Practice Test

(785) Install, Maintain, and Upgrade NonStop Server Hardware

37 questions

1. What is the minimum number of internal disk drives required on any new system?
   A. 3
   B. 4
   C. 6
   D. 8

2. Which hardware components are required to add a 2-processor system without I/O enclosures to an existing NonStop ServerNet Cluster?
   A. 2 MSEB, 2 NNA PICs, 2 SMF cables
   B. 4 MSEB, 4 NNA PICs, 2 ECL cables
   C. 2 SEB, 2 NNA PICs, 2 SMF cables
   D. 2 NonStop ServerNet/FX2 adapters, 2 fiber cables

3. Which NonStop System Console (NSC) components MUST be installed to enable remote dialin/dialout support?
   A. NonStop system console, modem, Carbon Copy, dedicated telephone line
   B. NonStop system console, dual 8 port hub, Carbon Copy, telephone line
   C. NonStop system console, ISDN line, Notification Director
   D. 2 NonStop system consoles, 2 voice lines (incoming and outgoing)

4. Can a S70000 be upgraded to a S74000 ONLINE?
   A. No
   B. Only if the number of processors is less than 8
   C. Only if the S74000 processor memory is 1GB or less
   D. Yes

5. What is the maximum fiber-optic cable length between the modular storage subsystem and a ServerNet/DA adapter?
   A. 100 meter
   B. 1 km
   C. 2 km
   D. 4 km

6. Which PMFs are supported in a CO NonStop Server? Select TWO
   A. S7000SE
   B. S7400SE
   C. S70000SE
   D. S72000SE
   E. S74000SE
7. Which cable interface types are supported on a SWAN concentrator?
   A. X21, V35, RS441, RS232
   B. CL, V35, RS441, RS232
   C. X21, V35, RS449, RS232
   D. X25, V35, RS449, RS232

8. How many ground straps are required for a system consisting of 3 double height and 1 single height enclosures?
   A. 5
   B. 6
   C. 7
   D. 8

9. What is used to verify the correct system topology? Select TWO
   A. NonStop ServerNet Diagnostic Tool
   B. SP Tool Application
   C. Guided Replacement Tool
   D. TSM/OSM Low Level Link
   E. SCF status topology

10. Before starting the system, which tool is used to verify that all NonStop ServerNet paths from Group 01 to all other Groups are functional?
    A. TSM/OSM Low Level Link
    B. SP Tool Application
    C. SCF Status NonStop ServerNet $ZSNET
    D. TSM/OSM Service Application

11. Which SCF command changes the EXPAND node number to 32?
    A. alter process $zzkrn,system_number 32
    B. alter subsys $zzkrn,system_number 32
    C. alter process $zexp,system_number 32
    D. alter subsys $zexp,system_number 32

12. Which SCF command changes the time zone offset?
    A. alter process $zzkrn,time_zone_offset USA66
    B. alter process $zzkrn,time_zone_offset - 05:00
    C. alter subsys $zzkrn,time_zone_offset - 05:00
    D. alter subsys $zzkrn,time_zone_offset USA66

13. Which SCF command adds a tape device to a SNDA in enclosure 21?
    A. add tape $cart0,sendto storage,location (21,1,53)
    B. add tape $cart0,sendto storage,location (21,1,50), sac 3
    C. add tape $cart0,sendto storage,location (21,1,53), sac 3, deviceid 5
    D. add tape $cart0,sendto storage,location (21,1,50)

14. Which SCF command adds an ATM adapter?
    A. Add adapter $ZZATM.$AM1, location (1,1,53), accesslist (0,1,2,3)
    B. Add adapter $ZZATM.$AM1, type ATM, location (1,1,53), accesslist (0,1,2,3)
    C. Add adapter $ZZLAN.$AM1, location (1,1,53), accesslist (0,1,2,3)
    D. Add adapter $ZZLAN.$AM1, type ATM, location (1,1,53), accesslist (0,1,2,3)
15. Which process acts as the SPI NonStop Server for NonStop ServerNet cluster subsystem management?
   A. FOXMON  
   B. MSGMON  
   C. SANMAN  
   D. SNETMON

