a. Online security software marketplace
 - b. Biometric authentication system
 - c. Cybersecurity threat detection and management software
 - d. Physical security monitoring and access control system

ANS: D PTS: 1

81. Which of the following is an example of an IoT application in insurance?
- a. Online insurance marketplace
 - b. Automated claims processing system
 - c. Risk management software
 - d. Actuarial analysis and modeling software

ANS: B PTS: 1

82. Which of the following is an example of an IoT application in manufacturing?
- a. Online manufacturing marketplace
 - b. Smart factory automation system
 - c. Supply chain management software
 - d. Quality control and inspection software

ANS: B PTS: 1

83. Which of the following is an example of an IoT application in construction?
- a. Online construction marketplace
 - b. Building information modeling software
 - c. Construction project management software
 - d. Construction materials and equipment rental platform

ANS: B PTS: 1

84. Which of the following is NOT a key technology component of an IoT system?
- a. Cloud computing
 - b. Artificial intelligence
 - c. Virtual reality
 - d. Wireless communication

ANS: C PTS: 1

85. Which of the following wireless communication protocols is commonly used in IoT devices?
- a. Wi-Fi
 - b. Bluetooth
 - c. Zigbee
 - d. All of the above

ANS: D PTS: 1

86. Which of the following is a key challenge in implementing IoT systems?
- a. Lack of standardization
 - b. High cost of hardware and software
 - c. Limited data storage and processing capacity
 - d. Limited availability of wireless communication networks

ANS: A PTS: 1

87. Which of the following is NOT a benefit of using IoT systems in business?
- a. Increased productivity and efficiency
 - b. Improved customer engagement and satisfaction
 - c. Enhanced security and privacy
 - d. Reduced operational costs and waste

ANS: C PTS: 1

88. Which of the following is a common use case for edge computing in IoT systems?
- a. Real-time data processing and analysis
 - b. Remote device management and monitoring
 - c. Cloud-based data storage and retrieval
 - d. Long-term trend analysis and forecasting

ANS: A PTS: 1

89. Which of the following is a potential disadvantage of using cloud computing in IoT systems?
- a. High cost of data storage and processing
 - b. Limited scalability and flexibility
 - c. Reliance on external service providers
 - d. Limited data security and privacy

ANS: C PTS: 1

90. Which of the following is an example of a smart home application of IoT?
- a. Online home rental marketplace
 - b. Home security and surveillance system
 - c. Home energy management platform
 - d. Home cleaning and maintenance service

ANS: B PTS: 1

91. Which of the following is an example of a smart city application of IoT?
- a. Online city guide and directory
 - b. Public transportation tracking and scheduling system
 - c. Waste management and recycling platform
 - d. Tourist information and booking service

ANS: B PTS: 1

92. Which of the following is an example of a wearable technology device?
- a. Smart home thermostat
 - b. Fitness track
 - c. Voice-activated assistant
 - d. Home security camera

ANS: B PTS: 1

93. what is the role of big data in IoT's smart grid architecture?
- a. Filter the data
 - b. locked the data
 - c. Store the data
 - d. None of these

ANS: C PTS: 1

94. What is the real example of smart grid devices in IoT?
- a. mobile phone
 - b. Television
 - c. Smart meters
 - d. Smart speakers

ANS: C PTS: 1

95. Which of the following protocols does the secure digital card application use?
- a. XMPP
 - b. SPI
 - c. MQTT
 - d. HTTPS

ANS: B PTS: 1

96. Which of the following topology used for Zigbee smart energy?
- a. BUS topology
 - b. RING topology
 - c. STAR topology
 - d. ANY topology

ANS: C PTS: 1

97. Which of the following protocol does not exist at the data link layer
- a. Zigbee smart energy
 - b. LORaWAN
 - c. wireless HART
 - d. Secure MQTT

ANS: D PTS: 1

98. Which is the example of short range wireless network?
- a. VPN
 - b. Wi-Fi
 - c. Internet
 - d. WWW

ANS: B PTS: 1

99. Among the following layers, identify the one which is used for wireless connection in IoT devices?
- a. Datalink layer
 - b. Transport layer
 - c. Network layer
 - d. Application layer

ANS: A PTS: 1

100. Identify the lightweight protocol.
- a. HTTP
 - b. MQTT
 - c. CoAP
 - d. IP

ANS: B PTS: 1

101. Identify the one which is not a network device.
- a. Switch
 - b. Traffic analyzer
 - c. Bridge
 - d. Router

ANS: B PTS: 1

102. Identify the protocol used to link all devices in IoT?
- a. UDP
 - b. TCP/IP
 - c. Network
 - d. HTTP
- ANS: B PTS: 1
103. Identify the short range IoT network
- a. sigFox
 - b. LPWAN
 - c. short-range wireless network
 - d. short network
- ANS: C PTS: 1
104. What is the considered the standard length for a MAC address?
- a. 8bits
 - b. 32bits
 - c. 48bits
 - d. none of these
- ANS: C PTS: 1
105. Which one out of these is not a data link layer technology?
- a. Bluetooth
 - b. Wifi
 - c. HTTP
 - d. Mobile Hotspot
- ANS: C PTS: 1
106. Which one out of these is in a format which is not readable by the user?
- a. Encryption
 - b. Password
 - c. .text
 - d. None of these
- ANS: A PTS: 1
107. What is the core storage layer in Hadoop architecture?
- a. HDFS
 - b. MapReduce
 - c. YARN
 - d. Zookeeper
- ANS: A PTS: 1
108. In Hadoop,What idoes the term 'DataNode' represent?
- a. Manges computation resources
 - b. stores and manages data blocks
 - c. Executes MapReduce jobs
 - d. manages HDFS meta data
- ANS: B PTS: 1
109. What is the primary purpose of the Hadoop YARN resources Manager?
- a. Manges computation resources
 - b. Manages the storage layer
 - c. Executes MapRedceujobs
 - d. Manages Haddop ecosystem tools
- ANS: A PTS: 1
110. What is the function of Hadoop MapReduce in the architecture?
- a. Storage layer
 - b. Data processing
 - c. Resources management
 - d. Workflow automation
- ANS: B PTS: 1