

**University of Mumbai**  
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**Sample Question Bank**

- Q ----- is mainly used for M2M communication and open standered
- A MQTT
- A CoAP
- A XMPP
- A XMPP
- Q A ----- is placed on Integrated Circuits. They are linear but have the lowest accuracy
- A Thermistor
- A Semiconductor based sensor
- A Resistance Thermometer
- A Thermocouple
- Q -----is a wireless battery-free sensor. This lug mounted sensor is designed to monitor electric distribution and switching equipment temperatures
- A ESP8266
- A LM35
- A DHT11
- A RFM3200
- Q How many times loop function runs in Arduino IDE?
- A forever
- A 5
- A 6
- A 1
- Q Raspbian is
- A Assembler
- A Language
- A Compiler
- A Operating System
- Q How may messages types are there in CoAP
- A 5
- A 4
- A 3
- A 2
- Q \_\_\_\_\_ occurs when many tags are present in a small area; but since the read time is very fast, it is easier for vendors to develop systems that ensure that tags respond one at a time.
- A RFID reader collision
- A RFID Tag collision
- A RFID standard collision
- A RFID material
- Q Which is not the RFID ethical issues from listed below?
- A Readers are not rectified by tags
- A Tags are diifcult to remove

- A Tags can be read without your knowledge
- A Tags are costly
- Q Which is the layer responsible for managing device drivers of all devices?
- A Reader interface
- A Data processor
- A Application interface
- A middleware management
- Q Find the principle on which RFID work from the given list.
- A Thumb rule
- A Ohm's law
- A Demorgan's law
- A Electromagnetic Coupling
- Q RFID some times uses one or two antenna , RFID with one antenna is called as \_\_\_\_and with two antenna called as\_\_\_\_\_.
- A Passive, Active
- A Active, Passive
- A Bistatic, Monostatic
- A Monostatic, Bistatic
- Q Bar code and RFID can be diffentiated as\_\_\_\_\_
- A Barcode carries editable information eg. Read, write etc but RFID cannot be changed
- A Barcodes are invisible
- A RFID carries editable information eg. Read, write etc but Barcode cannot be changed
- A RFID code are invisible
- Q The classification of RFID is as follows \_\_\_\_\_.
- A Slow and Fast
- A Slow and active
- A Transmitter and receiver
- A Active and Passive
- Q The effect of RF on Human body / animals would be as
- A Detuning (dielectric)
- A Absorption
- A Reflection
- A Filters
- Q The data rate for low , high and ultra high frequencies in RFID are \_\_\_\_.
- A Slower, moderate, faster respectively.
- A Slower, faster, moderate respectively.
- A faster, moderate, Slower respectively.
- A Faster ,faster,faster respectively
- Q The ability to read near metal or wet surface for low , high and ultra high frequencies in RFID are \_\_\_\_.
- A Poor, moderate, better respectively.
- A Better, moderate, poor respectively.
- A Moderate, poor, Better respectively.
- A Bettere , better, better respectively
- Q The software or device which connects readers to provide data collected by them to enterprise system.
- A RFID reader
- A RFID tag
- A RFID middleware
- A Data processor
- Q The effect of RF on Metals can be as follows
- A Detuning (dielectric)
- A Filters

- A Absorption
- A Reflection
- Q The values for RFID Low frequency is \_\_\_\_\_, its High frequency is \_\_\_\_\_ and Ultra High frequency is \_\_\_\_\_
- A 13.56kHz, 125MHz, 433 MHz
- A 125/134kHz, 433MHz, 13.56MHz
- A 13.56kHz, 125MHz, 435 MHz
- A 13.56kHz, 125MHz, 555 MHz
- Q The terminology used in RFID is if any article that is similar resonance characteristics as that of tag eg. a bundle of electrical cable can potentially trigger the system and generate false alarm is \_\_\_\_\_.
- A System fault
- A Loose connection
- A False triggering
- A Integrated circuit
- Q The edgware in RFID middleware architecture is \_\_\_\_\_.
- A Middleware
- A Core processing interface
- A Application interface
- A Device interface
- Q The term orthogonal linear polarization is \_\_\_\_\_.
- A Used for providing isolation between transmitter and receiver.
- A Used for monostatic RFID
- A Used in bistatic RFID
- A Is technique to provide isolation between transmitter and receiver in which horizontal is used for transmitting and vertical for receiving.
  
