



Exam: IBM 000-222

Title: P5 and pSeries Administration and Support
for AIX 5L V5.3

Ver: version2.00 05-15-08

English: <http://www.killtest.com>

Big5 : <http://www.killtest.net>

GB : <http://www.killtest.cn>

The safer,easier way to pass any IT exam.

1. A system administrator needs to quickly migrate a machine from AIX 5.2 to AIX 5.3. The administrator will only be allowed enough downtime to reboot the machine. Which installation method would accomplish this task?

- A. Perform a migration installation during the reboot process.
- B. Perform an alternate disk installation and migration using NIM.
- C. Copy the /usr directory from another 5.2 server to this server.
- D. Perform an update_all install from 5.2 media to take effect on reboot.

Answer: B

2. A system administrator has filesystems that should not be mounted during system startup. How can the system administrator prevent the /data filesystem from being mounted during subsequent boots?

- A. mount -no /data
- B. chfs -A no /data
- C. mount -n /data
- D. chfs -a type=nfs /data

Answer: B

3. An administrator is logged into a remote server using an Xwindows client and wants to use smit. The bandwidth for the remote connection is minimal, so the administrator would like to disable the graphical version of smit to speed up display updates. Which of the following commands will start smit in the non-graphical mode?

- A. smit
- B. msmit
- C. smit -C
- D. smit_tty

Answer: C

4. Because of performance problems, space needs to be added to a paging space named paging01 on hdisk1. The physical partition size of hdisk1 is 4MB. Which command will increase the size of paging01 by 100MB?

- A. swapon -a paging01 25
- B. mkps -a 25 paging01
- C. extendlv -a paging01 25
- D. chps -s 25 paging01

Answer: D

5. A system administrator has been asked to migrate the dev_vg volume group from server A to server B. The dev_vg volume group contains a single filesystem named "/development". To prepare for migration, which of the following is the correct sequence of commands for removing the volume group from server A?

- A. exportvg dev_vg; umount /development; varyoffvg dev_vg
- B. varyoffvg dev_vg; umount /development; exportvg dev_vg
- C. umount /development; exportvg dev_vg; varyoffvg dev_vg

D. `umount /development; varyoffvg dev_vg; exportvg dev_vg`

Answer: D

6. Which of the following attributes of a logical volume can NOT be changed after it is created?

- A. The placement of the logical volume
- B. The stripe size of the logical volume
- C. The upper bound of the logical volume
- D. The intra-policy of the logical volume

Answer: B

7. A system administrator was asked to log information on possible security breaches on a server. To which file should additional entries be added to capture this information?

- A. `/var/adm/sulog`
- B. `/etc/syslog.conf`
- C. `/etc/security/sysck.cfg`
- D. `/etc/security/login.cfg`

Answer: B

8. Which of the following commands can be used to get the system ready to physically insert a PCI hot plug adapter?

- A. `mkdev`

B. cfmgr

C. drslot

D. lsslot

Answer: C

9. A company uses raw logical volumes. Which of the following commands can be used to back up the data in the raw logical volumes to a tape?

A. dd

B. Tar

C. cpio

D. pax

Answer: A

10. A system administrator has a server that is performing poorly. The vmstat command identifies that high CPU usage is the problem. Which of the following commands can be used to identify the eight most active processes running on the server?

A. ps -ef -t8

B. sar -u -p 8

C. vmstat -t 8

D. topas -p8 -n0 -d0

Answer: D

11. Sometimes performance is more important than availability (e.g., in cases where the

data can be easily re-created). Which of the following is the appropriate disk configuration for an application that requires faster writes over availability?

- A. RAID-1
- B. RAID-5
- C. RAID-0 + 1
- D. RAID-0

Answer: D

12. A system administrator is considering enabling the 64-bit kernel but first must determine if the system hardware will support 64-bit. How would the system administrator accomplish this in AIX 5L?

- A. `prtconf -c`
- B. `lscfg -v sys0`
- C. Check the `/unix` link
- D. Check for JFS2 filesystems

Answer: A

13. How should a system administrator turn on Dynamic Processor Deallocation?

- A. Use the `diag` menu to set dynamic deallocation to 'on'.
- B. Use the `chdev` command to enable the 'cpuguard' attribute of `sys0`.
- C. Use the `cfgmgr` command to change the 'monitor' attribute of `proc0`.
- D. Use the `smitty` command with the fast path `dynamic_processor_deallocation` to turn it

on.

Answer: B

14. A system has a critical need for network services on a small network with a limited number of hosts. System overhead is not a concern. Which of the following options would the system administrator perform to help ensure connectivity in the event of a gateway failure?

- A. Use the `ifconfig` command to enable dead gate detection.
- B. Use the `chdev` command to set active dead gateway detection.
- C. Use the `route` command to set active dead gateway detection.
- D. Add the line `active_dgd=1` to the `/etc/gated.conf` command and refresh the `gated` daemon.

Answer: C

15. A system has five 80GB disk drives and has a requirement to store 300GB of data. Which disk configuration will provide fault tolerance while still meeting data storage requirements?

- A. Just a Bunch of Disks (JBOD)
- B. RAID-5
- C. RAID-0
- D. RAID-1

Answer: B

16. Which disk configuration provides the fastest write performance with fault tolerance?

- A. RAID-0
- B. RAID-3
- C. RAID-5
- D. RAID 1+0

Answer: D

17. Prior to implementing an LPAR system, which of the following options needs to be performed?

- A. All PCI slots must be made active.
- B. Cluster System Management (CSM) software must be installed.
- C. The LPAR system must have a Hardware Management Console (HMC) connected.
- D. Each LPAR must be configured with a CDROM for operating system installation.

Answer: C

18. Total memory available to all LPARS is 128 GB with 64 GB unallocated. Which of the following options assigns memory (8 GB) from LPAR1 to LPAR2 in a DLPAR environment?

- A. Select LPAR1 and move the 8 GB into LPAR2. Reboot required on LPAR1.
- B. Select memory from unallocated available memory. Reboot required on LPAR2.
- C. Select LPAR1 and move the 8 GB into LPAR2. Reboot not required.

D. Select LPAR1 and move the 8 GB into LPAR1. Reboot required on both LPARS.

Answer: C

19. An AIX LPAR capable server has AIX versions 5.1 and 5.2 installed. Which of the following options reflects available features?

A. Dynamic allocation of a CPU is available in versions 5.1 and later of AIX.

B. Memory and CPU dynamic allocation is available in versions 5.2 and later of AIX.

C. AIX version 5.1 and later support DLPAR features and hot swapping of PCI slots.

D. Only Memory and CPUs can be dynamically allocated and require version 5.2 or later of AIX.

Answer: B

20. An AIX system has four LPARS configured with similar environments and applications.

What happens to the other LPARS when one of the LPARS runs out of memory and that LPAR starts paging heavily due to a poor paging configuration?

A. The other three LPARS will experience the same problem because they all share a common memory pool.

B. The hypervisor will shutdown the offending LPAR and dynamically reallocate the memory to the other LPARS.

C. The other LPARS will be unaffected by the offending LPAR due to LPAR isolation.

D. There will be a moderate slowdown on the remaining LPARS due to hypervisor overload during the time the offending LPAR is having paging problems.

Answer: C

21. In order to upgrade from AIX Version 5.1 to AIX Version 5.3, which of the following actions should be performed?

- A. Run `smit update_all`
- B. Run `smit install_all`
- C. Boot from the installation media
- D. Run `update_all` from the mounted CD

Answer: C

22. A system administrator is doing an AIX 5L New and Complete Overwrite installation on a system with a 64-bit processor using the default settings. Which of the following options will be the resulting installed environment?