16. Which SCF command configures a CLIP on a SWAN concentrator?
   A. Add server $ZZWAN.#X2501.1  
   B. Add device $ZZWAN.#X2501.1  
   C. Add clip $ZZWAN.#X2501.1  
   D. Add line $ZZWAN.#X2501.1

17. Which is the default gateway address for a TSM LAN?
   A. 192.231.36.2  
   B. 192.231.36.3  
   C. 192.231.36.9  
   D. 192.231.36.17

18. What is the recommended size of a KMSF swap file for a CPU with 256MB of memory?
   A. 128MB  
   B. 256MB  
   C. 512MB  
   D. 1GB

19. How is the "SP Cru Presence Status" for an E4SA adapter verified?
   A. SCF verify adapter $ZZLAN.E0154, detail  
   B. SCF info adapter $ZZLAN.E0154, detail  
   C. SCF status adapter $ZZLAN.E0154, detail  
   D. TSM Low Level Link

20. What SCF command is used to check the firmware file in use on an ATM adapter?
   A. status adapter $am1  
   B. info adapter $am1  
   C. verify adapter $am1  
   D. stats adapter $am1

21. What SCF command is used to check the bootcode on a NonStop ServerNet/FX adapter?
   A. status adapter $ZZFOX.#x, detail  
   B. status lbu $ZZFOX.#x, detail  
   C. info adapter $ZZFOX.#x, detail  
   D. info lbu $ZZFOX.#x, detail

22. What is the name of the ServerNet Cluster monitor process?
   A. $ZZSMN  
   B. $ZZSCL  
   C. $ZIMnn  
   D. $ZZSTO
23. What SCF command is used to check the ‘media type’ on a SWAN line?
   A. status path $zzwan.#s01.1.a
   B. info path $zzwan.#s01.1.a
   C. status line $zzwan.#s01.1.a
   D. info line $zzwan.#s01.1.a

24. Which SCF command confirms the Service Application IP address for the PMF in slot 1.1.50?
   A. status subnet $ztc0*
   B. info subnet $ztc0*
   C. status subnet $ztcp0*
   D. info subnet $ztcp0*

25. Which tool is used to update SP firmware on an HP NonStop S-Series S74000 Server?
   A. SP Tool
   B. TSM/OSM LLL
   C. TSM/OSM Service Application
   D. GR Tool
   E. NonStop ServerNet Diagnostic Tool

26. Which SP Tool test identifies CRU/FRU locations in an enclosure?
   A. System Information
   B. Resource Dump
   C. Verify System
   D. Net Stat

27. Which utility is used to decompress an IPM downloaded from IPMScout?
   A. UNPAK
   B. SWARCSET
   C. PKUNZIP
   D. WINZIP

28. After removing a faulty PMF, how much time must elapse before installing the replacement PMF CRU?
   A. 15 seconds
   B. 20 seconds
   C. 25 seconds
   D. 30 seconds

29. When a single processor on a NonStop Server halts or is frozen, what utility is used to take a memory dump?
   A. GARTH
   B. TSM
   C. RCVDUMP
   D. COPYDUMP
30. What process must be running to create a saveabend file?
   A. $DMP
   B. $ZPM
   C. $IMON
   D. $DMxx

31. Within TSM/OSM, where are diagnostic checks for disk drives located?
   A. Service Application
   B. Low Level Link
   C. LLL and Service Application
   D. Notification Director

32. What is checked to verify a PMF CRU passed PON. Select TWO
   A. CRU green LED on
   B. TSM/OSM Service Application Processor Status dialogue box
   C. TSM/OSM Low Level Link Processor Status dialogue box
   D. TSM/OSM Notification Director dialogue box
   E. TSM/OSM Low Level Link processor attributes

33. On an FESA the LNK LED indicates?
   A. No Collisions on link
   B. Data is being received
   C. Data is being transmitted
   D. Twisted-pair link integrity

34. Which utility can be used to transfer large amounts of data over an IP connection?
   A. UDP
   B. TELNET
   C. PING
   D. FTP

35. Which SCF command lists the spared sectors on a disk?
   A. status $system,log
   B. status $system,bad
   C. info $system,log
   D. info $system,bad

