# **COMPTIA RF0-001 EXAM QUESTIONS & ANSWERS**

Number: RF0-001 Passing Score: 800 Time Limit: 120 min File Version: 20.8



http://www.gratisexam.com/



**COMPTIA RF0-001 EXAM QUESTIONS & ANSWERS** 

**Exam Name: RFID+ Certification** 

#### **Visualexams**

## **QUESTION 1**

An Electronic Product Code (EPC) Class 1 Gen 2 RFID system reads the EPC data from memory bank zero, but the 64-bit EPC code is always zero. Which of the following is MOST likely the cause of the problem?

- A. The EPC code is stored in Bank 1.
- B. The tag has been killed.
- C. The EPC code was never written to the tag.
- D. The access password is zero.

Correct Answer: A Section: (none) Explanation

## **Explanation/Reference:**

### **QUESTION 2**

A new batch of tags is received for an existing system. When the new tags are introduced into the system, the interrogation zones stop transmitting tag data. Which of the following is MOST likely the source of the problem?

- A. The new tags are all bad.
- B. The new tags are the wrong type for the system.
- C. A tag virus has been introduced by the new tags.
- D. The interrogators have issued the kill command to the tags.

Correct Answer: B Section: (none) Explanation

## **Explanation/Reference:**

## **QUESTION 3**

RFID media should be stored in:

- A. electrostatic discharge (ESD) protected packaging.
- B. metal containers.
- C. rolls of ten.
- D. the order that it was received.

Correct Answer: A Section: (none) Explanation

## **Explanation/Reference:**

#### **QUESTION 4**

When firmware upgrades become available, which of the following should the technician consider FIRST?

- A. How to install the upgrade.
- B. When to schedule the upgrade.
- C. Whether the upgrade can be downloaded from the internet.

D. The benefits of new upgrade.

Correct Answer: D Section: (none) Explanation

## **Explanation/Reference:**

#### **QUESTION 5**

Desktop industrial RFID-enabled bar code printers handle an inoperative tag by:

- A. sending an error to the host.
- B. printing 'void' or some other marking on the label.
- C. ejecting the label.
- D. ignoring it and continuing.

Correct Answer: B Section: (none) Explanation

## **Explanation/Reference:**

## **QUESTION 6**

When troubleshooting an interrogation zone, an operator observes that the interrogator is not responding to external input or reading tags. The lights are on indicating it has power and network connectivity. Which of the following would be the next step for the operator to take?



http://www.gratisexam.com/

- A. Replace the antenna cable.
- B. Replace the interrogator.
- C. Reboot the interrogator.
- D. Reboot the antenna.

Correct Answer: C Section: (none) Explanation

## **Explanation/Reference:**

## **QUESTION 7**

Loss of connection between an interrogator and the edgeware/middleware would result in which of the following?

- A. Only active RFID tag data would be processed.
- B. No tag data would be processed.

- C. Tag data would be sent directly to the Warehouse Management System (WMS).
- D. Only interrogator status would be tracked.

Correct Answer: B Section: (none) Explanation

## **Explanation/Reference:**

#### **QUESTION 8**

Which of the following materials have absorptive properties in relation to ultra high frequency (UHF)? (Select TWO).

- A. Damp cardboard
- B. Glass
- C. Conductive liquids
- D. Metal

Correct Answer: AC Section: (none) Explanation

### **Explanation/Reference:**

#### **QUESTION 9**

Which of the following RFID tags would be BEST for inconspicuous tagging of assets containing a maximum of eight bytes of data and are inductively coupled?

- A. Active 433.92 MHz tag with strategically installed fixed interrogators.
- B. Passive 13.56 MHz tag that is affixed to the asset and camouflaged requiring continuous loop interrogation.
- C. Passive Gen 2 tag requiring line of sight backscatter interrogation.
- D. Active 433.92 MHz tag requiring modulated backscatter interrogation.

Correct Answer: B Section: (none) Explanation

### **Explanation/Reference:**

### **QUESTION 10**

Which of the following technologies would provide the BEST read range when attached to a corrugated metal freight container that is 40 feet (12.4 meters)?

- A. Passive 13.56 MHz from a one watt interrogator/antenna
- B. Passive 860 960 MHz from a 4 watt interrogator/antenna
- C. Active 433.92 MHz, operating at 10 mW
- D. Active 2450 MHz, operating at 10 mW

Correct Answer: C Section: (none) Explanation

# **Explanation/Reference:**

### **QUESTION 11**

Ideally, as a tag passes though the antenna read window it should be:

- A. inside metal foil.
- B. on the same plane as the antenna.
- C. at least 30 feet (9.3 meters) from the antenna.
- D. facing away from antenna.

Correct Answer: B Section: (none) Explanation

## **Explanation/Reference:**

### **QUESTION 12**

Cases are going to be tagged and stored in a humid, high temperature area. Which of the following types of labels would be needed?

- A. Poly-coated with gum adhesive.
- B. Direct thermal with gum adhesive.
- C. Poly-coated with water base adhesive.
- D. Paper with gum adhesive.

Correct Answer: A Section: (none) Explanation

## **Explanation/Reference:**

# **QUESTION 13**

For a corrugated case filled with liquor bottles containing metal lids, all of the following locations are acceptable for optimizing the performance of a passive high frequency (HF) RFID smart label EXCEPT on the: (Select TWO).

- A. side near the bottom where there is the most amount of liquid.
- B. side near the top where there is the least amount of liquid.
- C. bottom where there is the most amount of glass.
- D. top near the metal lids.

Correct Answer: AD Section: (none) Explanation

# **Explanation/Reference:**

### **QUESTION 14**

When using an RFID enabled printer to encode tags as they are being printed, which of the following determines the data being encoded?

A. The software generating the print job.

- B. The printer's firmware.
- C. The printer is encoding in a sequence guaranteeing unique data on each tag.
- D. RFID enabled printers cannot encode RFID tags.

Correct Answer: A Section: (none) Explanation

# **Explanation/Reference:**

### **QUESTION 15**

Automated encode, print and apply label applicators can:

- A. encode more data than a table top printer.
- B. only use RFID labels.
- C. precisely place labels on cases.
- D. encode more than one label at a time.

Correct Answer: C Section: (none) Explanation

# **Explanation/Reference:**

#### **QUESTION 16**

Which of the following are functions of a scan tunnel on a conveyer mounted RFID system? (Select TWO).

- A. Keeps dust out of the system.
- B. Ensures that only one item is read at a time.
- C. Concentrates the RF energy.
- D. Contains the RF energy of the field.

Correct Answer: CD Section: (none) Explanation

## **Explanation/Reference:**

### **QUESTION 17**

The purpose of anti-collision is to:

- A. guard against tags using the wrong frequency.
- B. resolve (singulate) tags in the interrogator field.
- C. ensure that adjacent interrogators do not interfere.
- D. ensure that tags do not come in contact with one another.

Correct Answer: B Section: (none) Explanation

## **Explanation/Reference:**

#### **QUESTION 18**

When mounting an interrogator on a vehicle, the MOST important consideration would be:

- A. making the vehicle look good.
- B. employee safety.
- C. preventing damage to the interrogator.
- D. ensuring read capabilities.