- A. Only the 32-bit kernel will be installed and enabled
- B. Only the 64-bit kernel will be installed and enabled
- C. Both the 32-bit and 64-bit kernel will be installed and the 32-bit kernel will be enabled
- D. Both the 32-bit and 64-bit kernel will be installed and the 64-bit kernel will be enabled

Answer: C

23. To load the base operating system on a machine using NIM, what are the minimum NIM resources that must be defined for the installation to succeed?

- A. `Amksysb` resource, a `SPOT` resource, and an `lpp_source` resource

- B. A SPOT resource, an lpp_source resource, and a machine definition
- C. An lpp_source resource, a mkysyb resource, and a machine definition
- D. A SPOT resource, an lpp_source resource, a machine definition, and a bootable CD

Answer: B

24. While attempting to load a base operating system to a machine, an administrator is receiving bootp timeout error messages. What steps should be followed to troubleshoot communications between the NIM master and the client machine?

- A. View debug logs on NIM master for errors or failures.
- B. Boot the client machine to SMS, and view the POST Error log.
- C. Boot the client machine to SMS, setup remote IPL, and execute a ping test.
- D. Boot the client machine to diagnostics, and ping the client from the NIM master.

Answer: C

25. A system administrator completed installation of an AIX Maintenance Level on their server. Which of the following commands would verify that the operating system is in a consistent state?

- A. instfix -i
- B. lspp -l
- C. lppchk -v
- D. oslevel -r

Answer: C

26. A system administrator suspects that there were problems with the AIX installation on an AIX server. Which of the following commands can be used, with the appropriate flags, to view the BOS installation output files?

- A. alog
- B. errpt
- C. lscfg
- D. install

Answer: A

27. A system administrator will be migrating a server from AIX 5.2 to AIX 5.3 and is uncertain if the application running on the server will function properly after the migration. What is the fastest way to return to the previous AIX level if the application does not work?

- A. Use basemedia to restore system to AIX 5.2.
- B. Use an alt_disk_install and boot back to the AIX 5.2 rootvg.
- C. Make a mksysb of the original AIX to restore back to the AIX 5.2 level.
- D. Perform the AIX 5.3 upgrade using update_all with the commit option and rejectfilesets to return to AIX 5.2.

Answer: B

28. A system administrator has a mksysb of an AIX 5.3 machine and needs to install it on a

different server. How can this be accomplished?

- A. Install the base AIX from 5.3 media and then install the mksysb over it.
- B. Mount the tape and use the tar command to install AIX and the rest of the contents of the rootvg.
- C. Insert the mksysb tape and a 5.3 base media CD and then boot to maintenance mode and initiate the install.
- D. Install AIX 5.3 from base media and then perform an update_allinstall from the mksysb tape of the original machine.

Answer: C

29. A system administrator will use amksysb from a uniprocessor server running AIX 5.1 to install a multiprocessor chrp server. What else is required?

- A. A 5.1 AIX base media set
- B. An AIX 5.1.x Additional Device Software CD
- C. Amksysb of the multiprocessor chrp server
- D. A savevg of the uniprocessor server

Answer: A

30. A production system needs to be upgraded from AIX V5.2 to AIX V5.3. All logs and users need to be saved. Which installation method will accomplish the upgrade?

- A. Update Installation
- B. Migration Installation

C. Preservation Installation

D. Mirror rootvg prior to a Preservation Installation

Answer: B

31. A customer has a server that needs to be upgraded from AIX Version 5.2 to AIX Version

5.3. The customer wants to retain /etc/passwd and /var/adm/ras/errlog. Which of the

following installation types should be used?

A. Preservation Install

B. Retention Install

C. Overwrite Install

D. Migration Install

Answer: D

32. A system administrator has just installed a new maintenance level, but "oslevel -r" does

not show the correct maintenance level. Which of the following commands would

determine which filesets are downlevel?

A. lppchk

B. instfix

C. fixdist

D. maintlvl

Answer: B

33. Several people in an Information Technology (IT) department are asking for file set updates that the system administrator received earlier that day on CD-ROM. The system administrator created an install directory on their machine and made it available to everyone. Which of the following commands will allow the system administrator to copy the images from the CD-ROM to the install directory?

- A. `smit bffcreate` from the target directory
- B. `tar -xvf /dev/cd0` from the target directory
- C. `restore -xvqf /dev/cd0` from the target directory
- D. `mount thecdrom` on `/cdrom` and `cp /cdrom/* .` from the target directory

Answer: A

34. A system administrator has been asked to install an APAR but wants to be able to easily remove it. Which of the following install options should be used?

- A. `apply`
- B. `cleanup`
- C. `commit`
- D. `reject`

Answer: A

35. A system administrator has determined that a recently applied APAR needs to be removed. Which of the following install options will remove the APAR?

- A. `cleanup`

B. commit

C. deinstall

D. reject

Answer: D

36. Which of the following commands will display the current Maintenance Level of a server?

A. lspp -L

B. oslevel -r

C. oslevel -m

D. oslevel-i | grep ML

Answer: B

37. A system administrator is installing a C compiler on a system. According to the compiler's documentation, the AIX fileset bos.adt.lib must be installed prior to the installation of the compiler. Which of the following commands would verify installation of the bos.adt.lib fileset?

A. installp

B. instfix

C. lppchk

D. lspp

Answer: D

38. A system administrator has been instructed to verify that all filesets have all required prerequisites and are completely installed. Which of the following commands will provide this information?

- A. lspp
- B. lppchk
- C. geninstall
- D. installp

Answer: B

39. A system administrator just completed an AIX installation but suspects that not all filesets installed completely. Which of the following commands would verify that all filesets are completely installed?

- A. installp -E
- B. lspp -E
- C. lppchk -c
- D. errpt -a

Answer: C

40. Which supported command is used by the system boot process to determine what resources are available to the system?

- A. diag

B. lscfg

C. bootinfo

D. cfgmgr

Answer: D

41. A system administrator noticed several error messages on the screen while the system was booting up; but was not able to write them down. Where should the system administrator look for the console log, assuming it is in the default location?

A. /tmp/conslog

B. /etc/console.log

C. /var/adm/ras/conslog

D. /var/ras/console.log

Answer: C

42. Which of the following options could the system administrator use to assist in debugging boot problems after the system is up?

A. bootinfo

B. alog

C. fsck

D. bosboot

Answer: B

43. A new application has been added to a system which needs to be started automatically at system startup. The system administrator has decided to accomplish this by using the `/etc/inittab` file. Which of the following commands would accomplish this in a supported manner?

- A. vi
- B. Mkitab
- C. telinit
- D. Isitab

Answer: B

44. The `/etc/inittab` file is composed of position-dependent entries. What is the second field of an `/etc/inittab` file entry?

- A. Label
- B. Action
- C. Command
- D. RunLevel

Answer: D

45. During system boot, the system hangs at LED 0C31. What is the first step the system administrator should take to correct the problem?

- A. Check system console connections.
- B. Check system network connections.

- C. Boot in service mode and change the bootlist.
- D. Boot from the AIX installation media and mount rootvg filesystems.

Answer:A

46. A system was running properly until a reboot. Following the reboot, the system LED displayed cycles between 0223 and 0229. Which of the following procedures should be performed next?

- A. Power down then power up the system.
- B. Boot into diagnostic mode and run fsck.
- C. Boot from installation media and run bosboot.
- D. Boot into maintenance mode and check the bootlist.

Answer: D

47. During reboot, the system hangs with an LED 0554 message that means, "The boot device could not be opened or a read failed." What recovery procedures should be taken?