- Q RFID tag design for metallic objects is used \_\_\_\_\_
- A Tag
- A Reader
- A Chip
- A Antenna
- Q Avoid the problem of collision, especially in counting items in a retail chain \_\_\_\_\_
- A Every tag needs to be detected correctly
- A Every reader needs to be detected correctly
- A Every motor needs to be detected correctly
- A All antenna needs to be detected correctly
- Q TDMA approaches space division multiple access and \_\_\_\_\_
- A Code division multiple access
- A Class division multiple access
- A Change division multiple access
- A Collision division multiple access
- Q The tags have a random counter that sets a delay and once the time is expired known as \_\_\_\_\_
- A Pure Aloha
- A Framed Slotted Aloha
- A Tree Protocol
- A Framed Slotted Antenna
- Q The slotted aloha (SA) works in \_\_\_\_\_
- A Asynchronous mode
- A Single mode
- A Synchronous mode
- A Seconadary mode

- Q Allows end a transmission slot and prevent other tags colliding with a successful identification process in progress is \_\_\_\_\_
- A Early-end feature
- A front-end feature
- A Early-feature
- A Early-backend feature
- Q Tree protocols divides \_\_\_\_ in order to perform the identification process
- A Tag Space
- A Reader space
- A Motor Space
- A Code Space
- Q Reduces the idle timeslots obtaining a fast tag identification process \_\_\_\_\_
- A Adaptive tree splitting
- A Absolute tree splitting
- A Adaptive tag splitting
- A Asynchronous tree splitting
- Q Multimode and Multiband RFID is \_\_\_\_\_
- A Tag
- A Reader
- A Motor
- A Antenna
- Q Which binary search algorithms are provided the reading process is not restarted after successful tag identification?
- A Exterior Binary Search Algorithms
- A End Binary Search Algorithms
- A Enhanced Binary Search Algorithms
- A Enhanced Binded Search Algorithms
- Q \_\_\_\_\_ does not require the whole ID to identify the tags and it can be divided to optimize a tag's identification
- A Dynamic Bind Search Algorithms
- A Digital Binary Search Algorithms
- A Dynamic Binary Single Algorithms
- A Dynamic Binary Search Algorithms
- Q \_\_\_\_\_ request a tag's IDs in a bit-by-bit manner
- A Bit sight Arbitration
- A Binary Arbitration
- A Bind Arbitration
- A Bitwise Arbitration
- Q \_\_\_\_\_ tags can transmit their IDs only once per frame
- A Framed single Aloha
- A Framed Slotted Aloha
- A Face Site Align
- A Framed Slotted Antenna
- Q \_\_\_\_\_ minimizes the subset until only one tag is present
- A Basic Tree Splitting
- A Bind Tree Splitting
- A Boolean Tree Splitting
- A Basic tag Splitting
- Q Which type of tag use in In-house logistics Application of RFID?
- A Active Tag
- A Passive Tag
- A Semi Active Tag

- A Semi Pasive Tag
- Q Which type of tag not used in Access control, tracking RFID application?
- A Active Tag
- A Passive Tag
- A Semi Active Tag
- A Semi Pasive Tag
- Q Which type of tag not used in Product safety, quality and information?
- A Active Tag
- A Passive Tag
- A Semi Active Tag
- A Semi Pasive Tag
- Q The main standard used by EPCglobal for RFID systems is used \_\_\_\_
- A Gen 1
- A Gen 3
- A Gen 2
- A Gen 4
- Q The main standard used by \_\_\_\_\_ for RFID systems
- A Electrical product count
- A Electronic Product Code
- A Electronic Process Code
- A Electronic Planned Code
- Q The anti-collision protocols preferred for RFID are those that are \_\_\_\_
- A Time division multiple access
- A Time dependent multiple access
- A Time division matrix access
- A Trace divided multiple action
- Q Select false statement related to TDMA
- A Single carrier frequency for single user
- A Discontinuous data transmission
- A No requirement of duplexers
- A High transmission rates
- Q Measure of the percentage of transmitted data that contains information as opposed to providing overhead for the access scheme of TDMA is known as \_\_\_\_\_
- A Efficiency
- A Figure of merit
- A Signal to noise ratio
- A Mean
- Q A TDMA system uses 25 MHz for the forward link, which is broken into radio channels of 200 kHz. If 8 speech channels are supported on a single radio channel, how many simultaneous users can be accommodated?
- A 25
- A 200
- A 1600
- A 1000
- Q In WSN, sensor nodes can converse among themselves using \_\_\_\_\_
- A Even and Odd Signals
- A radio signals
- A Periodic and Signals
- A Power Signals
- Q \_\_\_\_\_ is origin of IEEE 802 MAC address
- A MAC address

