

# **Free Questions for CDCP by ebraindumps**

# Shared by Huff on 05-02-2024

**For More Free Questions and Preparation Resources** 

**Check the Links on Last Page** 

# **Question 1**

#### **Question Type:** MultipleChoice

What is a requirement of an FM200 (HFC-227) installation?

### **Options:**

A- It is a high-pressure gas; therefore nozzles must be mounted with two brackets.

- B- Drainage system under the raised floor.
- C- Install the gas containers (tanks) close to the data centre.
- **D-** Install pre-action sprinklers in the same room as the FM200.

### Answer:

А

### **Explanation:**

FM200 (HFC-227) is a clean agent fire suppression system that uses a high-pressure gas to extinguish fires by reducing the oxygen concentration and absorbing the heat. FM200 is stored in cylinders at pressures of up to 42 bar (600 psi) and is released through

nozzles into the protected area. Because of the high pressure, the nozzles must be mounted with two brackets to prevent them from moving or breaking during discharge. The brackets must be securely attached to the ceiling or wall and aligned with the nozzle outlet. The nozzle outlet must also be free of any obstructions that could affect the discharge pattern or distribution.

\* EPI Data Centre Professional (CDCP) Preparation Guide, page 32

\* FSL-227 Technical Manual, page 10

\* Firetrace ILP Manual, page 21

# **Question 2**

### **Question Type:** MultipleChoice

What is the recommended location for the Isolation Transformer in relation to the ICT-Equipment location?

### **Options:**

- A- The isolation transformer should be as close as possible to the ICT equipment but taking into account potential EMF.
- **B-** The isolation transformer should be as far away as possible to the ICT equipment to avoid potential EMF.
- **C-** The isolation transformer has to be installed within the power entry point of the building due to electrical code (regulation)

requirements.

D- The isolation transformer should be installed within the rack in which the ICT equipment has been installed.

#### Answer:

### А

### **Explanation:**

According to the EPI Data Centre Training Framework, an isolation transformer is a device that transfers electrical power from one circuit to another without changing the voltage or frequency, but providing galvanic isolation1. Galvanic isolation means that there is no direct electrical connection between the input and output circuits, which can prevent ground loops, reduce noise, and improve safety2. An isolation transformer can also provide voltage stepdown or stepup, create a local ground-bonded neutral, reduce harmonic currents, and provide taps for abnormal mains voltage3.

The location of the isolation transformer in relation to the ICT equipment depends on the purpose and design of the transformer. In general, the isolation transformer should be as close as possible to the ICT equipment, but taking into account potential EMF4. EMF is a form of electromagnetic interference (EMI) that can affect the performance and reliability of the ICT equipment5. The closer the isolation transformer is to the ICT equipment, the shorter the cable length and the lower the voltage drop and power loss4. However, the isolation transformer should also be far enough from the ICT equipment to avoid EMF, which can be reduced by using proper shielding, grounding, and spacing5.

The isolation transformer should not be installed as far away as possible to the ICT equipment, as option B suggests, because this would increase the cable length and the voltage drop and power loss4. The isolation transformer does not have to be installed within the power entry point of the building, as option C suggests, because this is not a requirement of the electrical code or regulation, and it may

not be optimal for the data centre power system. The isolation transformer should not be installed within the rack in which the ICT equipment has been installed, as option D suggests, because this would increase the heat load and the noise level in the rack, and it may not fit in the rack space.

# **Question 3**

#### **Question Type:** MultipleChoice

Can Electro Magnetic Fields (EMF) cause data centre failures?

### **Options:**

- A- Yes, high levels of EMF can cause data centre failures.
- B- No, only power issues will cause data centre failures.
- C- No, only cooling issues will cause data centre failures.
- D- Yes, but only EMF caused by lightning strikes.

#### Answer:

### **Explanation:**

According to the EPI Data Centre Training Framework, EMF is a form of electromagnetic interference (EMI) that can disrupt or damage the normal operation of electronic devices, such as servers, network cables, and IT equipment1. High levels of EMF can be generated by power equipment, cell phones, microwaves, TV and radio signals, etc., and can cause data corruption, data loss, system malfunction, and crashes23. Therefore, EMF can cause data centre failures and affect the availability, performance, and security of the data centre. To prevent or mitigate EMF, data centres should follow the best practices for data centre design, layout, cabling, grounding, shielding, and testing14.