Correct Answer: B Section: (none) Explanation

## **Explanation/Reference:**

## **QUESTION 19**

Under Federal Communication Commission (FCC) rules, interrogators operating in dense-reader mode are separated from one another:

- A. spectrally.
- B. temporally.
- C. logically.
- D. physically.

Correct Answer: A Section: (none) Explanation

# **Explanation/Reference:**

## **QUESTION 20**

An RFID interrogator is reading tags on cartons on a conveyor and cartons are directed to the proper truck by electrically-operated gates on the conveyor line. A carton reaches the first gate in one-half second. The decision to open a gate is BEST made by:

- A. a universal serial bus (USB) connection to the remote server.
- B. an interrogator with WiFi capability.
- C. an Ethernet connection to the remote server.
- D. an interrogator with an edge-server capability.

Correct Answer: D Section: (none) Explanation

### **Explanation/Reference:**

#### **QUESTION 21**

Which of the following anti-collision protocols uses a synchronous scheme?

- A. Binary tree
- B. Digital modulation
- C. ALOHA

D. Stream cipher

Correct Answer: A Section: (none) Explanation

## **Explanation/Reference:**

### **QUESTION 22**

A manufacturer of canned goods arranges tagged cartons in nine stacks nine high on a pallet. The passive ultra high frequency (UHF) tags on the center stack have a high failure rate on reads. Which of the following would be the BEST way to improve the read rate?

- A. Arrange the antennas on the top so they focus on the center stack.
- B. Double the number of antennas using 50-ohm splitters.
- C. Add a second interrogator running at 13.56 MHz.
- D. Read the individual cartons as the pallet is being built.

Correct Answer: D Section: (none) Explanation

### **Explanation/Reference:**

### **QUESTION 23**

If a manufacturer ships items to the United States Department of Defense (DoD) and major retailers, which of the following standards applies to the use of RFID tags to identify the cartons and pallets they ship?

- A. EPCglobalInc.
- B. None, no standards exist
- C. Universal Product Code (UPC)
- D. International Organization for Standardization (ISO) 9001

Correct Answer: A Section: (none) Explanation

### **Explanation/Reference:**

## **QUESTION 24**

Workers who are in close proximity to passive RFID interrogators for long periods of time should be aware of which of the following safety risks?

- A. None, interrogators pose no safety risks.
- B. Exposure to radio waves.
- C. Exposure to nuclear radiation.
- D. Potential for electrostatic shock.

Correct Answer: B Section: (none) Explanation

## **Explanation/Reference:**

#### **QUESTION 25**

Which of the following air interface standards would be applicable to the development of a passive system for the tagging of cases and pallets?

- A. ISO/IEC 18000-7
- B. International Organization for Standardization/International Electrotechnical Commission (ISO/IEC) 18000-6, Type C
- C. Electronic Product Code (EPC) Tag Data Standard 1.27
- D. ISO/IEC 18000-3

Correct Answer: B Section: (none) Explanation

# **Explanation/Reference:**

### **QUESTION 26**

Integrated Circuit Cards (Smart Cards) conforming to International Organization for Standardization/International Electrotechnical Commission (ISO/IEC) 15693 operate at what frequency?

- A. 315 MHz
- B. 915 MHz
- C. 13.56 MHz
- D. 128 kHz

Correct Answer: C Section: (none) Explanation

## **Explanation/Reference:**

#### **QUESTION 27**

North America is in which of the following International Telecommunications Union (ITU) regulatory regions?

- A. 2
- B. 3
- C. One
- D. 4

Correct Answer: A Section: (none) Explanation

### **Explanation/Reference:**

### **QUESTION 28**

A technician is assisting with a site analysis of a passive ultra high frequency (UHF) RFID system for a conveyor application requiring several antennas to be placed in close proximity. The BEST reason for using absorptive materials would be to:

A. absorb the RF from outside interference sources.

- B. protect the interrogator's receiver from becoming saturated.
- C. decrease the likelihood of electrostatic discharge (ESD) affecting performance.
- D. increase the size of the field pattern covered by the antennas.

Correct Answer: B Section: (none) Explanation

# **Explanation/Reference:**

### **QUESTION 29**

Backscattering operates by:

- A. alternating between linear and circular polarization.
- B. using spread-spectrum to equalize the power over the band.
- C. transmitting with power from the interrogator.
- D. changing the reflection coefficient of the antenna.

Correct Answer: D Section: (none) Explanation

# **Explanation/Reference:**

### **QUESTION 30**

An interrogator emits one watt from its antenna connector. The energy passes through a cable with 3dB loss to a linearly-polarized antenna with 6dB gain. Which of the following would be the Effective Isotropic Radiated Power (EIRP)?

- A. 4 watts
- B. 2 watts
- C. 0.5 watt
- D. one watt

Correct Answer: B Section: (none) Explanation

# **Explanation/Reference:**

### **QUESTION 31**

High frequency (HF) output power is BEST measured as:

- A. decibels per meter.
- B. dBm.
- C. Effective Radiated Power (ERP).
- D. Effective Isotropic Radiated Power (EIRP).

Correct Answer: B Section: (none) Explanation

# **Explanation/Reference:**

### **QUESTION 32**

Which of the following is an attribute of an inductively coupled system [e.g. low frequency (LF), high frequency (HF)] that a capacitively coupled [e.g. ultra high frequency (UHF), uW] system does not have?

- A. Capacitive material in which to store power.
- B. Inductive dipole antenna.
- C. Capacitive power circuitry.
- D. Inductive coil antenna.

Correct Answer: D Section: (none) Explanation

## **Explanation/Reference:**

### **QUESTION 33**

Under optimal conditions, active RFID tags operating at 303.8MHz or 433.92MHz can be read at:

- A. less than 6 inches (15 centimeters).
- B. more than 10 miles (16 kilometers).
- C. more than 322.6 feet (100 meters).
- D. less than 9.7 feet (3 meters).

Correct Answer: C Section: (none) Explanation

## **Explanation/Reference:**

## **QUESTION 34**

The length of a passive RFID interrogation zone can be doubled by:

- A. adding another antenna on the same side.
- B. selecting an antenna whose gain is 2dB greater than the original antenna.
- C. adding another antenna on the other side.
- D. placing reflective material across from the transmitting antenna.

Correct Answer: C Section: (none) Explanation

## **Explanation/Reference:**

### **QUESTION 35**

All of the following are true statements about passive RFID tags EXCEPT that they:

- A. may transmit and receive on different channels.
- B. permit multiple sessions in the same interrogation zone.
- C. do not implement duty cycle control.

D. contain batteries.

Correct Answer: D Section: (none) Explanation

## **Explanation/Reference:**

### **QUESTION 36**

Passive ultra high frequency (UHF) tags perform BEST when communicating by:

- A. near-field coupling.
- B. planar coupling.
- C. Faraday coupling.
- D. far-field coupling.

Correct Answer: D Section: (none) Explanation

## **Explanation/Reference:**

## **QUESTION 37**

An RFID system is to be used in a conveyor belt operation where single boxes with RFID labels are to be read. Which of the following types of antennas would be MOST effective?

