BICSI

Exam Questions DCDC-002

BICSI Data Center Design Consultant - DCDC

NEW QUESTION 1
What are the factors that affect availability?

A. Operational Requirements
B. Operational Availability
C. Impact of Downtime
D. All of the above

Answer: D

NEW QUESTION 2
Where should power cable be ran in an access floor?

A. Hot aisle
B. Cold aisle
C. Above the access floor
D. Below the access floor

Answer: B

NEW QUESTION 3
What is the recommended clearance space required for hot and cold aisles in a data center?

A. 1-2 feet
B. 3-4 feet
C. 5-6 feet
D. 7-8 feet

Answer: B

NEW QUESTION 4
What are the 2 minimum thicknesses of regular floor slabs?

A. 4 inches and 6 inches
B. 6 inches and 8 inches
C. 8 inches and 10 inches
D. 10 inches and12inches

Answer: B

NEW QUESTION 5
What should be done with unused rack space?

A. it should be filled with blanking devices to reduce non-functional airflow
B. it should be used for additional storage purposes
C. it should be left open to allow for better ventilation
D. they should be turned off to save energy costs

Answer: A

NEW QUESTION 6
What is the clearance required between the cold aisle and the CRAC unit?

A. 2 feet
B. 4 feet
C. 6 feet
D. 8 feet

Answer: D

NEW QUESTION 7
Apart from Power usage effectiveness or P U E, and Data center infrastructure Efficiency Or D C i E, what other standardized measurements are there for data center efficiency?

A. None of The Above.
B. Energy efficiency Ratio.
C. Return temperature index.
D. All of the above

Answer: D

NEW QUESTION 8
What is the benefit to locating the power distribution unit supporting equipment outside the computer room

A. maintenanc
B. activities are not taking place inside critical computer roomspace
C. Allows for easier access by IT staff during maintenance tasks
D. Enables greater energy efficiency
E. None of the above

Answer: A

NEW QUESTION 9
What is the recommended level of redundancy for a critical power system in a Tier III data center?

A. N
B. N+1
C. 2N
D. 2N+1
E. 3N

Answer: B

NEW QUESTION 10
What are the 3 types of Authentication for access control?

A. Type 4 - What you possess
B. Type 5 - What you desire
C. Type 6 - What you create
D. Type 1 - What you have Type 2 - What you know Type 3 - What you are

Answer: D

NEW QUESTION 10
What is the preferred location of the power distribution unit?

A. a service gallery outside the computer room, if the A H J and feeder distances allow
B. under each server rack
C. in an unused area of another floor
D. inside a ventilation duct

Answer: A

NEW QUESTION 12
Why do larger data centers require more H DAs?

A. to ensure maximum horizontal cable lengths are not exceeded and to avoid cable congestion
B. to reduce energy consumption and carbon footprint
C. to increase server processing speed by minimizing latency
D. to provide redundancy and failover mechanisms

Answer: A

NEW QUESTION 14
what room should the battery room be adjacent to?

A. the electrical Room
B. computing Room
C. Mechanical Room
D. Security Rooms
E. Non-combustible materials
F. all

Answer: A

NEW QUESTION 19
What is the Fourth Preference Regarding Utility Service?

A. At least two circuits from one substation fed via alternative power grid
B. Two balanced feeds with different voltages derived from a single distribution station
C. One circuit from one substation, separate paths
D. At least four circuits each from different distribution stations but fed via common feeders

Answer: C

NEW QUESTION 21
What is the minimum separation distance of underground telecommunications and utility cabling in same route?

A. 2 feet minimum along entire route

B. 6 feet minimum along entire route
C. no need for separation as long as they are enclosed in different conduit systems.
D. none of the above

Answer: B

NEW QUESTION 24
What is the appropriate fire rating requirements for a command center?

A. 1/2 hour
B. 1 hour
C. 2 hours
D. 3 hours

Answer: B

NEW QUESTION 26
What is typically considered the demarcation point for electrical utility at a data center?

A. The transformer
B. The UPS
C. The generator
D. The switchboard

Answer: A

NEW QUESTION 28
What is the ASHRAE TC 9.9 recommended range for humidity levels in a data center?

A. 20-50%
B. 40-60%
C. 60-80%
D. 80-100%

Answer: B

NEW QUESTION 32
What is the clearance required between AC units?

A. Mi
B. of 2 ft but recommended 6 ft.
C. Mi
D. of 4 ft but recommended 6 ft.
E. Mi
F. of 6 ft but recommended 8 ft.
G. Mi
H. of 8 ft but recommended 10 ft.

Answer: B

NEW QUESTION 36
What is the appropriate fire rating requirements for an electrical room?

A. 1/2 hour
B. 1 hour
C. 2 hours
D. 3 hours

Answer: B

NEW QUESTION 40
Why are H DAs more often required in data centers?