### **Question 4**

**Question Type:** MultipleChoice

Does shielded twisted pair network cabling provide protection against EMF from power cables?

### **Options:**

A-Yes, but only if the power cable is placed in a tre-foil cable arrangement.

B- Yes, as the shielding for twisted pair network cabling is specifically design for low frequency EMF protection.

C-No, the shielding is designed for alien cross-talk between network cables, it provides no or little protection against low frequency EMF.

D- No, the shielding for twisted pair network cabling is for physical protection against vandalism and accidental cutting of the cable.

#### Answer:

С

### **Explanation:**

Shielded twisted pair cables (STP) are Ethernet cables that feature additional protection against electromagnetic interference from external sources, such as radio waves, microwaves, or other network cables. This is achieved by wrapping each pair of wires with a conductive shield, usually made of foil or braided wire, and then enclosing the entire cable with another shield layer. However, this shielding is not effective against low frequency electromagnetic fields (EMF) from power cables, which can induce currents and voltages in the network cables and cause signal distortion or data loss. Low frequency EMF can only be reduced by increasing the distance between the power and network cables, or by using a tre-foil cable arrangement, which is a special configuration of three power cables twisted together to cancel out the magnetic fields they generate.

### **Question 5**

**Question Type:** MultipleChoice

The temperature and humidity values indicated on the display of the Computer room air conditioner unit are the values measured at which point?

### **Options:**

A- It is the average value between the intake and exhaust (outlet) of the air conditioner.

B- It is the value measured at the intake of the air conditioner.

C- It is the value measured at the exhaust (outlet) of the air conditioner.

D- It is the value measured at the front of the rack of the aisle the air conditioner is situated.

### Answer:

В

### **Explanation:**

According to the IBM document on temperature and humidity design criteria1, the temperature and humidity values indicated on the display of the computer room air conditioner unit are the values measured at the intake of the air conditioner. This is because the intake is where the air conditioner draws the air from the computer room and cools and dehumidifies it before sending it back to the computer room. The display shows the current conditions of the computer room air, which are used to adjust the cooling and dehumidifying operations of the air conditioner. The values measured at the exhaust (outlet) of the air conditioner are not displayed, as they are not relevant for the computer room environment. The values measured at the front of the rack of the aisle the air conditioner is situated are

also not displayed, as they may vary depending on the distance and location of the rack. The average value between the intake and exhaust (outlet) of the air conditioner is not displayed, as it does not reflect the actual conditions of the computer room air or the air conditioner performance.

# **Question 6**

**Question Type:** MultipleChoice

What is the purpose of a service corridor?

### **Options:**

A- To create a secure and conditioned environment where media can be stored in a controlled manner.

**B-** It is a generic name for pathways leading to other rooms that contains facility supporting equipment like the UPS room, battery room, generator room etc.

C- It provides a safe, vented and secure area where standby generators can operate safely.

**D-** It provides a secure area where supporting facilities can be serviced and monitored on a 24x7 basis without disturbing the computer room.

#### Answer:

D

### **Explanation:**

A service corridor is a dedicated space within or adjacent to a data centre that allows access to the supporting facilities, such as power, cooling, fire suppression, security, and cabling systems, without interfering with the computer room operations. A service corridor helps to isolate the noise, vibration, heat, and dust generated by the supporting facilities from the sensitive equipment in the computer room. A service corridor also enhances the safety and efficiency of the maintenance and monitoring activities, as well as the flexibility and scalability of the data centre design.

### **Question 7**

**Question Type:** MultipleChoice

Does unplanned downtime of a data centre have an impact on the business results?

### **Options:**

- A- No, because data centres operate independently from the business.
- B- No, unplanned data centre downtime is already financially planned for in the yearly budget planning process.
- C- Yes, data centre downtime can result in business downtime.
- D- Yes, but data centre downtime only impacts the airline industry.

### Answer:

С

### **Explanation:**

Data centres are essential for supporting the IT operations and applications of various businesses across different industries. Data centre downtime can have a negative impact on the business results, such as loss of revenue, customer satisfaction, productivity, reputation, and competitive advantage. According to a web search, the average cost of data centre downtime in 2020 was \$8,851 per minute, and the average duration of a data centre outage was 95 minutes1. This means that a typical data centre outage could cost a business over \$840,000 in direct and indirect losses1. Therefore, data centre downtime can have a significant impact on the business results, regardless of the industry or sector.