- A. Boot in maintenance mode and use fsck to check hd5.
- B. Boot in maintenance mode, access the rootvg and check the /etc/inittab for corruption.
- C. Boot in maintenance mode, access the rootvg and rebuild the boot image using the bosboot command.
- D. Boot in maintenance mode, access the rootvg and use the bootlist command to create a valid boot list.

Answer:C

48. During reboot, the system hangs with LED 0581 that indicates "Configuring TCP/IP."

Which of the following recovery procedures should be taken?

- A. Boot in maintenance mode, access the rootvg and run `/etc/tcp.clean`.
- B. Boot in maintenance mode, access the rootvg and check the `/etc/inittab` for corruption.
- C. Boot in maintenance mode, access the rootvg and rebuild the boot image using the `bosboot` command.
- D. Boot in maintenance mode after verifying the network connection, access the rootvg and check the `/etc/rc.net` file.

Answer: D

49. Which of the following scripts is executed during system startup to set the system hostname, default gateway and static routes?

- A. `/etc/rc.boot`
- B. `/etc/rc.net`
- C. `/etc/rc.tcPIP`
- D. `/etc/resolv.conf`

Answer: B

50. During system initialization, which of the following command scripts is executed through the `/etc/inittab` to activate page spaces and mount filesystems?

- A. `rc`

- B. init
- C. srcmstr
- D. rc.init

Answer: A

51. What system startup files would an administrator edit for starting up miscellaneous third party applications?

- A. /etc/rc.net and /etc/inetd.conf
- B. /etc/rc.boot and /etc/services
- C. /etc/rc.local and /etc/inittab
- D. /etc/rc.tcpip and /etc/rc.net

Answer: C

52. Which of the following commands would an administrator use to add startup scripts to the system startup process?

- A. chitab
- B. vi /etc/inittab
- C. vi /sbin/rc.boot
- D. mkitab

Answer: D

53. A system administrator wants to perform some system maintenance. The AIX

installation CD is in the CDROM drive; however, the system will not boot from the CD.

Which of the following commands will assist in determining if the CDROM drive is currently a bootable device?

- A. `lscfg -l cd0 -v`
- B. `bootlist -m service -o`
- C. `bosboot -a -d /dev/cd0`
- D. `chdev -l cd0 -a boot=yes`

Answer: B

54. A system administrator mirrored the rootvg from hdisk0 to hdisk1 and needs to specify that the system would boot from hdisk1 if hdisk0 failed. Which of the following commands would be used to accomplish this?

- A. `bootlist -m normal hdisk1`
- B. `bootlist -m normal hdisk0 hdisk1`
- C. `bootlist -m service hdisk0 hdisk1`
- D. `bosboot -m normal hdisk0 hdisk1 -i`

Answer: B

55. How would a system administrator find information regarding smit menu definitions?

- A. Use ODM commands
- B. Use LVM commands
- C. In the `/etc/environment` file

D. In the /usr/lib/smit/menu.cfg file

Answer:A

56.Where do the BOS ODM files reside?

A. /usr/objrepos

B. /usr/lpp/odm

C. /usr/bin/objrepos

D. /etc/objrepos

Answer: D

57.An administrator has added a new device to a system and wants to determine if it has been correctly added to the ODM database.Which of the following commands would the system administrator use?

A. odmget

B. odmadd

C. odmshow

D. odmcreate

Answer: A

58.Where can a system administrator find information regarding configured physical volumes, volume groups,and logical volumes besides the Volume Group Descriptor Area (VGDA)?

- A. /etc/filesystems
- B. /etc/environment
- C. Object Data Manager (ODM)
- D. Logical Volume Control Block (LVCB)

Answer:C

59. An administrator needs to document system changes that have occurred recently. The company has a policy of making all possible changes via the smit interface. Which of the following files would show the commands that have been performed from within smit and their resulting output?

- A. /smit.log
- B. /smit.script
- C. /var/log/smit.log
- D. /var/log/smit.script

Answer: A

60. A system administrator did not receive a response while attempting to ping loopback.

Which of the following options would most likely resolve this problem?

- A. Issue `startsrc -s loopback`
- B. Issue `startsrc -s tcpip`
- C. Run `/etc/rc.tcpip`
- D. Reconnect the network cable

Answer: C

61. While logged into the console, a system administrator would like to change the server's primary IP address from X.X.X.X to Y.Y.Y.Y. Which of the following options would be the best way to perform this task?

- A. Use `smit chinet`.
- B. Use `smit mktcpip`.
- C. Issue `ifconfig -a Y.Y.Y.Y`.
- D. Edit the `/etc/hosts` file with the new IP information.

Answer: B

62. Which of the following commands will display the network configuration of an Ethernet adapter?

- A. `lsdev`
- B. `lscfg`
- C. `entstat`
- D. `ifconfig`

Answer: D

63. Multiple users are trying to telnet to the AIX server. They are able to ping the server successfully, but are getting the following error message: `telnet: connect: A remote host refused an attempted connect operation`. Which of the following options could be the cause

of this problem?

- A. The routing table on the AIX server is incorrect.
- B. The IP address on the network adapter is incorrect.
- C. The portmap daemon is not running on the AIX server.
- D. The inetd daemon is not running on the AIX server.

Answer: D

64. For security reasons an administrator has edited the appropriate file to disable ftp and telnet. Which of the following commands must be run to activate the changes?

- A. /etc/rc.tcpip
- B. refresh -s inetd
- C. kill -l inetd
- D. startsrc -g tcpip

Answer: B

65. Which daemon converts Remote Procedure Call (RPC) program numbers into Internet port numbers?

- A. inetd
- B. rexecd
- C. routed
- D. portmap

Answer: D

66. How is an alias IP address removed from a network interface?

- A. `rmdev -dl ent0`
- B. `ifconfig en0 down`
- C. `ifconfig en0 delete`
- D. `ifconfig ent0 detach`

Answer: C

67. Where are timekeeping services configured?

- A. `/etc/services`
- B. `/etc/ntp.conf`
- C. `/etc/rc.tcpip`
- D. `/etc/inetd.conf`

Answer: B

68. Which of the following commands will set the duplex of a network adapter?

- A. `no -a media_speed=100_Full_Duplex en0`
- B. `chdev -l ent0 -a media_speed=100_Full_Duplex`
- C. `ifconfig -a media_speed=100_Full_Duplex ent0`
- D. `chinet -l en0 -a media_speed=100_Full_Duplex en0`

Answer: B

69. Which of the following commands will show the network configuration settings associated with an Ethernet adapter?

- A. lsconfig
- B. lsdev
- C. netstat
- D. ifconfig

Answer: D

70. What command is used to create a SEA device over physical ethernet adapter ent0 and virtual ethernet adapters ent1(PVID 1) and ent2(PVID 2) with default ID of 1?

- A. mkvdev -sea -vadapter ent1 -vadapter ent2 -default ent1 -defaultid 1
- B. mkvdev -sea ent0 -vadapter ent1 -vadapter ent2 -default ent1 -defaultid 1
- C. mkvdev -sea ent0 -vadapter ent1 ent2 -default ent1 -defaultid 1
- D. mkvdev -sea ent0 -vadapter ent1,ent2 -defaultid 1

Answer: C

71. Which of the following options applies to virtual ethernet devices?

- A. A virtual ethernet adapter can only connect to other partitions within the same system.
- B. A virtual ethernet adapter needs to be connected to an external VLAN capable switch to be able to communicate with other partitions on the same P5 system.
- C. A partition can support an unlimited number of virtual ethernet devices.
- D. A virtual ethernet adapter in the VIO Server that is part of a SEA should not have the

"trunk flag" set.

