



Up-to-date Practice Test with Latest Questions and Answers covering latest syllabus and topics of the exam. Makes you ready to face actual exam.



CDCP Practice Questions
CDCP Practice Test
CDCP Practice Exam
CDCP Exam Questions
CDCP Study Guide



killexams.com

EPI

CDCP

EPI Certified Data Center Professional

ORDER FULL VERSION

<https://killexams.com/pass4sure/exam-detail/CDCP>



Question: 738

In the implementation of redundancy strategies, what is the primary advantage of adopting a 2N configuration over an N+1 configuration?

- A. 2N configurations are less costly and easier to manage.
- B. 2N configurations require less maintenance.
- C. N+1 configurations can only handle half the operational load during a failure.
- D. 2N configurations provide complete independence for each component, eliminating shared risks.

Answer: D

Explanation: A 2N configuration offers complete independence for each component, reducing shared risks and enhancing overall reliability during failures.

Question: 739

During a data centre renovation, you are tasked with installing a new row of server racks, each weighing 1200 kg, on a raised floor designed to support a uniform load of 12 kN/m². The floor area for the row is 10 m², and the racks are evenly spaced. However, a structural engineer flags that the uniform load rating assumes no dynamic factors. If the racks are installed simultaneously using a pallet truck with a rolling load capacity requirement of 8 kN per wheel, and the truck has four wheels, what is the primary concern for the raised floor integrity?

- A. The plenum space airflow disrupts load distribution
- B. The uniform load of the racks exceeds the floor's static capacity
- C. The concentrated load at each rack base violates pedestal ratings
- D. The rolling load per wheel exceeds the floor's dynamic load capacity

Answer: D

Explanation: To assess the primary concern, calculate the uniform load and evaluate the rolling load. The total weight of the racks is not specified in number, but assume they cover 10 m² evenly. Uniform load is given as 12 kN/m², equivalent to 1200 kg/m² (since 1 kN ≈ 100 kg). The floor can support 12 kN/m² × 10 m² = 120 kN total. If each rack is 1200 kg (11.76 kN), multiple racks could fit within this limit, so uniform load is likely not exceeded. However, the pallet truck's rolling load is critical. Each wheel must support 8 kN, and with four wheels, the total rolling load is 32 kN. Raised floors typically have lower rolling load capacities than static uniform loads, often around 4-6 kN per wheel for standard floors. Exceeding this per-wheel dynamic load risks damaging floor tiles or pedestals, making the rolling load the primary concern.

Question: 740

A data center's Category 6A patch panel supports 25GBASE-T over a 90-meter channel. The panel uses T568-B terminations, and cables are bundled with nylon ties every 150 mm. Testing reveals a return loss failure at 400 MHz (Exhibit H: Measured = 11.0 dB, Limit = 12.5 dB). What is the most likely cause?

- A. Excessive patch cord length
- B. Incorrect T568-A termination
- C. Patch panel crosstalk
- D. Tight bundling causing cable stress

Answer: D

Explanation: Return loss failures indicate reflections, often due to cable stress from tight bundling. TIA-568-C.2 recommends loose bundling with hook-and-loop straps to avoid compression. Nylon ties every 150 mm likely cause excessive stress, reducing return loss. T568-A is valid, crosstalk affects NEXT, and patch cord length is not indicated as excessive.

Question: 741

Your organization is aligning its data centre with ISO 27001:2013. During a risk assessment per clause 6.1.2, you identify a vulnerability in the biometric access control system, which lacks a liveness detection feature, increasing the risk of spoofing. The system logs all access attempts to a SIEM with AES-256 encryption. What is the most effective control to mitigate this risk while complying with ISO 27001?

- A. Replace biometrics with RFID card access
- B. Encrypt access logs with AES-512
- C. Add liveness detection to the biometric system
- D. Implement video surveillance at entry points

Answer: C

Explanation: ISO 27001 requires risk treatment through appropriate controls. Liveness detection directly addresses the spoofing vulnerability in biometrics, enhancing access control security per clause 6.1.2. RFID cards may introduce other risks, AES-512 is not standard and unnecessary, and surveillance is a detective, not preventive, control.