36. Before testing a 6760 adapter ensure that:
   A. TSM has the latest revision level
   B. a disk is configured through any PIC on this adapter
   C. all disk paths are in a harddown state for this adapter
   D. the SNDA has a backup SNDA

37. If an ATM adapter problem is suspected, which diagnostic test is run?
   A. Internal loopback
   B. TSM Service App. Test Verify
   C. SCF Verify Adapter
   D. TSM LLL diagnostics
Feedback for Practice Test
(785) Install, Maintain, and Upgrade NonStop Server Hardware
37 questions

**Objective:** (785.1.1) Determine the required system hardware

**Item:** 785.1.1.c.1

1. What is the minimum number of internal disk drives required on any new system?
   - A. 3
   - B. 4
   - C. 6
   - D. 8

**References:** S-Series Planning and Configuration Guide 427199-001, Initial Configurations, Disk Drive Configurations

**Objective:** (785.1.1) Determine the required system hardware

**Item:** 785.1.1.d.1

2. Which hardware components are required to add a 2-processor system without I/O enclosures to an existing NonStop ServerNet Cluster?
   - A. 2 MSEB, 2 NNA PICs, 2 SMF cables
   - B. 4 MSEB, 4 NNA PICs, 2 ECL cables
   - C. 2 SEB, 2 NNA PICs, 2 SMF cables
   - D. 2 NonStop ServerNet/FX2 adapters, 2 fiber cables

**References:** NonStop ServerNet Cluster Manual 520575-001, Planning for Installation, Planning for Hardware

**Objective:** (785.1.3) Determine the support requirements

**Item:** 785.1.3.a.1

3. Which Nonstop System Console (NSC) components MUST be installed to enable remote dialin/dialout support?
   - A. **NonStop system console, modem, Carbon Copy, dedicated telephone line**
   - B. NonStop system console, dual 8 port hub, Carbon Copy, telephone line
   - C. NonStop system console, ISDN line, Notification Director
   - D. 2 NonStop system consoles, 2 voice lines (incoming and outgoing)

**References:** NonStop Server S-Series Planning and Configuration Guide 427199-001, Site Planning and Preparation, Planning for Remote Support (Dial-In and Dial-Out)
Objective: (785.1.5) Determine the installation tasks
Item: 785.1.5.d.1

4. Can a S70000 be upgraded to a S74000 ONLINE?
   A. No
   B. Only if the number of processors is less than 8
   C. Only if the S74000 processor memory is 1GB or less
   D. Yes

References: Software Installation and Upgrade Guide 429505-001, Preparing to Fall Back

Objective: (785.2.1) Determine the system space requirements
Item: 785.2.1.d.1

5. What is the maximum fiber-optic cable length between the modular storage subsystem and a ServerNet/DA adapter?
   A. 100 meter
   B. 1 km
   C. 2 km
   D. 4 km

References: 45xx Modular Disk Subsystem Manual for G-series Releases-142466, Introduction, Service Clearances

Objective: (785.2.5) Describe S-Series Central Office (CO) system requirements
Item: 785.2.5.c.1

6. Which PMFs are supported in a CO NonStop Server? Select TWO
   A. S7000SE
   B. S7400SE
   C. S70000SE
   D. S72000SE
   E. S74000SE

References: NonStop Server S-Series Central Office NonStop Server Installation and Service Guide 425946-001, page B1

Objective: (785.2.6) Determine system communication requirements
Item: 785.2.6.a.1

7. Which cable interface types are supported on a SWAN concentrator?
   A. X21, V35, RS441, RS232
   B. CL,V35 , RS441,RS232
   C. X21,V35, RS449,RS232
   D. X25,V35,RS449,RS232

References: Swan Concentrator Installation and Support Guide 425645-001, Appendix A
Objective: (785.3.2) Identify system connection and cabling tasks
Item: 785.3.2.b.1

8. How many ground straps are required for a system consisting of 3 double height and 1 single height enclosures?
   A. 5
   B. 6
   C. 7
   D. 8

References: S-Series Hardware Installation Guide - 426879-001, Installing the Enclosure, Examples of Groundstrap Locations Between Enclosures