Answer: A

72. A system administrator wants to NFS mount a filesystem from server "Alpha" to server "Bravo". Which command should be issued from "Bravo" to determine which filesystems are being exported by server "Alpha"?

- A. `lsnfsmnt Alpha`
- B. `exportfs -l Alpha`
- C. `showmount -e Alpha`
- D. `mount -t nfs Alpha`

Answer: C

73. A system administrator created a `/etc/exports` file on server "Alpha" and entered a filesystem to be exported to server "Bravo." However, the remote server is unable to mount the filesystem. What does the system administrator need to do?

- A. Use the `exportfs` command on server "Alpha" to export the filesystem
- B. Use the `showmount` command on server "Bravo" to import the filesystem
- C. Use the `startsrc` command on server "Bravo" to refresh the NFS daemons
- D. Use the `chfs` command on server "Alpha" to change the filesystem type to NFS

Answer: A

74. An AIX 5L system has 2 active paging space devices - `/dev/hd6` at 64MB in the rootvg

and /dev/page01 at 256MB in the datavg. The system administrator has determined that only 192MB of active paging space is actually required and wants to reclaim some of the disk space for use by a new application. Which of the following commands should be used to reduce the size of /dev/page01?

- A. chps
- B. rmps
- C. chdev
- D. swapoff

Answer: A

75. Which of the following commands would an AIX system administrator invoke to check if the required device-dependent software is missing?

- A. dbx
- B. cfgmgr
- C. telinit q
- D. lsdev -Cc adapter

Answer: B

76. Which of the following commands will show all interfaces and their IP addresses on an AIX system?

- A. entstat -d
- B. netstat -a

C. ipconfig -l

D. ifconfig -a

Answer: D

77. Which of the following commands will list vital product data for all hardware components on a server?

A. lsdev -C

B. lsslot -a

C. lscfg -vp

D. lsattr -El

Answer: C

78. Which of the following commands will remove the hardware definition of the tape drive rmt0 from a system?

A. rm /dev/rmt0

B. rmdel -s rmt0

C. rmdev -dl rmt0

D. rmdev -ol rmt0

Answer: C

79. Which of the following actions will enable 64-bit applications on a system with a 32-bit kernel?

- A. Change the kernel to 64-bit, reboot, and then use the following command: `chdev -l sys0 -a "applications=64_bit"`.
- B. Re-install the OS with 64-bit kernel enabled.
- C. Re-install all applications with 64-bit versions.
- D. Use `"smit load64bit"` to enable the 64-bit applications.

Answer: D

80. How can a system administrator determine if a system is running in 32-bit or 64-bit mode?

- A. Use `'prtconf -c'` to see if the system is 64-bit enabled
- B. Check the `/etc/inittab` to see if `/etc/method/cfg64` is enabled
- C. Use the `ls -al` to see if `/unix` is linked to `/usr/lib/boot/unix_64`
- D. Use the `lspp` command to see if the `bos.mp64` fileset is installed

Answer: C

81. The following entry is in the `/etc/host.equiv` and `/home/jsmith/.rhosts` file on server

Alpha: jsmith What does this entry indicate?

- A. The user "jsmith" can use r-commands from any server to server Alpha system-wide.
- B. The user "jsmith" can use r-commands from server Alpha to any server system-wide.
- C. The user "jsmith" can use r-commands from server Alpha to any server with a `/home/jsmith` directory.
- D. The user "jsmith" can use r-commands from any server to server Alpha only in the

/home/jsmith directory.

Answer:A

82.A system administrator wants to couple two servers together so that users from server A can access server B without entering their password. How should this be accomplished?

- A. Employ NIS to synchronize user names and passwords
- B. Create a /.rhosts on server A and server B
- C. Create a \$HOME/.netrc for all users on server A and server B
- D. Create a /etc/hosts.equiv on server A and server B

Answer: D

83.A user with the userid of 'joe' is unable to rsh from SYSTEMA to SYSTEMB without having to retype their password, but they can rsh from SYSTEMB to SYSTEMA. No other users are experiencing the same issue. Both systems have a /home/joe/.rhosts file that contain the proper references to the other host. The /home/joe/.rhosts files on both SYSTEMA and SYSTEMB are owned by userid 'joe'. Which of the following is the most likely cause of this problem?

- A. User 'joe' is specified in the /etc/nologin on SYSTEMA.
- B. User 'joe' is specified in the /etc/nologin on SYSTEMB.
- C. The file permissions on the /home/joe/.rhosts file on SYSTEMA are incorrect.
- D. The file permissions on the /home/joe/.rhosts file on SYSTEMB are incorrect.

Answer: D

84. The `$HOME/.netrc` file contains information used by the automatic login feature of which of the following commands?

- A. `rsh`
- B. `ftp`
- C. `ssh`
- D. `rlogin`

Answer: B

85. Disks `hdisk1` and `hdisk2` are assigned to `datavg`. Which of the following would determine which logical volumes are present on `hdisk1`?

- A. `lspv -l hdisk1`
- B. `lsvg -l datavg`
- C. `lslv -p hdisk1`
- D. `lsattr -El hdisk1`

Answer: A

86. Which of the following commands list out the physical volume names as well as total/free PPs in volume group `datavg`?

- A. `lsdev -Cl datavg`
- B. `lsvgpcfg datavg`
- C. `lspv -p datavg`

D. lsvg -p datavg

Answer: D

87. A system administrator can create logical volumes and then add file systems to them, or create the file system directly. What is an advantage of the two-step approach instead of the one-step approach?

- A. The number of bytes per inode can be specified.
- B. Placement of the filesystem on the disk can be specified.
- C. The jfslog can be specified on creation of the filesystem.
- D. Either a JFS or JFS2 filesystem can be created on the logical volume.

Answer: B

88. A system administrator has a filesystem called /test/data in volume group datavg.

Which of the following commands will allow the administrator to create a mirrored copy of the filesystem's data?

- A. chfs
- B. chlv
- C. mklvcopy
- D. mkfscopy

Answer: C

89. A system contains multiple hot-swap stand-alone disks with a large number of JFS2

filesystems. Which feature of JFS2 improves reliability, availability and serviceability (RAS) if a system crash occurs?

- A. Logging
- B. Dynamic inode allocation
- C. Linear directory organization
- D. Online filesystem defragmentation

Answer: A

90. Under which of the following circumstances must a JFS filesystem be used instead of a JFS2 filesystem?

- A. When the filesystem will contain 100GB files
- B. When the filesystem resides on a 32-bit system
- C. When the filesystem contains a large number of small files
- D. When filesystem compression is required due to limited disk space

Answer: D

91. Which of the following commands would an administrator use to list which filesystems are in volume group datavg?

- A. `lspv datavg`
- B. `lslv -a datavg`
- C. `lsfs -v datavg`
- D. `lsvg -l datavg`

Answer: D

92. Which of the following commands is used to list information about each physical volume in volume group testvg?

- A. `lsvg -p testvg`
- B. `lspv -v testvg`
- C. `lslv -l testvg`
- D. `lqueryvg -p testvg`

Answer: A

93. A system administrator would like to rename volume group oldvg to newvg. This volume group resides on hdisk1. What is the appropriate procedure to perform this?

- A. reboot the server in maintenance mode `migratevg -y newvg oldvg` reboot the server in normal mode
- B. `umount` all filesystems in the volume group `varyoffvg oldvg` `migratepv -y oldvg -n newvg varyonvg newvg`
- C. `umount` all filesystems in the volume group `varyoffvg oldvg` `exportvg oldvg` `importvg -y newvg hdisk1` `mount` all
- D. `umount` all filesystems in the volume group `varyoffvg oldvg` for each logical volume in the volume group `doctlv -v oldvg -y newvg varyonvg newvg` `mount` all

Answer: C

94. A system administrator has a two-disk volume group (testvg) with one logical volume (testlv) which has just been mirrored across both disk drives. Which of the following commands can be used to turn off quorum?