Question: 742

A data centre retrofits a suspended ceiling for a CO2 fire suppression system. The ceiling must support 75 kg/m², including piping, and meet aesthetic standards for Tier III audits. The room is 4.1m high, with a 1m raised floor. Which ceiling configuration ensures compliance?

- A. 600mm x 600mm acoustic tiles, 80 kg/m², nozzles hidden.
- B. 1200mm x 600mm metal grid, 80 kg/m², nozzles integrated.
- C. 600mm x 1200mm gypsum panels, 70 kg/m², nozzles surface-mounted.
- D. 600mm x 600mm fiberglass tiles, 65 kg/m², nozzles exposed.

Answer: B

Explanation: The ceiling must support 75 kg/m², ruling out 70 kg/m² and 65 kg/m² options. Hidden nozzles in acoustic tiles delay CO₂ dispersion, per NFPA 12, risking failure. A 1200mm x 600mm metal grid with 80 kg/m² capacity meets the load, and integrated nozzles ensure rapid gas delivery while maintaining a polished aesthetic for Tier III audits. Gypsum panels or exposed nozzles compromise visuals, and surface-mounted designs may obstruct flow, making the metal grid optimal.

Question: 743

If a data center's operations team implements a new incident response protocol to handle cooling system failures, what key performance indicator (KPI) should they focus on to measure its effectiveness?

- A. Average Resolution Time for incidents
- B. Total number of incidents reported
- C. Frequency of system upgrades
- D. Employee satisfaction ratings

Answer: A

Explanation: Average Resolution Time for incidents is a critical KPI that reflects how quickly the team can respond to and resolve issues, directly impacting the effectiveness of the incident response protocol.

Question: 744

To improve PUE from 2.0 to 1.4, a data centre with a 500 kW IT load upgrades its UPS to 95% efficiency and reduces cooling power by 20%. Current total power is 1000 kW, with cooling at 50% of non-IT power. What is the new total power consumption after upgrades?

- A. 625 kW
- B. 675 kW
- C. 700 kW
- D. 750 kW

Answer: C

Explanation: Non-IT power = 1000 - 500 = 500 kW. Cooling = 500 × 0.5 = 250 kW. New cooling power = 250 × 0.8 = 200 kW. UPS input power = 500 ÷ 0.95 = 526.32 kW. Other non-IT power = 500 - 250 = 250 kW, assume unchanged. New total = 500 (IT) + 200 (cooling) + 26.32 (UPS loss) + 250 - 250 = 700 kW.

Question: 745

In disaster recovery planning, which of the following statements accurately describes the Recovery Time Objective (RTO)?

- A. It specifies the maximum acceptable data loss after a disaster.
- B. It defines the time needed for routine preventive maintenance.
- C. It outlines the time required to restore all operations after a disruption.
- D. It indicates the frequency of data backups.

Answer: C

Explanation: The Recovery Time Objective (RTO) outlines the time required to restore all operations after a disruption, guiding recovery efforts.

Question: 746

A data centre for a defense contractor experiences a 3-hour outage when a technician misconfigures a firewall, blocking critical communications worth \$10 million. What high-availability feature could have mitigated this?

- A. Enhanced cooling systems
- B. Redundant network paths
- C. Change management protocols
- D. Additional UPS capacity

Answer: C

Explanation: A firewall misconfiguration causing an outage indicates a lack of change management protocols, which ensure controlled updates to prevent errors. Network paths, cooling, and UPS capacity are unrelated to configuration mistakes.

Question: 747

If a rolling load of 1000 kg experiences an impact factor of 2 during movement, what is the effective load on the floor?

- A. 1500 kg
- B. 2000 kg
- C. 1000 kg
- D. 2500 kg

Answer: B

Explanation: The effective load is calculated as the weight multiplied by the impact factor: $1000 \text{ kg} * 2 = 2000 \text{ kg}$.