A. they avoid cable congestion
B. they improve fire suppression system
C. they minimize noise pollution
D. they enhance cooling effectiveness

Answer: A

NEW QUESTION 43
What is the minimum height of a ceiling in a data center or telecommunications room?

A. Five feet from finished floor to any obstruction, sprinklers, lighting
B. eight feet from finished floor to any obstruction, sprinklers, lighting

C. ten feet from finished foroor to asany oos obstruction, sprinklers, lighting(correct)
D. twelve feet from finished floot to pay constructionjssgspritesari sek

Answer: C

NEW QUESTION 48
where should the vendor storage area be located?

A. far away from loading dock
B. inside data center
C. offsite
D. adjacent or near secured loading dock

Answer: D

NEW QUESTION 50
What are the speed and distance limitations of ESCON?

A. 1 Gbps @ up to 100m
B. 10 Gbps @ up to 40km
C. 17 MB/s @ up to 60km
D. 100 Mbps @ up to 20km

Answer: C

NEW QUESTION 51
What types of electrical equipment is typically located inside the computer room

A. power distribution units, not power distribution equipment, remote power panels, and power strips
B. transformers only
C. Uninterrupted Power Supply (UPS) only
D. Circuit Breakers only

Answer: A

NEW QUESTION 53
How often is there typically a technology refresh in a data center?

A. Every 1-2 years
B. Every 3-5 years
C. Every 7-10 years
D. There is no typical refresh cycle

Answer: B

NEW QUESTION 56
What is the minimum required headroom for overhead cable tray?

A. 3"
B. 6"
C. 9"
D. 12"

Answer: B

NEW QUESTION 58
What is the minimum access floor to ceiling height recommended?

A. 8 feet minimum
B. 9 feet minimum
C. 10 feet minimum
D. 11ft minimum

Answer: C

NEW QUESTION 60
What are the 3 different methods for grounding racks in a computer room?

A. Ground bus, direct connections, bond to rack
B. Ground conductor, surge protection, equipment rack
C. Copper cable, conduit, flexible connector
D. AC power, DC power, Ethernet

Answer: A

NEW QUESTION 65
What is the switch gear in an electrical distribution design responsible for?

A. Transforming voltage
B. Delivering power directly to the server racks
C. Transferring control between utility and generator
D. Managing cooling systems

Answer: C

NEW QUESTION 67
What is the recommendation regarding row length?

A. Do not exceed 20 racks in length and dead-end rows not to exceed ten racks long
B. Maximum twenty-five racks in each row only
C. Ten Racks in Length
D. None
E. All

Answer: A

NEW QUESTION 70
why does the entrance room designer need to meet with each anticipated access provider?

A. To determine their electrical, space, interface, and other facility requirements
B. As an alternative approach to save cost
C. To know about hardware requirement only
D. none of above

Answer: A

NEW QUESTION 74
What is the appropriate fire rating requirements for an ITE space?

A. 1/2 hour
B. 1 hour
C. 2 hours
D. 3 hours

Answer: B

NEW QUESTION 77
What are the recommended grounding requirements for DC power systems?

A. Single point ground
B. Multiple point ground
C. Distributed ground
D. None of the above

Answer: A

NEW QUESTION 78
What is the recommended placement of electrical distribution sub systems

A. install in dedicated electrical rooms, or, locate outside the computer room with fire rated wall
B. install within the computer room space on raised floor
C. install within server racks
D. none of the above

Answer: A

NEW QUESTION 80
What are three reasons for locating the power distribution unit outside the computer room?

A. removes maintenance item, removes a source of heat, allows P D U to occupy less expensive space
B. reduces cable congestion, prevents water damage, provides better access points
C. increases cooling efficiency, eliminates fire hazard, minimizes noise pollution
D. lowers electricity costs, improves network speed, enhances security measures

Answer: A

NEW QUESTION 83
what is the ANSI/TIA-942 recommended operational temperature

A. 60F to 75F

B. 68F to 77F
C. 80F to 90F
D. -10??C to +45??C

Answer: B

NEW QUESTION 84
What is the recommended amount of fuel supply needing to be available to a class F2 data center?

A. 12 hours
B. 18 hours
C. 24 hours
D. 30 hours
E. 36 hours

Answer: C

NEW QUESTION 88
What room should have direct access to the computer room?

A. Break room
B. Server room
C. Network Operations Center (NOC)
D. Administrative office

Answer: C

NEW QUESTION 92
What is the clearance required for the hot aisle width?

A. 2 ft
B. 4 ft
C. 6 ft
D. 8 ft

Answer: B

NEW QUESTION 93
What is recommended size ratio of Secure Storage Area?

A. 5% of Computer Room Space
B. 10% or greater than Available Floor Space
C. 15-20% more than Computer Room's Cross Sectional Area
D. 10% of Computer Room's Net Square Footage
E. None Of These

Answer: D

NEW QUESTION 94
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