- A. `chvg -Qntestvg`
- B. `chlv -Qn testlv`
- C. `varyoffvg testvg; varyonvg -Qn testvg`
- D. `varyoffvg testvg; exportvg testvg; importvg -Qn testvg; varyonvg testvg`

Answer: A

95. A system administrator has a failed disk drive that is mirrored to another disk drive. The system administrator successfully removed the logical volume copies off of the failed disk drive. Which of the following commands would remove the failed disk drive from the volume group?

- A. `reorgvg`
- B. `rmdev`
- C. `reducevg`
- D. `exportvg`

Answer: C

96. The `/systest` filesystem is associated with the `/dev/testlv` logical volume on the `testvg` volume group. The `testvg` volume group is assigned to physical volumes `hdisk2` and `hdisk3`. Which of the following commands can the system administrator use to determine if

the /systest filesystem is mirrored?

- A. df
- B. lslv
- C. lsfs
- D. lsdev

Answer: B

97. The /systest filesystem is associated with the /dev/testlv logical volume on the 'testvg' volume group. Given this information, which of the following commands can the system administrator use to determine if the /systest filesystem is mirrored?

- A. df
- B. lsvg
- C. lsfs
- D. lsdev

Answer: B

98. A system administrator has a server experiencing performance problems with logical volumes within a particular volume group. Which command can report I/O statistics for logical partitions with each logical volume within the volume group?

- A. lslv
- B. lsvg
- C. iostat

D. lvmstat

Answer: D

99. Which of the following commands will list all the logical volumes and the file system distribution across a specific physical volume?

A. lsv -l

B. lslv -p

C. lsv -L

D. lsvg -m

Answer: A

100. A system administrator has determined that the /development filesystem needs to be changed from JFS to JFS2 to take advantage of the new capabilities available in JFS2.

What is the method to convert the /development filesystem from type JFS to JFS2?

A. umount the /development filesystem, create new JFS2 /development filesystem, and remount it using the following command: `mount -t jfs2 /development`

B. Backup the /development filesystem data, edit the /etc/filesystems file to change the type parameter to "jfs2", change the log parameter to "jfs2log" and restore the data to the /development filesystem

C. Backup the /development filesystem data, delete the JFS /development filesystem, create the new JFS2/development filesystem, and restore the data to the /development filesystem

D. Backup the /development filesystemdata, change the /development filesystem using the following commandchfs -t type=jfs2 /development then, restore the data to the /development filesystem and applythe journals

Answer: C

101.While using the smit install_remove menus to remove some filesets on an AIX 5.3 server, a system administrator notices the /usr filesystem is now unnecessarily large.Which of thefollowing actions will reducethe size of the/usr filesystem?

- A. Backup, unmount, remove, recreate and restore the filesystem.
- B. Boot frommksysb tape and select Shrink filesystems on restore.
- C. Unmount, run defragfs /usr and the reducefs -size XXX /usr commands.
- D. Update /etc/filesystems with the desired size for /usr and reboot the system.

Answer: B

102.The system administrator wants to use a new jfslog /dev/fs1log withthe filesystem /test/fs1 onthe testvgvolume group. The following commands were usedto create the log and assign it to the filesystem: mklv -t jfslog -y /dev/fs1log testvg 1 chfs -a log=/dev/fs1log /test/fs1 While trying to mount the /test/fs1 filesystemthe administrator received the error:

"Cannot mount /dev/fs1lv on /test/fs1: A system call received a parameter that isnot valid".

What step did the administrator miss that most likely caused the error?

- A. Use the logform command to format /dev/fs1log as a jfslog.
- B. Use the chlvs command to change the lvtype of /dev/fs1log to jfslog.

- C. Use the chvg command to change the default jfslog of testvg to /dev/fs1log.
- D. Edit the /etc/filesystems file to change the log associated with /test/fs1 to /dev/fs1log.

Answer: A

103. A system administrator has increased the size of the logical volume lv00. The administrator now wants to enlarge the filesystem /fs00 that is mounted on lv00 to the same size as lv00. Which of the following commands will show the administrator the number of blocks to use when increasing the size of the filesystem /fs00?

- A. `lsiv /fs00`
- B. `lsfs -q /fs00`
- C. `lsdev -Cc lv00`
- D. `lsattr -El lv00`

Answer: B

104. Which of the following commands will increase the contiguous free space of a filesystem without having to add additional partitions?

- A. `chfs`
- B. `fsck`
- C. `chlv`
- D. `defragfs`

Answer: D

105. A system administrator is attempting to unmount filesystem /dev/data and receives

the following message: `umount: 0506-349 Cannot unmount /dev/data: The requested resource is busy.` Which of the following commands can be used to determine which process has open references within the filesystem?

- A. `lsfs`
- B. `topas`
- C. `fuser`
- D. `ps`

Answer: C

106. Which attribute of a JFS filesystem can NOT be changed after the filesystem is created?

- A. The size of the filesystem
- B. The placement of the filesystem
- C. The mount point of the filesystem
- D. The number of bytes per inode

Answer: D

107. Error log analysis indicates that a disk is starting to fail and will need to be replaced.

The failing disk contains multiple logical volumes which span multiple disks. A free disk has been added to the failing disk's volume group. All disks are the same size. Which of the following options is the most efficient method to move the data from the failing disk to the new disk?

- A. Back up the data, remove the failing disk from the volume group, then restore the data to the new disk.
- B. Use the `migratepv` command to move data from one disk to another and then remove the failing disk from the volume group.
- C. Use the `mirrorvg` command to mirror the data to the new disk, break the mirror and then remove the failing disk from the volume group.
- D. Create a new filesystem on the new disk and use the `mv` command to move the data to the new filesystem, and then remove the failing disk from the volume group.

Answer: B

108. A system administrator's daily monitoring has revealed a failing disk drive. The drive that is failing, `hdisk0`, is a `lvm` mirrored drive. What is the first step that would be taken in order to physically replace this drive?

- A. Remove the physical volume from the system.
- B. Remove the physical volume from the volume group.
- C. Remove the physical partitions from the volume group.
- D. Remove the logical volume copies from the failing drive.

Answer: D

109. A system administrator issued the `errpt` command and had no results. The system administrator determined that error logging was turned off. Which of the following commands would start logging system errors?

