

Exam : E20-017

Title: Information Availability

Design Specialist Exam for

Data Center Architects

Version: Demo

1. The exhibit represents a Component Failure Impact Analysis (CFIA) for a company's IT infrastructure. Several Requests for Change (RFC) were raised.

CI	OLTP Service	File share	E-mail	Backup/archive
Servers/NAS devices	A	X	В	Х
FC Switches	X	A	Х	В
Storage arrays	В	Х	В	X

- X: Cl Failure causes outage
- A: CI has an immediate backup ("hot-start")
- B: CI has an intermediate backup ("warm-start")

Which RFC should be considered a priority for implementation?

- A. Deploying a switch architecture with no single point of failure
- B. Clustering the backup server with multiple storage devices
- C. Configuring the NAS device in an active-active mode
- D. Adding more disk drives to the storage array

Answer: A

2.As represented in the exhibit, a company has a system with three critical components.

System Components	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Component 1	24hrs	3pm-5pm	7am-Noon	24hrs	3pm-9pm	1am - 4am	24hrs
Component 2	7am-9am	24hrs	24hrs	24hrs	3pm -9pm	1am - 4am	24hrs
Component 3	24hrs	24hrs	7am-Noon	24hrs	24hrs	1am - 4am	9am-2pm

Key

Failure/Outage

Scheduled Maintenance

Each component must be functioning for the system to be operational. SLAs have been established between the business and IT that define normal hours of operations for service as 8 A.M. - 8 P.M., Monday through Friday.

What is the availability (percentage) of Component 1?

A. 78

B. 81.7

C. 89

D. 91.7

Answer: B

3.A company has a system with three critical components as represented in the exhibit.

System Components	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Component 1	24hrs	3pm-5pm	7am-Noon	24hrs	3pm-9pm	1am - 4am	24hrs
Component 2	7am-9am	24hrs	24hrs	24hrs	3pm -9pm	1am - 4am	24hrs
Component 3	24hrs	24hrs	7am-Noon	24hrs	24hrs	1am - 4am	9am-2pm

Key

Failure/Outage

Scheduled Maintenance

Each component must be functioning for the system to be operational. Following an outage, certain components seem to take longer to restore back to service than others.

What is the mean time to repair (MTTR) for Component 3?

A. 2 hours

B. 3 hours

C. 5 hours

D. 10 hours

Answer: C

4.As represented in the exhibit, a company has a system with three critical components. Each component must be functioning for the system to be operational.

System Components	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Component 1	24hrs	3pm-5pm	7am-Noon	24hrs	3pm-9pm	1am - 4am	24hrs
Component 2	7am-9am	24hrs	24hrs	24hrs	3pm -9pm	1am - 4am	24hrs
Component 3	24hrs	24hrs	7am-Noon	24hrs	24hrs	1am - 4am	9am-2pm

Key

Failure/Outage

Scheduled Maintenance

What is the scheduled availability (percentage) for the system?

A. 84

B. 86

C. 88

D. 90

Answer: C

5.In which focus area of the Information Availability Design Framework can platform integrity be found?

A. Store

B. Automate

C. Create copies

D. Distribute

Answer: A

6.In which focus area of the Information Availability Design Framework can seamless movement of data between tiers of storage be found?

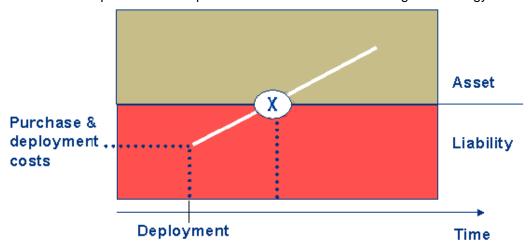
A. Automate

B. Create Copies

C. Distribute

D. Store
Answer: A

7. The exhibit represents the expected financial results of a storage technology investment.



What does the '®'-: represent?

A. Cost of investment equals the gain from the investment

B. Asset exceeds liability

C. Deployment cost crosses the planned deployment time

D. Return on investment

Answer: A

8.A company wants to replace its physical tape library with a virtual tape library (VTL). To deploy the VTL, the company spends \$300,000 for the hardware costs and \$50,000 for the implementation charges. Once the data is migrated from the physical tape library to the VTL, the physical tape library will be decommissioned for a cost of \$50,000. The company will gain \$70,000 per month due to this VTL implementation.

What is the return on investment (ROI) in one year and the break-even point for the company investment?

A. 85%; Month 8 B. 85%; Month 9 C. 110%; Month 6 D. 110%; Month 8

Answer: C

9.A company wants to replace its physical tape library with a virtual tape library (VTL). To deploy the VTL, the company spends \$300,000 for the hardware costs and \$60,000 for the implementation charges. Once

the data is migrated from the physical tape library to the VTL, the physical tape library will be decommissioned for a cost of \$50,000. The company will gain \$60,000 per month due to this VTL implementation.

What is the return on investment (ROI) in one year and the break-even point for the company in investment?

A. 35%; Month 6

B. 35%; Month 7

C. 76%; Month 6

D. 76%; Month 7

Answer: D

10.A company has a shared pre-staged infrastructure at an alternate site. This approach enables the company to rebuild systems and applications in the event of a disaster.

What is the term for this strategy?

- A. Hot site
- B. Manual failover site
- C. Cold site
- D. Warm site

Answer: A

- 11.In the context of "establishing information availability," what is an operation management activity?
- A. Capacity planning
- B. Data classification
- C. Testing
- D. Implementation planning

Answer: A

12.Based on strategic plans regarding green initiatives, an IT department is considering server consolidation in its data centers.

Which set of elements should be included in the business value analysis to maximize the ROI for such an initiative?

- A. Asset utilization, recovery of stranded assets, and cost of floor space and power
- B. Productivity of staff, response to business conditions, and utilization of storage
- C. Asset utilization, backup costs, and need for availability
- D. Cost of floor space and power, FTE-managed TB of storage, and reduction in SLA penalties

Answer: A

13.A company's IT department is comparing two technology proposals. Option 1 would retain legacy equipment while Option 2 would replace the existing equipment with a new one.

Option 1:

- -Total operation costs = \$400,000 per year -Annual storage requirements = \$100,000 per year Option 2:
- -Initial investment = \$1,250,000 -Recurring annual operation costs = \$150,000 per year -Annual storage requirements = \$100,000 per year

The company's write-off costs for the legacy equipment is \$50,000. As a business analyst using a TCO analysis, which option would you recommend?

- A. Option 1 is feasible if the project lifespan is less than 5 years
- B. Option 1 is feasible if the project lifespan is more than 6 years
- C. Options 1 and 2 are feasible if the project lifespan is 5 years
- D. Option 2 is feasible if the project lifespan is less than 5 years

Answer: A

14.A company has estimated a cost of \$220,000 to build its new data center. The new data center will serve an additional 20,000 clients for which the company will gain \$30,000 per month. In addition, the company has agreed to spend \$1,000 every month in support costs.

In order to achieve a break-even point, what is the minimum time period the data center must be operational?

- A. 8 months
- B. 9 months
- C. 10 months
- D. 11 months

Answer: A

15.A company has estimated a cost of \$240,000 to build its new data center. The new data center will serve an additional 20,000 clients for which the company will gain \$35,000 per month. In addition, the company has agreed to spend \$2,000 every month in support costs.

In order to achieve a break-even point, what is the minimum time period the data center must be operational?

- A. 8 months
- B. 9 months
- C. 10 months
- D. 11 months

Answer: A