- A. Isotropic
- B. Circularly polarized
- C. Horizontally polarized linear
- D. Vertically polarized linear

Correct Answer: B Section: (none) Explanation

# **Explanation/Reference:**

### **QUESTION 38**

As the distance between tags in a passive ultra high frequency (UHF) RFID interrogation zone decreases, which of the following is affected?

- A. Time required to power the tag.
- B. Distance at which the tag can be read.
- C. Coverage area of the interrogation zone.
- D. Power level of the field.

Correct Answer: B Section: (none) Explanation

# **Explanation/Reference:**

#### **QUESTION 39**

Interrogation zones that are found to be interfering with an existing system can BEST be resolved by doing which of the following?

- A. Shielding the zone with a reflective or absorptive material.
- B. Replacing the existing components that are interfering.
- C. Turning off the RFID system.
- D. Upgrading the RFID system to Electronic Product Code (EPC) Class 1 Gen 2 specifications.

Correct Answer: A Section: (none) Explanation

## **Explanation/Reference:**

### **QUESTION 40**

Using a spectrum analyzer, it is determined that the source of interference in a passive ultra high frequency (UHF) system is the vehicle-mounted computers. The computers are operating in spread-spectrum 915 MHz mode. Which of the following would be the MOST efficient method of resolving this situation?

- A. Replace the radio cards in the computer terminals with 802.11 radio cards and the computer terminals will be able to communicate over the existing access points.
- B. Remove the computer terminals, replacing them with computers that operate in a different frequency range and update the wireless network to support this change.
- C. Surround the computer terminals with a shield so the terminals cannot emit signals into the interrogation zones.
- D. Replace the radio cards in the computer terminals with 802.11 radio cards and change the access points to support 802.11 operation as well.

Correct Answer: D Section: (none) Explanation

### **Explanation/Reference:**

## **QUESTION 41**

Which of the following temperatures is the lower limit of operation for a passive ultra high frequency (UHF) tag to operate in a cold environment?

A. -40C (-40 F)

B. 20 C (68 F)

C. -80 C (-112 F)

D. 0 C (32 F)

Correct Answer: A Section: (none) Explanation

### **Explanation/Reference:**

### **QUESTION 42**

A large number of antennas are being damaged at the dock doors of an existing installation. Upon further

inspection, the technician discovers that forklift operators are hitting the antennas because they are 2 inches (5 centimeters) in front of the protective pylons/ballards. Which of the following would be the BEST solution?

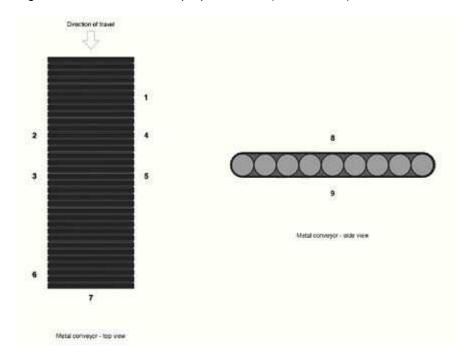
- A. Move the dock stands so they are further out of the travel path than the protective equipment installed.
- B. Re-install the antennas so they protrude into the travel path further than the dock stands.
- C. Remove the dock stands and install them somewhere else in the operation.
- D. Replace the dock stands with smaller, less obtrusive dock stands.

Correct Answer: A Section: (none) Explanation

## **Explanation/Reference:**

### **QUESTION 43**

Based on the diagram below, at which of the following numbered locations should antennas be placed to read tags on six sides of an RF-opaque carton? (Select TWO).



A. 3, 5, 8, 9

B. 2, 4, 8, 9

C. 2, 3, 4, 5

D. 2, 3, 8, 9

Correct Answer: AB Section: (none) Explanation

# **Explanation/Reference:**

### **QUESTION 44**

An animal identification system is used in feedlots and transfer gates are equipped with 135 kHz interrogators and are of a size to support one animal. When two animals attempt to get through at the same time, a problem

#### occurs because the:

- A. 135 kHz systems do not have anti-collision algorithms.
- B. 135 kHz interrogator system is broken because of the congestion.
- C. animals expand the gates to a size where the second animal cannot be read.
- D. animals are moving too slowly to be read only once.

Correct Answer: A Section: (none) Explanation

# **Explanation/Reference:**

#### **QUESTION 45**

In package tracking systems, read-only tags are unable to be used because the destination postal code is not contained within the tag. Read-only tags have been proposed to work in a manner so as to read the read-only tag and then access the package tracking company's database to determine the appropriate sorting, based on the postal code within the database. Which of the following would be a reason that this would not be successful?

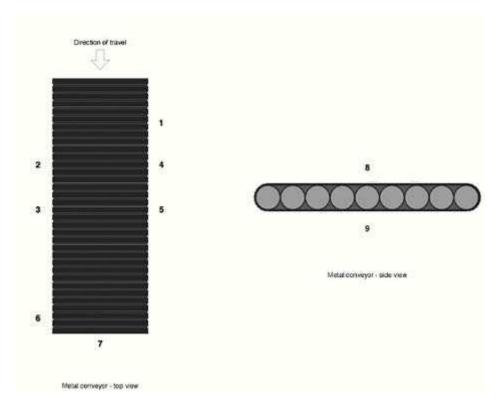
- A. Read-only tags are not able to be reused and re-write tags can be re-used.
- B. Distribution of the read-only tags to the drivers requires that each driver have a specific sequence of numbers in the tag.
- C. When recording the destination information at package pickup it is feared that the wrong postal code will be entered.
- D. Using a reference number instead of the postal code for sorting depends upon a communications link that is not completely reliable.

Correct Answer: D Section: (none) Explanation

## **Explanation/Reference:**

### **QUESTION 46**

Based on the following diagram, if antennas are located at locations 2 and 4, at which of the following locations should a smart label applicator be placed?



A. one

B. 9

C. 6

D. 7

Correct Answer: A Section: (none) Explanation

# **Explanation/Reference:**

## **QUESTION 47**

When installing an RFID interrogator on a forklift, which of the following would be the BEST means of ensuring proper grounding on the forklift?

- A. Refer to the equipment manuals.
- B. Ground the interrogator to the frame.
- C. Use a volt meter to test for ground.
- D. Connect the antenna ground to the battery.

Correct Answer: A Section: (none) Explanation

# **Explanation/Reference:**



## http://www.gratisexam.com/

### **QUESTION 48**

The technician is working with a passive ultra high frequency (UHF) system for a beverage distributor. Which of the following tag locations would provide the BEST tag performance when tagging a case of long-neck beverage bottles?

- A. Upper left corner of the short end of the case.
- B. Center of the top of the case.
- C. Lower left corner of the long end of the case.
- D. Center of the bottom of the case.

Correct Answer: A Section: (none) Explanation

## **Explanation/Reference:**

#### **QUESTION 49**

Which of the following is the maximum output power of the interrogator at the connector between the interrogator and the antenna according to Federal Communication Commission (FCC) rules for 902-928 MHz RFID?