- A. /usr/bin/errmsg
- B. /usr/lib/errdemon
- C. /usr/lib/errlogger
- D. /usr/bin/errinstall

Answer: B

110. Which of the following commands is used to delete "DISK OPERATION ERROR" from the following error report?

```
IDENTIFIER  TIMESTAMP  T  C  RESOURCE_NAME
DESCRIPTION  F89FB899  0616150005  P  Odumpcheck  The copy directory is too small.
5DFED6F1  0616075205  I  O  SYSPFS  UNABLE TO ALLOCATE SPACE IN FILE
SYSTEMAA8AB241  0615153905  TO OPERATOR  OPERATOR NOTIFICATION
35BFC4990412130605P  H  hdisk6  DISK OPERATION ERROR  91FBD5DB  0525045805
P  S  ssa1  SOFTWARE PROGRAM ERROR  05F97A32  0525045805  P  H  ssa1ADAPTER
ERROR
```

- A. `errclear -k35BFC499 0`
- B. `errpt -N hdisk6`
- C. `errclear -j 35BFC499 0`
- D. `errpt -k 35BFC499`

Answer: C

111. A system administrator ran the `vmstat` command because of performance problems. The output of the `vmstat` is given:

```
kthr  memory  page faults  cpu  r  b  avm  fre  re  pi  po  fr  sr  cyin
```

```
sy cs us sy id wa 4 1 191703677 0 0 0 0 0 207 150 47 6137 0 14 1 191703 341 0 00 0 0
0 206 100 27 64 30 2 4 4 1 192064 664 0 0 0 0 0 207 110 16 53 43 1 33 1 191773 447 0
0 0 0 0 0 206 110 84 57 38 2 3 4 1 191592 184 0 0 0 0 0 204 110 87 63 32 1 4 41
191567 232 0 0 0 0 0 207 150 87 63 33 1 35 1 191521 142 0 0 0 0 0 208 120 33 59 38
0 2 4 1 191985 170 00 0 00 0 209 121 2964 32 1 35 1 191856 179 0 0 0 0 0 0203 120 40
57 420 0
```

Based on the output, which of the following is insufficient?

- A. cpu
- B. kthr
- C. memory
- D. page

Answer: A

112. A system administrator ran the vmstat command because of performance problems.

The output of the vmstat is given: System Configuration: lcpu=2 mem=512MB kthr memory

```
page faults cpu r b avm fre re pi po fr sr cy in sy cs us sy id wa 198 0 38 15532540 14902 0
```

```
592 1471 1547 14 15 38 321 1 51610 120 0 34 40 123 1788 0 496 1425 892 0 1 79 20 0 1
```

```
51610127 0 143 48144 1568 0 592 1199 1045 0 3 49 480 1 51610 123 0 140 51 141 1032
```

```
0 589 1181 1038 0 2 49 48 0 1 51610 125 0 143 40 144 1375 0 589 118810390 2 49 49
```

Based on the output, which of the following options is insufficient?

- A. Disk
- B. CPU
- C. Memory

D. Network0

Answer: C

113. A system administrator periodically receives calls from users who complain about poor performance with their application. Using the following sar command output, which of the following system resources need more investigation? sar -u 5 5 AIX server1 3 5

```
000011223344 03/07/05 10:04:26 %usr %sys %wio %idle 10:04:31 4 8 1 70 10:04:36 5 13
0 74 10:04:41 5 12 0 74 10:04:46 5 16 0 73 10:04:51 3 9 0 73 Average 4 120 73 sar -r 5 5
```

```
AIX server1 3 5 000011223344 03/07/05 10:36:44 slots cycle/s fault/s odio/s
```

```
10:36:49 779877 0.00 12178.240.00 10:36:55 779877 0.00 12028.540.00 10:37:00
```

```
779877 0.00 12095.60 0.00 10:37:05 779877 0.00 12107.19 0.00 10:37:10 779869 0.00
```

```
11935.93 0.00 Average 779875 0 12069 0 sar -d 5 5 AIX server1 3 5 000011223344
```

```
03/07/05 10:05:39 device %busy avque r+w/s blks/s avwait avserv 10:05:44 hdisk3 80 10.0
```

```
783 6498 0.0 0.0 hdisk10 0.0 00 0.0 0.0 hdisk200.0 0 0 0.0 0.0 hdisk0 0 0.0 0 0.0 0.0 cd0
```

```
0 0.0 0 0.0 0.0 10:05:49 hdisk3 7715.0 812 6577 0.0 0.0 hdisk1 0 0.0 0 0.0 0.0 hdisk2 0
```

```
0.0 0 0.0 0.0 hdisk0 0 0.0 0 0.0 0.0 cd0 0 0.0 0 0.0 0.0 10:05:54 hdisk3 88 12.0 750
```

```
6375 0.0 0.0 hdisk1 0 0.0 0 0.0 0.0 hdisk2 0 0.0 0 0.0 0.0 hdisk0 0 0.0 0 0.0 0.0 cd0 0
```

```
0.0 0 0.0 0.0 10:05:59 hdisk3 89 13.0 802 6736 0.0 0.0 hdisk1 0 0.0 0 0.0 0.0 hdisk2 0
```

```
0.00 0 0.0 0.0 hdisk0 0 0.0 0 0.0 0.0 cd0 0 0.0 0 0.0 0.0 10:06:04 hdisk3 83 12.0 783
```

```
64360.0 0.0 hdisk1 0 0.0 0 0.0 0.0 hdisk2 0 0.0 0 0.0 0.0 hdisk0 0 0.0 0 0.0 0.0 cd0 0
```

```
0.0 00 0.0 0.0 Average hdisk3 83 12.0 786 6524 0.0 0.0 hdisk1 0 0.0 0 0.0 0.0 hdisk2 0 0.0
```

```
0 0 0.0 0.0 hdisk0 0 0.0 0 0.0 0.0 cd0 0 0.0 0 0.0 0.0
```

- A. CPUs
- B. Dsk
- C. Mmory
- D. Ntwork

Answer: B

114. An administrator attempted to run a sar -u report and received the following error: sar: 0551-201 Cannot open /var/adm/sa/sa07. Which of the following should be scheduled in adm's crontab to enable sar reporting?

- A. sar
- B. sa1
- C. vmtune
- D. schedtune

Answer: B

115. What stanza file does a system administrator view to determine which kernel-tuning parameter changes were made when the system was last started?

- A. /etc/rc.net
- B. /etc/tunables/tuning
- C. /etc/tunables/lastboot
- D. /usr/samples/kernel/nextboot

Answer: C

116. Which of the following commands would a system administrator run after using an editor to create the `/etc/tunables/nextboot` file?

- A. `ksh -n nextboot`
- B. `tunsave -a -f nextboot`
- C. `tuncheck -r -f nextboot`
- D. `diff $(vmtune) /etc/tunables/nextboot`

Answer: C

117. A system administrator is monitoring a system that has recently shown a decrease in performance. The administrator suspects that the system may be low on memory and may be paging excessively. Which of the following commands is best to identify a possible paging problem?

- A. `iostat`
- B. `lsps -a`
- C. `ps`
- D. `vmstat`

Answer: D

118. A system administrator is monitoring a system that has recently shown a decrease in performance. The administrator suspects there is an overload of traffic on a single Ethernet adapter. Which of the following commands is best to identify a possible overload of the

Ethernet adapter?

- A. ping
- B. iostat
- C. netstat
- D. ifconfig

Answer: C

119. A system administrator ran the iostat command because of system performance problems. The following iostat output is provided: iostat 120 3 System configuration: lcpu=2 drives=4 paths=1 vdisks=0 tty: tin tout avg-cpu: % user % sys % idle % iowait 0.1 46.8 77.6 22.1 0.0 0.3 Disks: % tm_act Kbps tps Kb_read Kb_wrtn hdisk3 0.2 9.5 0.3 61355081 46299763 hdisk1 0.2 14.0 0.5 112654145 46299771 hdisk2 0.1 0.7 0.1 18068226462876 hdisk0 0.1 1.9 0.2 15165133 6463460 cd0 0.0 0.0 0.0 0 0 tty: tin tout avg-cpu: % user % sys % idle % iowait 0.0 4.5 81.7 18.3 0.0 0.0 Disks: % tm_act Kbps tps Kb_read Kb_wrtn hdisk3 0.0 0.0 0.0 0 0 hdisk1 0.0 0.0 0.0 0 0 hdisk2 0.2 2.1 0.4 0 256 hdisk0 0.2 2.1 0.4 0 256 cd0 0.0 0.0 0.0 0 0 tty: tin tout avg-cpu: % user % sys % idle % iowait 0.0 4.5 81.2 18.7 0.0 0.1 Disks: % tm_act Kbps tps Kb_read Kb_wrtn hdisk3 0.0 0.0 0.0 0 0 hdisk1 0.0 0.0 0.0 0 0 hdisk2 0.2 1.8 0.3 0 220 hdisk0 0.1 1.8 0.3 0 220 cd0 0.0 0.0 0.0 0 0 .%?.&,...*.Based on the output, which of the following is insufficient?