Question: 748

In a Tier IV data center, you are tasked with designing a structured cabling system compliant with

ANSI/TIA-568-C.2 to support 400GBASE-SR8 Ethernet over a 100-meter channel. The client requires a copper-based solution with minimal latency for intra-rack connectivity, and the system must adhere to the latest standards for twisted-pair cabling. After reviewing the requirements, you calculate the maximum allowable insertion loss for a Category 6A channel at 500 MHz to be 20.7 dB. Which of the following configurations ensures compliance with TIA-568-C.2 while meeting the 400GBASE-SR8 requirements?

- A. Category 5e UTP with T568-A configuration, 85-meter permanent link, and 15-meter patch cords
- B. Category 6 UTP with T568-A configuration, 80-meter permanent link, and 20-meter patch cords
- C. Category 7 S/FTP with T568-B configuration, 100-meter permanent link, and no patch cords
- D. Category 6A UTP with T568-B configuration, 90-meter permanent link, and 10-meter patch cords

Answer: D

Explanation: For 400GBASE-SR8, copper cabling is not typically used due to its high bandwidth and distance limitations; however, the question specifies a copper-based solution, implying a hypothetical scenario where Category 6A or higher is considered. ANSI/TIA-568-C.2 defines Category 6A as suitable for up to 10 Gbps over 100 meters, with a maximum insertion loss of 20.7 dB at 500 MHz for a channel. Category 6A UTP with T568-B configuration supports this, and a 90-meter permanent link with 10-meter patch cords fits within the 100-meter channel limit. Category 6 UTP is limited to 1 Gbps at shorter distances, Category 7 is not recognized by TIA for this application, and Category 5e cannot support high-speed Ethernet beyond 1 Gbps.

Question: 749

When a data center experiences a cooling system failure, which immediate action should be prioritized to protect hardware assets?

- A. Begin a system-wide shutdown
- B. Increase the temperature setting on the thermostats
- C. Notify upper management of the incident
- D. Activate auxiliary cooling systems

Answer: D

Explanation: Activating auxiliary cooling systems immediately helps protect hardware assets from overheating, reducing the risk of damage and subsequent downtime.

Question: 750

A plenum with 10 m³/s airflow at 25 Pa has a 750 mm height. A 10% height reduction occurs. What's the new airflow at constant pressure?

- A. 8.5 m³/s
- B. 10 m³/s
- C. 11 m³/s

D. 9 m³/s

Answer: D

Explanation: 10% height reduction lowers area by 10%. Airflow: $10 \text{ m}^3/\text{s} \times 0.9 = 9 \text{ m}^3/\text{s}$.

Question: 751

Your organization is designing a new data centre to support critical financial transactions with zero tolerance for downtime. The Uptime Institute Tier IV certification is targeted to ensure fault tolerance. During the design phase, you are tasked with validating the power distribution architecture. The proposed design includes dual independent utility feeds, each with its own dedicated generator and UPS system, and a cooling system with N+2 redundancy. The client requires that any single component failure, including a utility feed, must not disrupt operations. Based on the Uptime Institute Tier IV requirements, which aspect of the design must be further evaluated to ensure compliance?

- A. The cooling system's N+2 redundancy level
- B. The capacity of the UPS systems to handle peak loads
- C. The ability of the system to isolate a failed utility feed without impacting the other
- D. The generator fuel storage duration

Answer: C

Explanation: Tier IV requires fault tolerance, meaning no single failure, including a utility feed, can disrupt operations. The design must ensure complete isolation between dual utility feeds so a failure in one does not cascade to the other, maintaining continuous power to critical loads. While cooling redundancy, UPS capacity, and fuel storage are important, they are secondary to ensuring fault-tolerant power distribution, which is the core of Tier IV compliance.

