

lot Third Exam

- 1- In the most general case based on the lot system infrastructure view a gateway can be connected
 - a) Sensors, Actuators, Things and Gateways
 - b) Sensors and Actuators
 - c) Sensors, Actuators and Things
 - d) Sensors
- 2- During the process of node commissioning and provisioning that follows installation, nodes are issued system identities and security credential necessary for
 - a) Authentication and for secure operation upon their activation in the IP-Based system
 - b) Authentication and for secure operation upon their activation in the wired system
 - c) Authentication and for secure operation upon their activation in the wireless system
 - d) Authentication and for secure operation upon their activation in the system
- 3- Aliasing errors results from
 - a) Noise in the digital circuitry
 - b) Insufficient memory of the Digital signal processing
 - c) Insufficient quantization level
 - d) Insufficient sampling rates
- 4- Which of the following is not an industrial bus or protocol
 - a) CAN bus
 - b) Profibus
 - c) Modbus
 - d) Fieldbus
- 5- Serialization defines
 - a) How individual bits and bytes appear in actual transfers over IP-Based communication
 - b) How individual bits and bytes appear in actual transfers over wireless communication
 - c) How individual bits and bytes appear in actual transfers over industrial protocols
 - d) How individual bits and bytes appear in actual transfers over communication links
- 6- In push notification
 - a) a message is explicitly requested from the source by its recipient on lot client
 - b) The data source and gateway acting on its behalf send data messages to an agreed point when the specified conditions are met
 - c) The data exchange is accomplished via an API-styled 'get-data' for a specific data source or a group of related ones.
 - d) Some synchrony between the sender and the receiver is needed
- 7- The watchdog(timer)(WDT)
 - a) is usually present in any microprocessor
 - b) is usually present only in general-purpose CPUs
 - c) Can not be included in microcontroller designed for embedded systems
 - d) Is included in many microcontrollers designed for embedded systems
- 8- Key functions of the network layer does not include
 - a) Addressing
 - b) Segmentation
 - c) Transmission of digital frames between two end-points connected by the physical layer
 - d) Routing
- 9- Low-Power and Loss Networks
 - a) have a constant packet error rate
 - b) Use nodes all of the same types
 - c) Allow nodes to sleep
 - d) Are not used in lot

10- Max payload size per pack in IEE.802.15.4 network is

- a) 127 bytes
- b) 128 bytes
- c) 2048
- d) Unlimited as far as size is concerned

11- IEEE802.15.4 IP-Based networks include

- a) Thread
- b) ZigBee
- c) Bluetooth
- d) LoRaWAN

12- In a LoRaWAN network if you aim at Lowest latency for a node you select a node

- a) Class C
- b) Class B
- c) Class A
- d) Class A with ADR

Which one is true?

13- In terms of security, CoAP communication can be secured

- a) at the transport layer, such as DTLS for UDP only
- b) At the link layer in conjunction with IEE.802.15.4 only
- c) Using IP security
- d) At the transport layer, as well as the link layer in conjunction with IEEE 802.15.4

14- With reference to the "lot cloud components" ingested data may go through the cloud path for

- a) Storage
- b) Storage and the more time consuming
- c) Stream data process
- d) Event processing

15- Descriptive analytics answers the question

- a) What happened?
- b) What will happen next?
- c) How to get there?
- d) Is lot system secure?

16- 16- Trusted execution environment includes

- a) PGP keys
- b) Trusted processing core(s) and crypto accelerators
- c) Simcards
- d) NFC communications

1-c

2-c

3-c

4-d

5-d

6-b

7-d

8-b

9-c

10-a

11-a

12-b

13-d

14-c

15-a

16-b