- A. 100 milliwatts
- B. 4 watts
- C. One watt
- D. 500 milliwatts

Correct Answer: C Section: (none) Explanation

## **Explanation/Reference:**

### **QUESTION 50**

A customer has an RFID system to sort packages by their destination in real time. When first installed, the system worked properly but now most packages are not going to the correct destination. Which of the following BEST describes the cause of this problem?

- A. There are increased losses in the antenna cabling.
- B. Interrogator output power has degraded over time.
- C. Sensors that control the interrogator were repositioned.
- D. The customer is using a bad batch of tags.

Correct Answer: C Section: (none) Explanation

# **Explanation/Reference:**

### **QUESTION 51**

When installing cabling and wiring within a safety enclosure around an RFID interrogator, which of the following should be done?

- A. Ensure all wiring sizes are the same.
- B. Use cable restraints only on wires greater than 8 American wire gauge (AWG).
- C. Remove screws from unused terminals.
- D. Place wire numbers on all wires.

Correct Answer: D Section: (none) Explanation

## **Explanation/Reference:**

### **QUESTION 52**

When an interrogator queries Electronic Product Code (EPC) Class 1 Gen 2 tags, the tag has the responsibility to perform which of the following?

- A. Place a randomly generated number in its slot counter.
- B. Tell the interrogator the tag manufacturer.
- C. Return its unique identification number on power up.
- D. Tell the interrogator the channel the tag is going to use.

Correct Answer: A Section: (none) Explanation

## **Explanation/Reference:**

## **QUESTION 53**

The International Telecommunications Union (ITU) has divided the world into radio regions. ITU region 2 includes which of the following geographical areas?

- A. Africa
- B. Europe
- C. North America
- D. Australia

Correct Answer: C Section: (none) Explanation

## **Explanation/Reference:**

## **QUESTION 54**

Which of the following types of ultra high frequency (UHF) antennas provide the BEST range?

A. Linear

- B. Waveguide
- C. Circularly polarized
- D. Isotropic

Correct Answer: A Section: (none) Explanation

## **Explanation/Reference:**

#### **QUESTION 55**

RF absorbing materials:

- A. detune the transponder from its resonant frequency so the antenna can no longer absorb enough RF energy to activate the transponder.
- B. reduce the signal to the transponder by dissipating the RF energy from the interrogator.
- C. reflect the RF energy in multiple directions.
- D. shield the transponder.

Correct Answer: B Section: (none) Explanation

# **Explanation/Reference:**

#### **QUESTION 56**

A container yard has been upgraded with an active RFID system for tracking containers moving to different locations within the yard. Recently, the system monitor has observed a decrease in interrogator reporting. Which of the following may be the cause of this change?

- A. The yard manager installed wooden walls to separate various areas within the yard.
- B. The company has introduced a new line of propane-powered forklifts in the yard.
- C. The 50 workers in the container yard were issued cellular telephones for reporting container conditions to the yard manager.
- D. The temperature in the area has dropped to 0 C (32 F) and this temperature has been sustained for the past 2 weeks.

Correct Answer: D Section: (none) Explanation

## **Explanation/Reference:**

### **QUESTION 57**

Which of the following materials would cause the MOST attenuation of an RFID signal?

- A. Glass
- B. Green lumber
- C. Water
- D. Foam

**Correct Answer:** C

Section: (none) Explanation

## **Explanation/Reference:**

### **QUESTION 58**

RFID labels that were being printed correctly are now being printed with half the image area across two labels and the tags cannot be validated. Which of the following should the technician check FIRST?

- A. Sensor settings
- B. Print drivers
- C. Communications protocol
- D. Printer speed

Correct Answer: A Section: (none) Explanation

### **Explanation/Reference:**

## **QUESTION 59**

Although the site diagram has points marked for locations of print-encode-apply printers, the MOST important thing needed to complete the mounting is:

- A. locating the WiFi access points.
- B. having a large work area.
- C. knowing the load factor of the floor.
- D. knowing the label orientation on each case.

Correct Answer: D Section: (none) Explanation

## **Explanation/Reference:**

### **QUESTION 60**

When assisting with a site analysis for an active Real Time Locating System (RTLS), which of the following will have the LEAST affect upon the number of interrogators installed?

- A. The ampere-hour rating of the tag's battery.
- B. The resolution required for locating items.
- C. The size of the area to be covered.
- D. The frequency of the system selected.

Correct Answer: A Section: (none) Explanation

## **Explanation/Reference:**

### **QUESTION 61**

When installing equipment into a proposed interrogation zone based on the site diagram, a technician observes

that the cooling fans at the dock doors are directly in the way of the dock stands requiring installation. Which of the following actions should the technician take?

- A. Cancel the installation because there are physical constraints preventing them from completing the job as designed.
- B. Remove the fans; install the dock stands, and then remount the fans to the dock stands to complete the job.
- C. Remove the fans and place them on the floor just outside of the proposed interrogation zone.
- D. Contact the project manager to arrange a meeting with site management and determine the best solution.

Correct Answer: D Section: (none) Explanation

## **Explanation/Reference:**

#### **QUESTION 62**

When installing a conveyor tunnel, antennas should be placed:

- A. on the same side of the conveyor with radiation patterns not overlapping away from the conveyor path.
- B. underneath the conveyor with radiation patterns overlapping in the area under the conveyor.
- C. around the conveyor with radiation patterns overlapping away from the conveyor path.
- D. around the conveyor with radiation patterns overlapping along the conveyor path.

Correct Answer: D Section: (none) Explanation

### **Explanation/Reference:**

## **QUESTION 63**

A container yard unloads 40 foot (12.4 meter) containers from a freighter. As a container is lifted, the active tag is read, however other tags still on containers on the freighter are also read. A solution to this problem would be to:

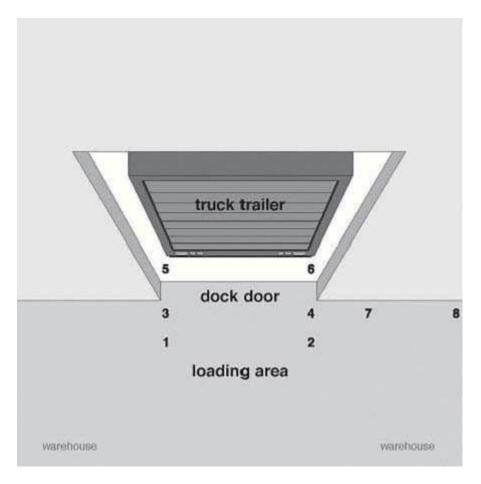
- A. install circularly polarized antennas.
- B. install Yagi antennas.
- C. trigger the tag read at some other point.
- D. increase the power level of the interrogator.

Correct Answer: C Section: (none) Explanation

## **Explanation/Reference:**

#### **QUESTION 64**

The technician is preparing to place the light break sensor for a dock door interrogation zone. Based on the following diagram, in which of the following numbered locations should the light break sensors be placed? (Select TWO).



A. 4

B. 3

C. 5

D. 6

Correct Answer: AB Section: (none) Explanation

# **Explanation/Reference:**

# **QUESTION 65**

An interrogator that supports four antennas only has two antennas attached and the customer reports that the interrogator is not functioning. Which of the following may be the cause of the problem?