- A. CPU
- B. Memory
- C. Paging space

D. Disk capacity

Answer: A

120. Because of system performance problems, a system administrator ran the iostat command. The following iostat output is provided:

```
iostat 120 3
tty: tin tout avg-cpu: %
user % sys % idle % iowait
0.1 46.8 10.3 13.1 0.0 76.6
Disks: % tm_act Kbps tps Kb_read
Kb_wrtn
hdisk3 0.2 9.5 0.3 1873900
hdisk1 0.2 14.0 0.5 4145 771
hdisk2 70.1 1844.7
402.591806822 6462876
hdisk0 0.1 1.90.2 8133 1460
cd0 0.0 0.00.00 0
tty:
tin tout avg-cpu: % user % sys % idle % iowait
0.0 4.5 3.2 11.8 0.0 85.0
Disks: % tm_act
Kbps tps Kb_read Kb_wrtn
hdisk3 0.0 0.0 0.0 0 0
hdisk1 0.0 0.0 0.0 0 0
hdisk2 90.2 2581.4
473.8 12924 0
hdisk0 0.2 2.1 0.4 0 256
cd0 0.00.0 0.0 0 0
tty: tin tout avg-cpu: % user %
sys % idle % iowait
0.0 4.5 5.4 16.2 0.0 78.4
Disks: % tm_act Kbps tps Kb_read Kb_wrtn
hdisk3 0.0 0.0 0.0 0 0
hdisk1 0.0 0.0 0.0 0 0
hdisk2 83.2 1924.8 303.3 5000 2220
hdisk0
0.11.8 0.3 0 20
cd0 0.0 0.0 0.0 0 0
```

Which of the following issues can be derived from the output?

- A. The server is CPU bound.
- B. The server has network problems.
- C. The server is memory constrained.
- D. The server needs the disk usage to be optimized.

Answer: D

121. What do the entries in the /proc directory represent?

- A. They are the decimal numbers corresponding to the activeprocessIDs.
- B. They are the decimal numbers correspondingto the gid of the system group.
- C. They are the decimal numbers corresponding to the block IDs of the boot sector.
- D. They are the decimal numbers corresponding to the inodes of the system directories.

Answer: A

122.A system administrator found a process on the server that should be stopped. Which of the followingcommands can be used to list all the signal actions defined for this process?

- A. ps
- B. Pstat
- C. Portmap
- D. procsig

Answer: D

123.A system administrator has edited /etc/syslog.conf to change system logging. What other action is necessary to put this change into effect?

- A.reboot
- B. refresh -s syslogd
- C. refresh -s syslog
- D. Run /etc/rc.net

Answer:B

124. A system administrator has been asked to document the hardware configuration of a system. Which of the following commands would assist in this task?

- A. `lscfg`
- B. `lsattr`
- C. `lsresource`
- D. `cfgmgr`

Answer: A

125. A system administrator is in the process of documenting the system. Which of the following commands will provide a list of all the devices defined on the system?

- A. `lsdev`
- B. `lsresource`
- C. `lsattr`
- D. `lsslot`

Answer: A

126. The `/home` filesystem is 100% full and errors are generated trying to increase the size using `chfs`. Which of the following options is most likely the problem?

- A. `/tmp` is 100% full
- B. `/var` is 100% full
- C. `/home` is still mounted

D. A user is editing a file residing in /home

Answer:A

127.A filesystem /fs_a occupies the entire volume group vg_a. There are no available partitions in vg_a. How would the size of /fs_a be increased?

- A. Extend the volume group vg_a into another volume group with available partitions
- B. Use another filesystem to extend the filesystem /fs_a
- C. Extend the filesystem /fs_a after adding an available physical volume to vg_a
- D. Add free space from another volume group to vg_a

Answer: C

128. A remote user is trying to telnet to the production server. The session is getting a timeout error. Which of the following commands would the user issue to verify the network connection?

- A. iptrace
- B. nslookup
- C. netstat
- D. traceroute

Answer:A

129. A user calls to report they are getting I/O errors on a file system. Which of the following tools would isolate this problem?

- A. df
- B. diagrpt
- C. errmsg
- D. errpt

Answer: D

130. A system administrator received the following message while trying to ssh to a server: connection timed out. The administrator pinged the server and had no response. The administrator then pinged the gateway, and was successful. Which of the following tools could the administrator use next to isolate the problem?

- A. route
- B. traceroute
- C. netstat -nr
- D. broadcast ping

Answer: B

131. Performance monitoring of a poorly performing system indicates a high level of CPU usage. Which of the following tools can be used to help identify which processes are using excessive CPU resources?

- A. sar
- B. topas
- C. iostat

D. vmstat

Answer: B

132. A system administrator has just finished upgrading a system to AIX 5.3. If there are future problems, the system administrator would like to add an entry to the AIX errorlog to record this event. Which of the following commands can be issued for this purpose?

A. /usr/bin/errmsg "System upgraded to AIX 5.3"

B. /usr/bin/errlog "System upgraded to AIX 5.3"

C. /usr/bin/errupdate "System upgraded to AIX 5.3"

D. /usr/bin/errlogger "System upgraded to AIX 5.3"

Answer: D

133. Which of the following commands will remove all software entries in the error log?

A. errpt -d S

B. errmsg 0

C. errclear -d S 0

D. errmsg -d S 0

Answer: C

134. A system administrator identified a problem with an AIX command and implemented a work-around. A call was made to IBM Support to report the problem. What severity level should the administrator choose?

- A. Crit-Sit
- B. Severity 1
- C. Severity 2
- D. Severity3

Answer: D

135. A system administrator is currently working on a problem with IBM Support. The administrator feels that their expectations are not being met on this problem. What is the IBM recommended procedure to ensure that the request is handled appropriately?

- A. Request to change the severity to 1.
- B. Request to speak to the Duty Manager.
- C. Request to escalate the problem to development.
- D. Request IBM to close the incident and reopen the incident with another call.

Answer: B

136. A system administrator needs to configure dump devices for the system. Which of the following commands would be used to estimate the size required for a dump device?

- A. lsdev
- B. chdev
- C. sysdumpdev
- D. sysdumpstart

Answer: C

137. A systemdump has occurred. The LED display shows 0c0. What does this indicate?

- A. The dump was successful.
- B. A system dump is in progress.
- C. No systemdump device configured.
- D. There was an I/O error during the dump.

Answer: A

138. Which of the following commands can be used to identify all PCI hot plug slots on a server and their characteristics?

- A. `lsattr -l pci`
- B. `lscfg -vl pci`
- C. `lsconn -p pci`
- D. `lsslot -c pci -a`

Answer: D

139. A user would like their shell prompt to reflect the current directory. Which of the following environment variables can be set to accomplish this?

- A. PS1
- B. PATH
- C. PROMPT
- D. LOCPATH

Answer: A

140. A system administrator has been asked to lock a specific login account. Which of the following commands is used to accomplish this?

A. pwdck

B. usrck

C. chuser

D. rmuser

Answer: C

141. A system administrator would like to verify the user definitions in the /etc/passwd file.

Which of the following commands will accomplish this?