Objective: (785.3.3) Describe steps and tools to confirm system functionality
Item: 785.3.3.a.1

9. What is used to verify the correct system topology? Select TWO
   A. NonStop ServerNet Diagnostic Tool
   B. SP Tool Application
   C. Guided Replacement Tool
   D. TSM/OSM Low Level Link
   E. SCF status topology

References: TSM Online User Guide, Setting the Topology for the NonStop Server

Objective: (785.3.3) Describe steps and tools to confirm system functionality
Item: 785.3.3.b.1

10. Before starting the system, which tool is used to verify that all NonStop ServerNet paths from Group 01 to all other Groups are functional?
   A. TSM/OSM Low Level Link
   B. SP Tool Application
   C. SCF Status NonStop ServerNet $ZSNET
   D. TSM/OSM Service Application

References: NonStop Server S-Series Hardware Installation Guide - 427188-001, Verifying Topology and System Components, Table 8-3. Checking the Attributes of Selected System Components

Objective: (785.4.1) Describe the NSK subsystem manager ($ZZKRN) configuration tasks
Item: 785.4.1.b.1

11. Which SCF command changes the EXPAND node number to 32?
    A. alter process $zzkrn,system_number 32
    B. alter subsys $zzkrn,system_number 32
    C. alter process $zexp,system_number 32
    D. alter subsys $zexp,system_number 32

References: NonStop Server S-Series FastPath Guide - 427560-001, Required Configuration Procedures, Set System Name, System Time and System Number
Objective: (785.4.1) Describe the NSK subsystem manager ($ZZKRN) configuration tasks
Item: 785.4.1.e.1

12. Which SCF command changes the time zone offset?
   A. alter process $zzkm, time_zone_offset USA66
   B. alter process $zzkm, time_zone_offset - 05:00
   C. alter subsys $zzkrn, time_zone_offset - 05:00
   D. alter subsys $zzkm, time_zone_offset USA66

References: SCF Reference Manual for the Kernel Subsystem 427158-001, SCF Commands for the Kernel Subsystem, ALTER SUBSYS Considerations

Objective: (785.4.2) Describe storage subsystem configuration tasks
Item: 785.4.2.e.1

13. Which SCF command adds a tape device to a SNDA in enclosure 21?
   A. add tape $cart0, sendto storage, location (21,1,53)
   B. add tape $cart0, sendto storage, location (21,1,50), sac 3
   C. add tape $cart0, sendto storage, location (21,1,53), sac 3, deviceid5
   D. add tape $cart0, sendto storage, location (21,1,50)

References: SCF Reference Manual for the Storage Subsystem - 424878-001, Storage Subsystem Commands, ADD TAPE Command

Objective: (785.4.4) Describe the ATM subsystem configuration tasks
Item: 785.4.4.b.1

14. Which SCF command adds an ATM adapter?
   A. Add adapter $ZZATM.$AM1, location (1,1,53), accesslist (0,1,2,3)
   B. Add adapter $ZZATM.AM1, type ATM, location (1,1,53), accesslist (0,1,2,3)
   C. Add adapter $ZZLAN.$AM1, location (1,1,53), accesslist (0,1,2,3)
   D. Add adapter $ZZLAN.AM1, type ATM, location (1,1,53), accesslist (0,1,2,3)

References: ATM Configuration and Management Manual - 422840-001, SCF Commands, ADD ADAPTER Command

Objective: (785.4.6) Describe NonStop ServerNet Cluster configuration tasks
Item: 785.4.6.b.1

15. Which process acts as the SPI NonStop Server for NonStop ServerNet cluster subsystem management?
   A. FOXMON
   B. MSGMON
   C. SANMAN
   D. SNETMON

References: NonStop ServerNet Cluster Manual 427410-001, Page 1-22
Objective: (785.4.7) Describe WAN configuration tasks
Item: 785.4.7.e.1

16. Which SCF command configures a CLIP on a SWAN concentrator?
   A. Add server $ZZWAN.#X2501.1
   B. Add device $ZZWAN.#X2501.1
   C. Add clip $ZZWAN.#X2501.1
   D. Add line $ZZWAN.#X2501.1