# **Question 8**

**Question Type:** MultipleChoice

### **Options:**

- A- Anywhere as data centre tiles are designed to allow cut-outs anywhere.
- B- Draw a cross on the tile and when making a cut-out do not touch a line and avoid the corners.
- C- Draw a line in the middle of the tile and never touch the line when making the cut.
- **D-** Cut the tiles at the corner so the pedestals can be used as a vertical cable manager.

### Answer:

В

### **Explanation:**

According to the Raised Floor Installation Manual, the best practice for cutting holes in the raised floor tile is to draw a cross on the tile and when making a cut-out do not touch a line and avoid the corners1. This ensures that the structural integrity and load-bearing capacity of the tile are not compromised. Cutting holes anywhere, touching the line, or cutting the corners can weaken the tile and cause it to crack or collapse1. Additionally, the manual recommends using a drill press or a reciprocating saw with a metal or bi-metal cutting blade, and deburring all sharp edges1.

# **Question 9**

#### **Question Type:** MultipleChoice

What needs to be installed in the battery room when using Lithium-ion batteries?

### **Options:**

A- A battery management system to monitor and prevent unsafe temperatures during charging/discharging.

**B-** High capacity air-conditioning equipment since Lithium-ion batteries are sensitive to high temperatures, which can reduce their lifetime.

C- A proper ventilation system since Lithium-ion batteries produce highly flammable Hydrogen gas during charging.

D- A proper supply of distilled water.

### Answer:

А

### **Explanation:**

According to the EPI Data Centre Training Framework, lithium-ion batteries are becoming more popular in data centres due to their higher energy density, longer lifespan, and lower maintenance costs compared to lead-acid batteries1. However, lithium-ion batteries

also have some drawbacks, such as higher initial cost, stricter safety requirements, and potential thermal runaway risks1. Therefore, a battery management system (BMS) is essential to monitor and control the voltage, current, temperature, and state of charge of each battery cell or module, and to prevent overcharging, over-discharging, or overheating23. A BMS can also communicate with the UPS system and provide information on the battery status, performance, and health2.

### **Question 10**

#### **Question Type:** MultipleChoice

Where should exit/emergency signs be located?

### **Options:**

- A- Depends on the policy of the data centre
- B- At every escape door and pathways leading to doors (arrows)
- C- In the Computer room only
- D- At each door

### Answer:

#### **Explanation:**

According to the EPI Data Centre Operations Standard (DCOS), exit/emergency signs should be located at every escape door and pathways leading to doors (arrows) to ensure a safe and quick evacuation in case of an emergency1. This is also consistent with the best practices for data centre emergency preparedness and response, which recommend having a clear and visible signage system for emergency exits23.

## **Question 11**

### **Question Type:** MultipleChoice

IP protection grades consist of two numbers.

Which levels of protection do they describe and what is the best protection?

### **Options:**

A- First digit; protections against the ingress of solid objects. Second digit; protection against ingress of water/fluids. The lower the number the better the level of protection.

**B-** First digit; protections against the ingress of solid objects. Second digit; protection against ingress of water/fluids. The higher the number the better the level of protection.

**C-** First digit; protections against the ingress of water/fluids. Second digit; protection against ingress of solid objects. The higher the number the better the level of protection.

**D-** First digit; protections against the ingress of water/fluids. Second digit; protection against ingress of solid objects. The lower the number the better the level of protection.

#### Answer:

#### В

### **Explanation:**

IP protection grades are a way of showing the effectiveness of electrical enclosures in blocking foreign bodies such as dust, moisture, liquids, and accidental contact. IP stands for Ingress Protection or International Protection, and it is defined by the international standard IEC 60529. IP ratings consist of the letters IP followed by two digits and an optional letter. The first digit indicates the level of protection the enclosure provides against access to hazardous parts and the ingress of solid foreign objects. The second digit indicates the level of protection the enclosure provides against the ingress of water or fluids. The higher the number, the better the level of protection. For example, IP65 means the enclosure is dust-tight and can withstand water jets from any direction. IP68 means the enclosure is dust-tight and can withstand water jets from any direction.

### **To Get Premium Files for CDCP Visit**

https://www.p2pexams.com/products/cdcp

For More Free Questions Visit

https://www.p2pexams.com/exin/pdf/cdcp