- A IP address
- A Ethernet address
- A HTTP
- Q \_\_\_\_\_ technique is used by IEEE 802.11 standard for wireless LAN
- A CDMA
- A CDMA/CD
- A CDMA/CA
- A TDMA
- Q \_\_\_\_\_ protocol is open standard protocol
- A CoAP
- A MQTT
- A XMPP
- A HTTP
- Q Request field is present in which message format?
- A Request message
- A Response message
- A Both request and response
- A Neither request nor response
- Q CoAP built /works on \_\_\_\_\_ Layer
- A Control layer
- A Transport layer
- A Service layer
- A Application layer
- Q CoAP supports RAM and ROM size as
- A 100 KiB of RAM and 10 KiB of ROM
- A 10 KiB of RAM and 100 KiB of ROM
- A 10 KiB of RAM and 250 KiB of ROM
- A 250 KiB of RAM and 10 KiB of ROM
- Q The Unified Network Protocol Framework integrates \_\_\_\_\_ operations in its protocol structure:
- A Only network maintenance and routing protocol
- A Network initialization, Routing protocol and Wireless transmission medium.
- A Only Network initialization, Routing protocol and Wireless transmission medium.
- A Network initialization and maintenance , medium access control protocol and Routing protocol
- Q Which XML tag represents information related to a REST service's request.
- A Result and Body
- A Title and Body
- A Body and Head
- A Result and Title
- Q Routing Information Protocol is an intra domain routing based on \_\_\_\_\_ routing
- A Distance Vector
- A Link State
- A Path Vector
- A State of neighbour
- Q Dynamic mobile on-demand routing is an evolution of which of the following Protocol
- A DSR
- A AODV
- A OLSR
- A OSPF
- Q Which protocol maintains source route for all destination
- A DSR

A AODV

A OLSR

A OSPF

Q IETF standards documents are also known as

A RFC

A RCF

A ID

A None

Q In RPL, a gradient protocol is defined by the 4 elements. Select wrong element

A set of sink node

A set of atomic metrics collected on each link

A Distance between each link

A link costs are combined to form a multi-hop path

Q which statement is true about WSN

A In WSN communication area of a node is a perfect disk of given radius R

A radio that is on consumes almost the same amount of energy whether it is transmitting, receiving or idly listening.

A In WSN packet indicates at what power that packet was received . This power is related to the distance of the transceiver.

A WSN are zero vulnerable

Q To utilize the ability of the terminal to have active communication, UMTS defines

A Easier handover

A Simpler handover

A Periodic handover

A Softer handover

Q The movement of a mobile node between 2 subnets within 1 domain is referred to as

A Inter-mobility

A Macro-mobility

A Micro-mobility

A Intra-mobility

Q Most widely used protocol in Mobile IP is for

A Inter-mobility

A Macro-mobility

A Micro-mobility

A Intra-mobility

Q Macro mobility scheme solves the problem of

A Node mobility

A Location mobility

A Network mobility

A Protocol mobility

Q Handover occurs if it is required to change

A Location being used by a mobile

A Time being used by a mobile

A Period being used by a mobile

A Frequency being used by a mobile

Q In GSM handover, the mobile remains attached to the

A Different base station transceiver but same channel

A Same workstation transceiver without changing the channel

A Same base station transceiver but changes the channel

A Different workstation transceiver but changes the channel

- Q In tags, the localization methods does not depend on
- A Ultrasonic
  - A Infrared
  - A RFID
  - A Transceiver
- Q Select incorrect statement related to RFID tags localization
- A It permits remotely to identify, to track, and to know the characteristics of an object
  - A It allows reading tags even without a direct sight
  - A Tag is additionally composed of a chip connected to an antenna
  - A RFID reader is always ready to print the tag contents based on signal strength
- Q Which one of the following plays an important role in the good performance evaluation of wireless sensor networks
- A Power
  - A Signal
  - A Size
  - A Storage
- Q In localization and handover management, handover is a
- A Architecture
  - A Process
  - A Connectivity
  - A Framework
- Q Which one is not classified as technology based in localization
- A Wi-Fi
  - A Camera
  - A Bluetooth
  - A Tape
- Q In Localization approach tags in libraries or in warehouse are used to check
- A Item
  - A location
  - A position
  - A distance
- Q The readers attempts to make communication with tags that are in the coverage area of another reader when
- A Tag Collision
  - A Readers Collision
  - A Area Collision
  - A Coverage Collision
- Q Following is not a Ranging based methods
- A TOA (Time of Arrival)
  - A TDOA (Time Difference of Arrival )
  - A AOA (Angle of Arrival)
  - A TSSI (Transmitted Signal Strength Indicator)
- Q IP version 6 header format, the version of Internet Protocol is
- A 4-bits long
  - A 8-bits long
  - A 16-bits long
  - A 32-bits long
- Q In ToA calculation in which approach the roundtrip of the signal is measured at the senders node
- A One Way Propagation Time
  - A Two Way Propagation Time
  - A Round trip Propagation Time
  - A Round Way Propagation