- A. Terminators were not placed on the unused antenna ports.
- B. The interrogator must have four antennas connected to operate.
- C. The antennas were of different polarization.
- D. The antenna's gain was too high causing the interrogator to overheat.

Correct Answer: A Section: (none) Explanation

# **Explanation/Reference:**

### **QUESTION 66**

A warehouse dealing with quantities of RF absorbing material has a portal using a single antenna with reflective panels on all sides. The totes used to transport the material have tags mounted to one end and are run through the portal in random orientations. Not all tags are being read. Which of the following would be the BEST way to correct this problem?

- A. Add antennas on the other side of the portal.
- B. Increase the radiated power.
- C. Change the type of tag used.
- D. Reduce the amount of material in the tote.

Correct Answer: A Section: (none) Explanation

## **Explanation/Reference:**

#### **QUESTION 67**

The higher frequency ranges of RFID [e.g. ultra high frequency (UHF), microwave] offer which of the following as advantages over the lower frequencies? (Select TWO).

- A. There are fewer regulatory issues.
- B. There is greater range.
- C. They work well around water or body tissue.
- D. They have a higher data rate.

Correct Answer: BD Section: (none) Explanation

## **Explanation/Reference:**

# **QUESTION 68**

Ultra high frequency (UHF) output power is measured as:

- A. Effective Isotropic Radiated Power (EIRP).
- B. decibels.
- C. decibels per meter.
- D. Effective Radiated Power (ERP).

Correct Answer: A Section: (none) Explanation

### **Explanation/Reference:**

#### **QUESTION 69**

High frequency (HF) output power is BEST measured as:

- A. decibels per meter.
- B. dBm.

- C. Effective Radiated Power (ERP).
- D. Effective Isotropic Radiated Power (EIRP).

Correct Answer: B Section: (none) Explanation

### **Explanation/Reference:**

#### **QUESTION 70**

Which of the following is an attribute of an inductively coupled system [e.g. low frequency (LF), high frequency (HF)] that a capacitively coupled [e.g. ultra high frequency (UHF), uW] system does not have?

- A. Capacitive material in which to store power.
- B. Inductive dipole antenna.
- C. Capacitive power circuitry.
- D. Inductive coil antenna.

Correct Answer: D Section: (none) Explanation

### **Explanation/Reference:**

#### **QUESTION 71**

A conveyor system has cartons that may be standing up or lying on the side. Which of the following antenna configurations would work BEST for reading these cartons? (Select TWO).

- A. A linear antenna.
- B. Two linear antennas, one vertical and the other horizontal.
- C. An isotropic antenna.
- D. A circularly polarized antenna.

Correct Answer: BD Section: (none) Explanation

### **Explanation/Reference:**

### **QUESTION 72**

The reflection of RF energy from a floor or nearby reflective surfaces can cause a passive ultra high frequency (UHF) RFID system to miss tags because of:

- A. constructive interference.
- B. deconstructive interference.
- C. changes in the air interface's modulation depth.
- D. interrogator antenna diversity.

Correct Answer: B Section: (none) Explanation

## **Explanation/Reference:**

### **QUESTION 73**

Backscattering operates by:

- A. alternating between linear and circular polarization.
- B. using spread-spectrum to equalize the power over the band.
- C. transmitting with power from the interrogator.
- D. changing the reflection coefficient of the antenna.

Correct Answer: D Section: (none) Explanation

## **Explanation/Reference:**

### **QUESTION 74**

Interrogators placed at dock door portals are failing. When repairing the interrogators, the manufacturer's technician observes that the interrogators are showing signs of water intrusion. The BEST solution would be to:

- A. move the dock door stands back from the doors 4 feet (1.2 meters) to decrease exposure.
- B. fill all openings in the interrogator with water resistant silicone.
- C. install dock shelters on all dock doors utilizing RFID interrogation zones.
- D. place the affected interrogators in National Electrical Manufacturers Association (NEMA) 4 enclosures.

Correct Answer: D Section: (none) Explanation

# **Explanation/Reference:**

## **QUESTION 75**

High frequency (HF) RFID systems are thought to create interference with:

- A. cellular telephone and wireless personal computer (PC) cards.
- B. oceanographic exploration and submarines.
- C. radio astronomy and amateur radios.
- D. liquid crystal display (LCD) projectors and plasma displays.

Correct Answer: C Section: (none) Explanation

# **Explanation/Reference:**

#### **QUESTION 76**

A passive ultra high frequency (UHF) RFID system has been installed for use outdoors in a winter climate. Although the system has been designed and implemented for the region, the user should be told that: (Select TWO).

A. low temperatures can crack antenna housings.

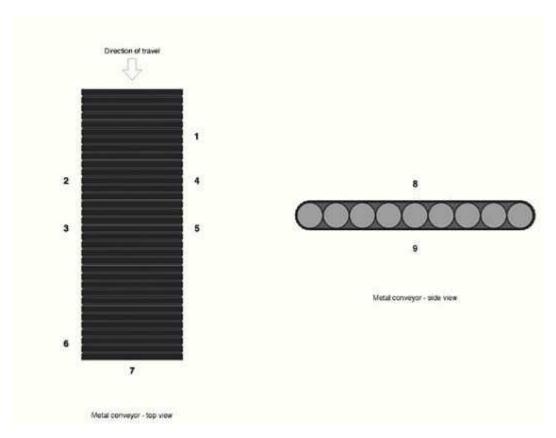
- B. there are temperatures that are beyond interrogator specifications.
- C. there are temperatures that are beyond tag specifications.
- D. ice and/or snow on tags can cause inaccurate readings.

Correct Answer: CD Section: (none) Explanation

# **Explanation/Reference:**

### **QUESTION 77**

Based on the diagram below, if antennas are located at points 2 and 4, at which of the following numbered locations should a presence detector be placed?



- A. A light-break sensor should be placed at location one.
- B. A proximity sensor should be placed at location one.
- C. A proximity sensor should be placed at location 7.
- D. A light-break sensor should be placed at locations 3 and 5.

Correct Answer: B Section: (none) Explanation

## **Explanation/Reference:**

## **QUESTION 78**

A large number of antennas are being damaged at the dock doors of an existing installation. Upon further

inspection, the technician discovers that forklift operators are hitting the antennas because they are 2 inches (5 centimeters) in front of the protective pylons/ballards. Which of the following would be the BEST solution?

- A. Move the dock stands so they are further out of the travel path than the protective equipment installed.
- B. Re-install the antennas so they protrude into the travel path further than the dock stands.
- C. Remove the dock stands and install them somewhere else in the operation.
- D. Replace the dock stands with smaller, less obtrusive dock stands.

Correct Answer: A Section: (none) Explanation

## **Explanation/Reference:**

#### **QUESTION 79**

Prior to installation of RF equipment, which of the following should be evaluated as potential sources of interference?