Question: 752

During a power outage, a data centre's 1500 kW diesel generator fails to start due to a faulty fuel pump. The facility has a 2N redundant power path with two generators per path, each rated at 1500 kW. The IT load is 900 kW, and ancillary systems (cooling, lighting) consume 300 kW. The ATS is set to prioritize Generator A1, with Generator A2 as failover. If Generator A1 fails, and Generator A2 starts successfully, what is the impact on the power supply, assuming the UPS batteries can support the load for 15 minutes?

- A. No interruption; UPS bridges the gap
- B. Brief interruption; ATS transfer delay
- C. Prolonged outage; insufficient capacity
- D. No interruption; redundant path activates

Answer: A

Explanation: In a 2N setup, each power path (A and B) supports the full load independently. Path A has

Generators A1 and A2. If A1 fails, A2 starts, and the ATS transfers the load. The UPS batteries cover the load (900 kW + 300 kW = 1200 kW) during the generator start-up (typically 10-15 seconds), ensuring no interruption. Generator A2's 1500 kW capacity exceeds the 1200 kW load, maintaining full power supply.

Question: 753

A data center is implementing a structured cabling system to support 10GBASE-T over Category 6A, adhering to TIA-568-C.2. The channel includes a 95-meter permanent link and a 5-meter patch cord, terminated at a Category 6A patch panel. During certification, the tester reports a power sum alien crosstalk (PSANEXT) failure at 250 MHz (Exhibit C: PSANEXT = 60.0 dB, Limit = 62.5 dB). Which mitigation strategy ensures compliance?

- A. Reduce the permanent link to 80 meters
- B. Separate adjacent cables by 50 mm in trays
- C. Replace the patch cord with Category 5e
- D. Reconfigure the patch panel to T568-A

Answer: B

Explanation: PSANEXT failures in Category 6A systems often result from crosstalk between adjacent cables, especially in high-density environments. TIA-568-C.2 requires a minimum PSANEXT of 62.5 dB at 250 MHz for 10GBASE-T. Separating cables by 50 mm in trays reduces alien crosstalk, ensuring compliance. Reducing link length may help marginally but doesn't address the root cause. Category 5e cannot support 10GBASE-T, and reconfiguring to T568-A is irrelevant to PSANEXT.

Question: 754

In a data center with a Mean Time Between Failures (MTBF) of 8,000 hours, if a server fails every 2,000 hours, what is the MTTR if the average repair time is 4 hours?

- A. 0.1%
- B. 0.05%
- C. 0.2%
- D. 0.25%

Answer: A

Explanation: MTTR as a percentage of MTBF is calculated as $(\text{MTTR} / \text{MTBF}) * 100 = (4 / 2,000) * 100 = 0.2\%$.

Question: 755

During a load test, a concentrated load of 500 kg is applied on a small area of 0.1 m². What is the stress on the flooring in kg/m²?

- A. 4000 kg/m²
- B. 5000 kg/m²
- C. 6000 kg/m²
- D. 7000 kg/m²

Answer: B

Explanation: Stress is calculated by dividing the load by the area: $500 \text{ kg} / 0.1 \text{ m}^2 = 5000 \text{ kg/m}^2$.

Question: 756

A data center is deploying a patch panel for Category 6A cabling to support 40GBASE-T over a 90-meter channel. The panel must comply with TIA-568-C.2 and accommodate 48 ports in a 1U rack space. During installation, you notice the patch cords have a 6-mm diameter and are routed through a cable manager with a 20-mm radius. Which adjustment ensures compliance with TIA standards?

- A. Reduce the patch cord length to 3 meters
- B. Increase the cable manager radius to 24 mm
- C. Use a 2U patch panel to reduce density
- D. Replace patch cords with 28 AWG cables

Answer: B

Explanation: TIA-568-C.2 specifies a minimum bend radius of 4 times the cable diameter for Category 6A cables. For a 6-mm diameter patch cord, this is $4 \times 6 = 24 \text{ mm}$. A 20-mm radius cable manager violates this, risking signal degradation. Increasing the radius to 24 mm ensures compliance. Reducing cord length is irrelevant, a 2U panel doesn't address bending, and 28 AWG cables have higher loss and are not standard for 40GBASE-T.