Q In localization method, following is a phase

A region partition and local partition

A region refinement and localization refinement

A region partition and localization refinement

A region refinement and local partition

Q During the interactions between blind node and beacon nodes, the beacon nodes accumulate RSSI values in

A 4 times

A 6 times

A 8 times

A 10 times

Q In mobility management, smart mobility is a

A CRS2

A CRS3

A CRS4

A CRS5

Q Which is not a positioning technique

A Triangulation

A Localization

A Scene Analysis

A Proximity

Q During the real time data processing of a stream data in Storm , a spout reads the incoming data stream and feeds it to a processing unit called\_\_\_\_\_

A Spout

A Bolts

A HDFS

A RDBMS

Q \_\_\_\_\_ is a platform for constructing data flows for extract, transform, and load (ETL) processing and analysis of large datasets.

A Oozie

A Pig

A Hive

A Apache Mahout

Q \_\_\_\_\_ is responsible for managing resources and providing an execution environment for the said processes.

A Hive

A YARN

A Oozie

A Mahout

Q Which is a process of inspecting, cleansing, transforming and modelling data with the goal of discovering useful information, informing conclusions and supporting decision-making

A Data Inspecting

A Data Modeling

A Data Analytics

A Data Cleaning

Q Which type of data analytics is used to answer the question why something happens.

A Diagnostics Analytics

A Descriptive Analytics

A Predictive Analytics

A Prescriptive Analytics

Q The data that can be processed stored and retrieved in a fixed format called \_\_\_\_\_

A Structured Data

- A Semi Structured Data
- A Unstructured Data
- A XML Data
- Q The Hadoop list includes the HBase database, the Apache Mahout \_\_\_\_\_ system, and matrix operations
- A Pattern recognition
- A Machine learning
- A Statistical classification
- A Artificial intelligence
- Q \_\_\_\_\_ is a key algorithm that hadoop engine uses to distribute a work around a cluster.
- A Map Reduce
- A K-means
- A Bloom filter
- A Apriori
- Q Which of the following is NOT the Feature of Hadoop?
- A Suitable for Big Data Analysis
- A Scalability
- A Robust
- A Fault Tolerance
- Q What Is Chef?
- A Chef is an automation tool that provides a way to define infrastructure as code
- A Chef is an routing phenomenon
- A Chef is an mechanical tool that provides a way to define infrastructure as code
- A Chef is an automation tool that provides a way to define hardware
- Q Chef uses popular \_\_\_\_\_ to create a domain-specific language
- A Ruby language
- A Python language
- A C language
- A C# language
- Q Chef does not make assumptions on the current status of a node. It uses its mechanisms to get the \_\_\_\_\_ of machine
- A current status
- A past status
- A future status
- A concurrent status
- Q As \_\_\_\_\_ uses native Ruby language for configuration, a standard configuration language it can be easily picked up by anyone having some development experience.
- A Chef
- A IoT
- A Robotics
- A Mechatronics
- Q One of the huge \_\_\_\_\_ of Chef is the way cookbooks are controlled. It needs constant babying so that people who are working should not mess up with others cookbooks.
- A disadvantages
- A advantages
- A support
- A likelihood
- Q NETCONF/YANG provides a standardized way to programmatically update and modify the configuration of a network device.
- A modify
- A delete
- A add

A configure

Q The \_\_\_(commands) differs from vendor to vendor

A CLI OUTPUT

A CMI INPUT

A CNI INPUT

A CII INPUT

Q NETCONF have ability to \_\_\_configurations

A rollback

A add

A delete

A add

Q The \_\_\_ layer used to provide a communication path between the client/server (manager/agent). The protocol used is agnostic to NETCONF, but SSH is typically used.

A transport

A network

A session

A application

Q The\_\_\_ deployment means deploying from more than one deployment tier.

A Multitier

A Twotier

A onetier

A multiplex

Q In YANG terminology, what is the CONTAINER terminology?

A An interior data node that exists in at most one instance in the data tree. A container has no value, but rather a set of child nodes.

A A data model describes how data is represented and accessed.

A Adds new schema nodes to a previously defined schema node.

A The instantiated tree of configuration and state data on a device.