- A. Manual dock doors
- B. Metal racking
- C. Pallet jacks
- D. Public address system/intercom

Correct Answer: D Section: (none) Explanation

### **Explanation/Reference:**

## **QUESTION 80**

A company wants to track personnel using RFID with a resolution within 10 feet (3.1 meters). Which of the following RFID systems would provide the BEST results?

- A. Active Real Time Locating System (RTLS)
- B. Passive ultra high frequency (UHF) RFID system with hand-held interrogators
- C. Passive high frequency (HF) RFID system with interrogators at entry points
- D. Global Positioning System (GPS)

Correct Answer: A Section: (none) Explanation

### **Explanation/Reference:**

## **QUESTION 81**

Cases are going to be tagged and stored in a humid, high temperature area. Which of the following types of labels would be needed?

- A. Poly-coated with gum adhesive.
- B. Direct thermal with gum adhesive.
- C. Poly-coated with water base adhesive.
- D. Paper with gum adhesive.

Correct Answer: A Section: (none) Explanation

### **Explanation/Reference:**

#### **QUESTION 82**

When testing for best placement of a tag on a case of liquid product such as water, look for:

- A. dynamic air gaps.
- B. no air gaps.
- C. null air gaps.
- D. static air gaps.

Correct Answer: D Section: (none) Explanation

## **Explanation/Reference:**

#### **QUESTION 83**

Within an office environment, a property manager must place an RFID tag on all assets with a value of greater than \$100. The tags must cost less than \$10 each; be able to store a maximum of one kilobit of data and read with a portable interrogator. When performing inventory, the manager is unable to move the assets to interrogate the tags. The RFID tags used should be applied to the front of the asset with an adhesive strong enough to prevent tag removal and be:

- A. a passive13.56 MHz tag.
- B. a Surface Acoustic Wave (SAW) tag.
- C. an active Class 1 Gen 2 tag.
- D. a passive Class 0 tag.

Correct Answer: A Section: (none) Explanation

### **Explanation/Reference:**

### **QUESTION 84**

Which of the following RFID tags is BEST used for tracking in-transit assets carrying explosives?

- A. Active tags using power less than one milliwatt with an interrogator system strategically installed along a predetermined route.
- B. Active tags using power in excess of 15 milliwatts and an interrogator system strategic installed on a predetermined route.
- C. Passive tags that require the interrogator to be placed less than 9.7 feet (2.9 meters) from the tagged asset.
- D. Passive tags using strategically installed modulated backscatter interrogators.

Correct Answer: A Section: (none) Explanation

## **Explanation/Reference:**

### **QUESTION 85**

Ideally, as a tag passes though the antenna read window it should be:

- A. inside metal foil.
- B. on the same plane as the antenna.
- C. at least 30 feet (9.3 meters) from the antenna.
- D. facing away from antenna.

Correct Answer: B Section: (none) Explanation

## **Explanation/Reference:**

### **QUESTION 86**

Which of the following RFID tags would be BEST for inconspicuous tagging of assets containing a maximum of eight bytes of data and are inductively coupled?

- A. Active 433.92 MHz tag with strategically installed fixed interrogators.
- B. Passive 13.56 MHz tag that is affixed to the asset and camouflaged requiring continuous loop interrogation.
- C. Passive Gen 2 tag requiring line of sight backscatter interrogation.
- D. Active 433.92 MHz tag requiring modulated backscatter interrogation.

Correct Answer: B Section: (none) Explanation

## **Explanation/Reference:**

# **QUESTION 87**

Tags applied in a frozen food manufacturer's process are falling off the products before they leave the freezer. Which of the following is MOST likely the source of the problem?

- A. The adhesive used is not appropriate for the cold environment.
- B. The food is thawing, creating moisture under the tag so it no longer sticks.
- C. The applicator is not properly applying the tags to the product.
- D. The RFID chip is heating up as it is being read.

Correct Answer: A Section: (none) Explanation

#### **Explanation/Reference:**

## **QUESTION 88**

When sending boxes into an interrogation zone where orientation cannot be assured, which of the following tags will MOST likely read successfully?

A. Single-dipole

- B. Phased-dipole
- C. Dual-dipole
- D. Keyed-dipole

Correct Answer: C Section: (none) Explanation

## **Explanation/Reference:**

### **QUESTION 89**

An organization has received a shipment of Electronic Product Code (EPC) Class 1 Gen 2 RFID tags from the manufacturer and is unable to read them with existing Class 1 interrogators. Which of the following actions should be taken FIRST?

- A. Perform a firmware upgrade.
- B. Enable dense reader mode.
- C. Replace the interrogators with updated models.
- D. Add an EPC decoder to the middleware.

Correct Answer: A Section: (none) Explanation

## **Explanation/Reference:**

## **QUESTION 90**

According to European Norm (EN) 302-208, installations address dense-reader environments using:

- A. interrogator talks first.
- B. Listen Before Talk (LBT).
- C. direct sequence spread spectrum.
- D. frequency hopping spread spectrum.

Correct Answer: B Section: (none) Explanation

# **Explanation/Reference:**

#### **QUESTION 91**

A few months after installing an active Real Time Locating System (RTLS) in a warehouse, several of the tags stop working. Which of the following is MOST likely the reason?

- A. The interrogator's frequency has inadvertently changed.
- B. The tags were placed too close to each other causing shadowing and coupling.
- C. The active tag was queried too often or set to transmit too often.
- D. The tag's frequency was inadvertently changed.

Correct Answer: C Section: (none) Explanation

## **Explanation/Reference:**

### **QUESTION 92**

A library wants to use RFID to track books, tapes and other materials, to automate the checkout process and track items leaving the library through a portal. Which of the following types of tags would BEST meet their requirements?

- A. Surface Acoustic Wave (SAW) tags
- B. Passive ultra high frequency (UHF) tags at 2450 MHz
- C. Passive high frequency (HF) tags at 13.56 MHz
- D. Passive low frequency (LF) tags at 125 kHz

Correct Answer: C Section: (none) Explanation

# **Explanation/Reference:**

#### **QUESTION 93**

When installing a dock door interrogator system, which of the following should be done after installation?

- A. Installation of interrogator power.
- B. Testing for interference.
- C. Assignment of network addresses.
- D. Backend application testing.

Correct Answer: D Section: (none) Explanation

## **Explanation/Reference:**

## **QUESTION 94**

Which of the following materials would cause the MOST attenuation of an RFID signal?

- A. Glass
- B. Green lumber
- C. Water
- D. Foam

Correct Answer: C Section: (none) Explanation

# **Explanation/Reference:**

### **QUESTION 95**

A container yard has been upgraded with an active RFID system for tracking containers moving to different locations within the yard. Recently, the system monitor has observed a decrease in interrogator reporting. Which of the following may be the cause of this change?

- A. The yard manager installed wooden walls to separate various areas within the yard.
- B. The company has introduced a new line of propane-powered forklifts in the yard.
- C. The 50 workers in the container yard were issued cellular telephones for reporting container conditions to the yard manager.
- D. The temperature in the area has dropped to 0 C (32 F) and this temperature has been sustained for the past 2 weeks.