Question: 757

A Tier IV data centre you manage uses dual-path power distribution. During a fault tolerance test, one path's transformer fails, but critical loads remain operational. However, non-critical lighting experiences a 1-second outage. Per Uptime Institute standards, what should be corrected?

- A. Segregate critical and non-critical loads
- B. Upgrade transformer capacity
- C. Add a second transformer to the failed path
- D. Implement faster fault detection

Answer: A

Explanation: Tier IV ensures no disruption to critical loads, but non-critical loads should not impact critical systems. The lighting outage indicates improper load segregation, allowing non-critical systems to share the critical path. Transformer capacity, redundancy, and detection speed are less relevant if segregation is addressed.

Question: 758

During construction of a 12 MW data center, the soil bearing capacity is found to be 150 kPa, not 175 kPa, due to a silt layer. The foundation is designed for 13 kN/m², and the site has a 1.5% annual tornado risk. The building includes a 5-meter server room. What is the top pitfall?

- A. Tornado risk
- B. Reduced soil capacity
- C. Silt layer impact
- D. Server room height

Answer: B

Explanation: The 150 kPa soil capacity is insufficient for the 13 kN/m² load (130 kPa), risking settlement. Tornado risk is secondary, the silt layer is a cause, and room height is irrelevant. Addressing the bearing capacity is critical.

Question: 759

A data centre supporting a stock exchange uses an N+1 PDU configuration. A PDU failure causes a 30-minute outage, halting trades worth \$100 million. What high-availability upgrade should be considered?

- A. Install additional generators
- B. Increase cooling capacity
- C. Upgrade to 2N PDU configuration
- D. Enhance network security

Answer: C

Explanation: A PDU failure in an N+1 system indicates insufficient redundancy for critical operations. Upgrading to 2N provides fully redundant power paths, ensuring high availability. Cooling, generators, and security are unrelated to the PDU failure.

Killexams.com is a leading online platform specializing in high-quality certification exam preparation. Offering a robust suite of tools, including Exam Questions, practice tests, and advanced test engines, Killexams.com empowers candidates to excel in their certification exams. Discover the key features that make Killexams.com the go-to choice for exam success.



Practice Exam Questions Based on Current Exam Objectives

Killexams.com provides practice exam questions aligned with the latest official exam objectives and latest syllabus. Our content is reviewed and updated regularly to reflect recent changes announced by certification vendors. By studying these practice questions, candidates will cover the structure, difficulty level, and topics of the actual exam, helping them prepare more effectively and efficiently.

Comprehensive Practice Exams (PDF Format)

Killexams.com offers multiple-choice questions (MCQs) in easy-to-read PDF format, covering all major domains of the exam. Each PDF contains a structured collection of practice questions and verified answers designed to support focused study. These MCQs help candidates reinforce key concepts, identify knowledge gaps, and improve exam readiness through consistent practice.

Realistic Practice Tests (Online Test Engine & Desktop Test Engine)

To support hands-on preparation, Killexams.com provides practice tests through both an Online Test Engine and a Desktop Test Engine. These tools are designed to simulate a real exam environment, allowing candidates to practice under exam-like conditions, with latest syllabus and topics of the exam. Performance tracking, test history, and result analysis help users evaluate their progress and focus on areas that need improvement.

Risk-Free Purchase Policy

Killexams.com follows a transparent and customer-friendly purchase policy. If users are not satisfied with the study materials, they may request assistance or a refund in accordance with our published terms and conditions. This policy reflects our commitment to customer satisfaction, fairness, and confidence in our preparation resources.

Regularly Updated Content

Our practice question bank is reviewed and updated on an ongoing basis to stay aligned with the latest exam outlines and vendor updates. This ensures candidates are studying up-to-date, relevant material, and preparing with content that reflects current exam expectations, helping them stay confident and well-prepared.