References: WAN Subsystem Configuration and Management Manual 426850-001, Adding a SWAN Concentrator, Configuring the SERVER Objects

Objective: (785.4.8) Describe TSM configuration tasks
Item: 785.4.8.d.1

17. Which is the default gateway address for a TSM LAN?
   A. 192.231.36.2
   B. 192.231.36.3
   C. 192.231.36.9
   D. 192.231.36.17

References: TSM Configuration Guide, Default Values for Initial Configuration

Objective: (785.5.1) Describe NonStop Kernel subsystem verification and testing
Item: 785.5.1.d.1

18. What is the recommended size of a KMSF swap file for a CPU with 256MB of memory?
   A. 128MB
   B. 256MB
   C. 512MB
   D. 1GB

References: Kernel-Managed Swap Facility (KMSF) Manual 425824-001 Configuring KMSF, Example 2-1. Default Configuration for a Four-Processor System
Objective: (785.5.3) Describe SLSA subsystem test and verification
Item: 785.5.3.a.1

19. How is the "SP Cru Presence Status" for an E4SA adapter verified?
   A. SCF verify adapter $ZZLAN.E0154, detail
   B. SCF info adapter $ZZLAN.E0154, detail
   C. SCF status adapter $ZZLAN.E0154, detail
   D. TSM Low Level Link

References: LAN Configuration and Management Manual 425686-001, SCF Commands for the SLSA Subsystem, STATUS Command

Objective: (785.5.4) Describe ATM subsystem test and verification
Item: 785.5.4.b.1

20. What SCF command is used to check the firmware file in use on an ATM adapter?
   A. status adapter $am1
   B. info adapter $am1
   C. verify adapter $am1
   D. stats adapter $am1

References: ATM configuration and Management Manual 422840-001, SCF Commands, INFO ADAPTER Display

Objective: (785.5.5) Describe FOX subsystem test and verification
Item: 785.5.5.c.1

21. What SCF command is used to check the bootcode on a NonStop ServerNet/FX adapter?
   A. status adapter $ZZFOX.#x, detail
   B. status lbu $ZZFOX.#x detail
   C. info adapter $ZZFOX.#x, detail
   D. info lbu $ZZFOX.#x, detail

References: NonStop ServerNet/FX Adapter and Configuration Manual 422795-001, STATUS Command, Consideration

Objective: (785.5.6) Describe ServerNet cluster test and verification
Item: 785.5.6.a.1

22. What is the name of the ServerNet Cluster monitor process?
   A. $ZZSMN
   B. $ZZSCL
   C. $ZIMnn
   D. $ZZSTO

References: ServerNet Cluster Manual 427410-001, ServerNet Cluster Description, SNETMON and the ServerNet Cluster Subsystem
Objective: (785.5.7) Describe WAN subsystem test and verification
Item: 785.5.7.c.1

23. What SCF command is used to check the 'media type' on a SWAN line?
   A. status path $zzwan.#s01.1.a
   B. info path $zzwan.#s01.1.a
   C. status line $zzwan.#s01.1.a
   D. info line $zzwan.#s01.1.a

References:   SWAN Concentrator and WAN Subsystem Troubleshooting Guide 426992-001,
              Troubleshooting Tips for the SWAN Concentrator and the WAN Subsystem,
              Finding the MAC Address of the CLIP

Objective: (785.5.8) Describe TSM component verification
Item: 785.5.8.c.1

24. Which SCF command confirms the Service Application IP address for the PMF in slot 1.1.50?
   A. status subnet $ztc0*
   B. info subnet $ztc0*
   C. status subnet $ztcp0*
   D. info subnet $ztcp0*

References:   TCP/IP Configuration and Management Manual 140771, TCP/IP Processes and
              Protocols, Retrieving Configuration Information

Objective: (785.6.1) Identify proactive preventative maintenance and best practices
Item: 785.6.1.a.1

25. Which tool is used to update SP firmware on an HP NonStop S-Series S74000 Server?
   A. SP Tool
   B. TSM/OSM LLL
   C. TSM/OSM Service Application
   D. GR Tool
   E. NonStop ServerNet Diagnostic Tool