Correct Answer: D Section: (none) Explanation

# **Explanation/Reference:**

#### **QUESTION 96**

A dense-reader interrogator:

- A. can operate near other interrogators using the same frequency.
- B. can resolve thousands of tags per second.
- C. will coexist with any number of other dense-reader interrogators.
- D. uses tag talks first access control.

Correct Answer: C Section: (none) Explanation

### **Explanation/Reference:**

#### **QUESTION 97**

A passive ultra high frequency (UHF) RFID system reading cartons on a conveyor stopped working when the conveyor speed was increased. Which of the following would be the FIRST action to take to adapt the system to high-speed operation?

- A. Add antennas to increase the time tags are in the interrogator field.
- B. Rotate the antennas to point toward the cartons as they travel.
- C. Move the light sensor away from the direction of travel.
- D. Increase the interrogator power.

Correct Answer: B Section: (none) Explanation

#### **Explanation/Reference:**

### **QUESTION 98**

A manufacturing plant uses plastic totes and attaches passive ultra high frequency (UHF) inserts to the totes for tracking purposes. A high percentage of the tags are failing. Which of the following is the MOST likely cause?

- A. There is electrostatic discharge (ESD) from the plastic totes.
- B. The ambient temperature of 50 C (122 F) is too high.
- C. The totes are damp causing the tags to short out.
- D. The interrogator antenna is too close to the tag.

Correct Answer: A Section: (none) Explanation

### **Explanation/Reference:**

### **QUESTION 99**

An interrogator mounted on the roof of a forklift must be connected to an antenna mounted on the movable load backrest. The BEST way to connect the antenna to the interrogator would be to use:

- A. a coil cord that will stretch with the movement of the forks.
- B. Bluetooth to avoid the physical connection.
- C. the cable guides available from the forklift manufacturer.
- D. a transition cable made with Category (CAT)-5 stranded cable where flexing will occur.

Correct Answer: C Section: (none) Explanation

### **Explanation/Reference:**

### **QUESTION 100**

RFID labels that were being printed correctly are now being printed with half the image area across two labels and the tags cannot be validated. Which of the following should the technician check FIRST?

- A. Sensor settings
- B. Print drivers
- C. Communications protocol
- D. Printer speed

Correct Answer: A Section: (none) Explanation

### **Explanation/Reference:**

### **QUESTION 101**

If an interrogator and associated antennas are located at a dock door with a desk for the traffic coordinator, which of the following may be a concern?

- A. The traffic coordinator may be over exposed to radio waves.
- B. The traffic coordinator would rely too much on the RFID data.
- C. The forklift drivers would have access to the interrogator data.
- D. The interrogator could not be connected to the network.

Correct Answer: A Section: (none) Explanation

#### **Explanation/Reference:**

#### **QUESTION 102**

The protocol used for control of the interaction between the tag and interrogator is known as the:

- A. air interface.
- B. network interface.
- C. cycle interface.
- D. data interface.

Correct Answer: A Section: (none) Explanation

## **Explanation/Reference:**

### **QUESTION 103**

In which of the following places would an RFID technician find the appropriate commands for reading and writing data to a 433.92 MHz active RF tag?

- A. Electronic Product Code (EPC) Tag Data Standard, 1.3
- B. EPC ultra high frequency (UHF) Gen 2 v. 1.0.9
- C. International Organization for Standardization/International Electrotechnical Commission (ISO/IEC) 18000-6, Part C
- D. (ISO/IEC) 18000-7

Correct Answer: D Section: (none) Explanation

### **Explanation/Reference:**

### **QUESTION 104**

Which of the following statements concerning health and safety issues with RFID systems is accurate?

- A. Long term exposure to passive tags has been shown to cause tumors.
- B. Exposure to passive tags has no detrimental effects.
- C. Regulations only apply if the system is exceeding manufacturer specifications.
- D. Equipment is harmful only if it is damaged.

Correct Answer: B Section: (none) Explanation

## **Explanation/Reference:**

# **QUESTION 105**

North America is in which of the following International Telecommunications Union (ITU) regulatory regions?

- A. 2
- B. 3
- C. One

Correct Answer: A Section: (none) Explanation

## **Explanation/Reference:**

### **QUESTION 106**

When installing a closed-loop active RFID system to track a manufacturing process, which of the following standards must be met?

- A. International Organization of Standardization (ISO) 9000
- B. EPCglobalInc. standard
- C. Standards are not required.
- D. Real Time Locating System (RTLS) standard

Correct Answer: C Section: (none) Explanation

## **Explanation/Reference:**

## **QUESTION 107**

The automotive industry has implemented more RFID tags in their automobile immobilizers than any other application. Which of the following is the dominant technology used?

- A. 13.56 MHz high frequency (HF)
- B. 125 150 kHz low frequency (LF)
- C. 2.45 GHz UHF
- D. 860 960 MHz ultra high frequency (UHF)

Correct Answer: B Section: (none) Explanation

# **Explanation/Reference:**

### **QUESTION 108**

Which of the following passive RFID air interface protocols uses a random number as part of the initial identification process?

- A. Electronic Product Code (EPC) Class 1 Gen 2
- B. EPC Class 1 v1
- C. ISO 15693
- D. International Organization for Standardization (ISO) 18000, Part 6b

Correct Answer: A Section: (none) Explanation

# **Explanation/Reference:**

#### **QUESTION 109**

Automated encode, print and apply printers are used:

- A. when cases are of assorted sizes.
- B. when labels need to be placed on the bottom of cases.
- C. for tagging individual produce items.
- D. for high volume manufacturing.

Correct Answer: D Section: (none) Explanation

## **Explanation/Reference:**

### **QUESTION 110**

In a portal application where it is desirable for the interrogator to be triggered to read at certain times, which of the following would be the preferred trigger method?

- A. Have an employee plug-in the interrogator at desired time.
- B. Use a camera focused on the portal so that the system administrator can trigger the interrogator.
- C. Have a linear antenna.
- D. Use a photo optic sensor.

Correct Answer: D Section: (none) Explanation

# **Explanation/Reference:**

### **QUESTION 111**

Printers should be installed to meet Electronic Product Code (EPC) compliance in manufacturing at the: (Select TWO).

- A. receiving area.
- B. finished case pack area.
- C. delivery area.
- D. palletization area.

Correct Answer: BD Section: (none) Explanation

## **Explanation/Reference:**

### **QUESTION 112**

When choosing an RFID enabled printer, which of the following questions should be asked FIRST? (Select TWO).

- A. Will the printer encode EPCglobalInc. 64-bit Class 0 tags?
- B. Does the printer support the tag being used in the application?
- C. Which interrogator is being used in the application?

D. Does the software generating the label format support the printer?

Correct Answer: BD Section: (none) Explanation

## **Explanation/Reference:**

### **QUESTION 113**

An RFID system is to be used in a conveyor belt operation where single boxes with RFID labels are to be read. Which of the following types of antennas would be MOST effective?

- A. Isotropic
- B. Circularly polarized
- C. Horizontally polarized linear
- D. Vertically polarized linear

Correct Answer: B Section: (none) Explanation

## **Explanation/Reference:**

### **QUESTION 114**

During identification cycles, in which of the following modes will interrogators respond to commands from the network host?

- A. Half-duplex
- B. Autonomous
- C. Interactive
- D. Amplitude modulation

Correct Answer: C Section: (none) Explanation

# **Explanation/Reference:**

### **QUESTION 115**

An RFID application at an automobile distributorship must be able to inventory the cars from a central location. Which one of the following RFID technologies would work BEST in this application?

- A. Active UHF
- B. Passive high frequency (HF)
- C. Passive ultra high frequency (UHF)
- D. Active surface acoustic wave (SAW)

Correct Answer: A Section: (none) Explanation

# **Explanation/Reference:**

#### **QUESTION 116**

When attaching a passive ultra high frequency (UHF) tag to an asset that is made of metal, the technician would need a standoff between the tag and the metal surface:

- A. to keep the tag cool by having an air gap between surfaces.
- B. so the tag is not detuned from the resonant frequency.
- C. to prevent the tag from being shorted out by the metal surface.
- D. because the magnetic properties of metals interferes with the tag transmitter.

Correct Answer: B Section: (none) Explanation

### **Explanation/Reference:**

### **QUESTION 117**

In a high frequency (HF) passive system, the anticipated read range should be:

- A. Less than 3.2 feet (one meter).
- B. Between 3.2 and 16 feet (one and 5 meters).
- C. Greater than 32 feet (10 meters).
- D. Between 16 and 32 feet (5 meters and 10 meters).

Correct Answer: A Section: (none) Explanation

### **Explanation/Reference:**

#### **QUESTION 118**

Passive RFID tags operating at 915 MHz can normally be read at:

- A. more than 322.6 feet (100 meters).
- B. close range only.
- C. several feet (meters).
- D. several inches (centimeters).

Correct Answer: C Section: (none) Explanation

## **Explanation/Reference:**

### **QUESTION 119**

For two passive RFID tags the size of a business card, where one uses high frequency (HF) and the other uses ultra high frequency (UHF) chip technology and a single interrogator antenna, which of the following statements is MOST accurate?

- A. The HF and UHF tags can be read at approximately the same range.
- B. The HF tag can be read at a range that is the radius of the interrogator's antenna.

- C. Neither tag will be read due to tag on tag air interface collisions.
- D. The UHF tag's read range is less than the HF tag.

Correct Answer: B Section: (none) Explanation

### **Explanation/Reference:**

#### **QUESTION 120**

An installed interrogator will not read a newly released tag format that the manufacturer claims the interrogator supports. All of the hardware appears to be functional. Which of the following steps should be taken to resolve this situation?

- A. Replace the failed antenna cable.
- B. Replace the interrogator.
- C. Upgrade the antenna's firmware.
- D. Upgrade the interrogator's firmware.

Correct Answer: D Section: (none) Explanation

## **Explanation/Reference:**

#### **QUESTION 121**

Common sources of static electricity generation in printer encoders include:

- A. unwinding the ribbon in low humidity environments.
- B. unwinding the facestock in high humidity environments.
- C. threading the facestock through the printer.
- D. mounting the facestock on the printer.

Correct Answer: A Section: (none) Explanation

### **Explanation/Reference:**

### **QUESTION 122**

When reviewing the data content of a tag, the data length is less than expected. The MOST likely cause of this would be that:

- A. power to the interrogator is shorting out.
- B. software filters are set too low.
- C. a tag constructed for fewer bits is being read.
- D. the battery pack in the interrogator needs to be changed.

Correct Answer: C Section: (none) Explanation

## **Explanation/Reference:**

### **QUESTION 123**

An RFID technician is troubleshooting an active RFID system to determine why an interrogator is not reading tags in its area of coverage. Which of the following actions should the technician take?

- A. Relocate all antennas and change all interrogators.
- B. Call the help desk; relocate antennas; change the interrogators; replace all tags.
- C. Check the power connection; check the local area network (LAN) connection; check the antenna connection; use a test tag.
- D. Check and replace the batteries on all tags in the field; change all interrogators.

Correct Answer: C Section: (none) Explanation

### **Explanation/Reference:**

### **QUESTION 124**

An RFID application using the Electronic Product Code (EPC) Class 1 Gen 2 protocol needs to read the EPC code from the tag. It reads 96 bits from the tag, but the last 4 bytes of the EPC code in Bank 1 are corrupted. Which of the following is MOST likely the cause of the problem?

- A. The access password must be non-zero.
- B. The Protocol Control (PC) bits indicate an EPC length of 64 bits.
- C. The tag can store only 64 bits.
- D. The EPC code is stored in Bank 2.

Correct Answer: B Section: (none) Explanation

## **Explanation/Reference:**

#### **QUESTION 125**

When verifying and troubleshooting low read rates at an installed site with fixed interrogators, it is BEST to use a:

- A. digital voltmeter.
- B. portable interrogator.
- C. bar code verifier.
- D. fixed antenna that can be moved from door to door.

Correct Answer: B Section: (none) Explanation

## **Explanation/Reference:**

### **QUESTION 126**

When installing equipment into a proposed interrogation zone based on the site diagram, a technician observes that the cooling fans at the dock doors are directly in the way of the dock stands requiring installation. Which of

the following actions should the technician take?

- A. Cancel the installation because there are physical constraints preventing them from completing the job as designed.
- B. Remove the fans; install the dock stands, and then remount the fans to the dock stands to complete the job.
- C. Remove the fans and place them on the floor just outside of the proposed interrogation zone.
- D. Contact the project manager to arrange a meeting with site management and determine the best solution.

Correct Answer: D Section: (none) Explanation

## **Explanation/Reference:**

#### **QUESTION 127**

When preparing for the installation of passive RFID forklift system, all of the following can be done EXCEPT:

- A. allowing ultra high frequency (UHF) and RF cabling to flex and bend with the movements of the forks.
- B. mounting antennas on the moving forks.
- C. mounting the RFID interrogator on the moving fork.
- D. routing serial cables with hydraulic tubes.

Correct Answer: A Section: (none) Explanation

# **Explanation/Reference:**

#### **QUESTION 128**

After viewing a site diagram, it is observed that the location of one of the interrogation zones is bisected by a steel door. Which of the following problems could this cause?

- A. Having steel doors amplifies the interrogator signal.
- B. With the doors closed, the signal strength would overload the interrogator.
- C. Tags on the other side of the closed door would be read more than once.
- D. If the door is closed, the interrogation area is reduced by one-half.

Correct Answer: D Section: (none) Explanation

## **Explanation/Reference:**

#### **QUESTION 129**

In a single-channel European Conference of Postal and Telecommunications Administration (CEPT) environment, interrogators operating in dense-reader mode are separated:

- A. logically.
- B. spectrally.
- C. temporally.
- D. physically.

Correct Answer: C Section: (none) Explanation

# **Explanation/Reference:**

## **QUESTION 130**

All of the following help solve multiple interrogator environment issues EXCEPT:

- A. separate transmit and receive channels.
- B. single side band modulation.
- C. using multi-protocol interrogators.
- D. using absorptive material.

Correct Answer: C Section: (none) Explanation

# Explanation/Reference:



http://www.gratisexam.com/