References:   TSM ONLINE USER GUIDE, Updating Firmware and Service Processor (SP)
              Firmware

Objective: (785.7.1) Identify defective CRU/FRU location
Item: 785.7.1.b.1

26. Which SP Tool test identifies CRU/FRU locations in an enclosure?
   A. System Information
   B. Resource Dump
   C. Verify System
   D. Net Stat

References:   SP Tool Online Help
27. Which utility is used to decompress an IPM downloaded from IPMScout?
   A. UNPAK
   B. SWARCSET
   C. PKUNZIP
   E. WINZIP

28. After removing a faulty PMF, how much time must elapse before installing the replacement PMF CRU?
   A. 15 seconds
   B. 20 seconds
   C. 25 seconds
   D. 30 seconds

29. When a single processor on a NonStop Server halts or is frozen, what utility is used to take a memory dump?
   A. GARTH
   B. TSM
   C. RCVDUMP
   D. COPYDUMP
Objective: (785.8.1) Describe data collection methods
Item: 785.8.1.j.1

30. What process must be running to create a saveabend file?
   A. $DMP
   B. $ZPM
   C. $IMON
   D. $DMxx

References: Inspect Manual, 118810, Introduction

Objective: (785.8.3) Describe diagnostic tool features
Item: 785.8.3.a.1

31. Within TSM/OSM, where are diagnostic checks for disk drives located?
   A. Service Application
   B. Low Level Link
   C. LLL and Service Application
   D. Notification Director

References: NonStop S-Series Field Support Course.

Objective: (785.8.3) Describe diagnostic tool features
Item: 785.8.3.e.1

32. What is checked to verify a PMF CRU passed PON. Select TWO
   A. CRU green LED on
   B. TSM/OSM Service Application Processor Status dialogue box
   C. **TSM/OSM Low Level Link Processor Status dialogue box**
   D. TSM/OSM Notification Director dialogue box
   E. TSM/OSM Low Level Link processor attributes

References: S-Series Hardware Support Guide, 427200-001, Troubleshooting, PMF CRU or IOMF CRU Changes Topology Configuration

Objective: (785.8.5) Describe physical inspection for troubleshooting
Item: 785.8.5.b.1

33. On an FESA the LNK LED indicates?
   A. No Collisions on link
   B. Data is being received
   C. Data is being transmitted
   D. **Twisted-pair link integrity**

References: Fast Ethernet Adapter Installation and Support Guide, 425685-001, Introduction to the Fast Ethernet ServerNet Adapter (FESA), External Connectors and Indicators
Objective: (785.8.6) Describe system utilities used for troubleshooting
Item: 785.8.6.e.1

34. Which utility can be used to transfer large amounts of data over an IP connection?
   A. UDP  
   B. TELNET  
   C. PING  
   D. FTP  

References: Common knowledge

Objective: (785.8.6) Describe system utilities used for troubleshooting
Item: 785.8.6.l.1

35. Which SCF command lists the spared sectors on a disk?
   A. status $system,log  
   B. status $system,bad  
   C. info $system,log  
   D. info $system,bad  

References: SCF Reference Manual for Storage Subsystem, 424878-001, Storage Subsystem Commands, INFO Command

Objective: (785.8.8) Identify subsystem/component and methods for troubleshooting
Item: 785.8.8.c.1

36. Before testing a 6760 adapter ensure that:
   A. TSM has the latest revision level  
   B. a disk is configured through any PIC on this adapter  
   C. all disk paths are in a harddown state for this adapter  
   D. the SNDA has a backup SNDA  

References: NonStop Server S-Series Hardware Support Guide- 427200-001, Troubleshooting, 6760 ServerNet/DAs

Objective: (785.8.8) Identify subsystem/component and methods for troubleshooting
Item: 785.8.8.g.1

37. If an ATM adapter problem is suspected, which diagnostic test is run?
   A. Internal loopback  
   B. TSM Service App. Test Verify  
   C. SCF Verify Adapter  
   D. TSM LLL diagnostics  

References: TSM Online User Guide 427120-001, Tools and Utilities for Operators, TSM Service Application