A. sysck

B. usrck

C. lssec

D. lsuser

Answer: B

142. A user has used all of the allowed logon attempts for the user id. Which command can be used to reset the unsuccessful_login_count to 0 for that user?

A. usrck

B. chsec

C. chuser

D. Passwd

Answer: B

143. A system's backups are failing. Error log analysis indicates that there is either a hardware or media problem. Which of the following commands is used to determine if there is a hardware problem with the tape drive?

A. diag

B. lscfg -v

C. errpt -z

D. cfgmgr

Answer: A

144. Following a system boot, the display indicates that previously detected hardware is missing. Which of the following commands would identify the missing hardware?

A. diag

B. lscfg

C. cfgmgr

D. lsattr

Answer: A

145. A system administrator has determined a root mirrored disk, hdisk1, needs to be

replaced. The root volume has been unmirrored. What is the next step to remove the disk drive?

- A. `recreatevg rootvg hdisk1`
- B. `rmdev -d hdisk1 -l`
- C. `reducevg rootvg hdisk1`
- D. `reorgvg rootvg hdisk1`

Answer: C

146. A mirrored root disk needs to be replaced. Which of the following commands will clear the boot record on the failing disk?

- A. `chpv -c`
- B. `rmlv hd5`
- C. `bosboot -ad`
- D. `rmdev -dl hd5`

Answer: A

147. A system administrator has placed an AIX base media CD-ROM in a server and initiated a reboot. The server has an ASCII terminal attached to it. Which key or key combination must the administrator press to initiate the maintenance mode?

- A. 5
- B. M
- C. F8

D. Ctrl-Alt-Delete

Answer: A

148. A server will not boot in normal mode and the server must be booted into maintenance mode to rebuild the boot logical volume. A NIM master is not defined in this environment.

How is the system booted into maintenance mode to perform this task?

- A. Apply power and when the SMS menus appear press 5 repeatedly to enter a maintenance boot automatically. The system will present a maintenance shell eventually.
- B. Boot media such as CDROM or Tape is required to boot into maintenance mode. When inserted into the proper device the system automatically boots into maintenance mode when it can not boot into normal mode.
- C. Apply power and the server automatically boots into maintenance mode where you can select your disk to rebuild the boot logical volume.
- D. Boot media such as CDROM or Tape is required and an administrator must select the proper SMS menus to get into maintenance mode.

Answer: D

149. After adding a new Ethernet card to a system and rebooting, the system administrator notices the card was not configured. How can the system administrator determine if there were errors during the configuration process for the card?

- A. Examine the bootlog with the command: `alog -o -f /var/adm/ras/bootlog`.
- B. Display the device attributes and errors with the command: `lsdev -C -l ent0`.

C. Examine the AIX errlog for configuration method errors with the command: `errpt -a -C ent0`.

D. Examine the ODM for configuration errors with the command: `odmget -q "method_errors" ent0`.

Answer: A

150. A system without a monitor has crashed. The administrator would like to see the console output to determine a possible cause of the crash and ensure that there were no problems on reboot. Which of the following commands should be used?

A. `alog`

B. `swcons`

C. `lscons`

D. `syslog`

Answer: A

151. The rootvg disk on a system failed and was replaced. The system was restored using the latest `mksysb`. However, no files in the `/home` filesystem were restored. Which of the following options is the most likely cause of this problem?

A. The new drive is too small to hold the entire rootvg.

B. The `/home` filesystem was not mounted during creation of the `mksysb`.

C. The `/home` stanza in the `bosinst.data` contained an entry `'restore=no'`.

D. The `/home` filesystem was NFS exported to another system during creation of

themksysb.

Answer: B

152. An administrator needs to be able to restore a mksysb created on SERVER_A using a 4MM tape drive, to SERVER_B that only has an 8MM tape drive. There is an additional server that has a 4MM drive at /dev/rmt0 and an 8MM drive at /dev/rmt1. Which of the following procedures should be followed to convert from the 4MM to 8MM format?

- A. `tcopy /dev/rmt0.1 /dev/rmt1.1`
- B. `dd if=/dev/rmt0.1 of=/dev/rmt1.1`
- C. `tar -xvf /dev/rmt0.1 | tar -cvf /dev/rmt1.1`
- D. `cpio -ivcBDUM < /dev/rmt0.1 | cpio -ovcBDUM - >/dev/rmt1.1`

Answer: A

153. A system administrator wants to automatically eject the backup tape each night after the backup is complete. Which of the following commands can be used to eject the tape?

- A. `stopsrc`
- B. `tctl`
- C. `chdev`
- D. `tcopy`

Answer: B

154. A system administrator is attempting to restore some files from a backup tape. The

restore failed. The system administrator suspects the block size of the tape drive is incorrect. Which of the following commands can be used to determine the block size of the backup tape?

- A. dd
- B. tar
- C. cpio
- D. restore

Answer: A

155. An AIX server is being used as a file server and all data is stored on a non-root volume group and resides on mounted filesystems. Which of the following commands provides the quickest way to backup all of the data and filesystem definitions?

- A. backup
- B. mksysb
- C. pax
- D. savevg

Answer: D

156. A system administrator has an application that has the data in volume group appvg. Which of the following commands will back up the contents of appvg to the tape in /dev/rmt0 and check for any read errors?

- A. savevg -mf /dev/rmt0 appvg

- B. savevg -cvf /dev/rmt0 appvg
- C. savevg -xvf /dev/rmt0 appvg
- D. savevg -f /dev/rmt0 -V appvg

Answer: D

157. In which of the following directories are the basic Linux commands such as gzip, gunzip and zcat installed?

- A. /opt/freeware/bin
- B. /usr/bin/freeware
- C. /var/freeware/bin
- D. /usr/sbin/freeware

Answer: A

158. A support specialist started to apply an APAR on a system by inserting the tape into the tape drive, and loaded the fix using smitty installp. The following error message is displayed: tape not in backup format Which of the following options will resolve this problem?

- A. Change density setting to 2
- B. Set tape device to /dev/rmt0
- C. Set block size to 0 for variable
- D. Enable compression on tape device

Answer: C

159. Which of the following commands can a system administrator use to verify that a tape is in backup format and is readable by the system?

- A. tar
- B. tctl
- C. Tcopy
- D. restore

Answer: D

160. How can a directory be excluded from a mksysb backup?

- A. Put an entry in the /etc/exclude.rootvg file.
- B. Put an entry in the /etc/mksysb.exclude file.
- C. Remove the directory's entry from the mksysb /image.data file.
- D. Remove the directory's entry from the /var/adm/ras/bosinst.data file.

Answer: A

161. A system administrator used the savevg command to backup the testvg each night.

There is now a requirement to exclude the /test/static filesystem from the backup. How can this be accomplished?

- A. Use the -X flag on the savevg command.
- B. Put an entry in the /etc/exclude.testvg file.
- C. Remove the /test/static entries from the /vgdata/testvg.data file.

D. Use the touch command to create /test/static/.excludebefore using savevg.

Answer: B

162. A system administrator performs a full backup every Saturday evening and incremental backups the rest of the week. The system failed on Thursday and needs to be restored. Which backup tapes will be required to restore the system to its most recent recoverable state?

A. Saturday's full backup tape only

B. Wednesday's incremental backup tape only

C. Saturday's full backup and Wednesday's incremental backup tapes

D. Saturday's full backup and Sunday's through Wednesday's incremental backup tapes

Answer: D

163. Due to operational commitments, a system has a very short backup window during the week, but is not used from Saturday morning through Sunday at Midnight. Which of the following minimizes backup time, while providing the best data restore coverage?

A. Full backups every night

B. Differential backups every night

C. Full backup Saturday night, incremental backups the rest of the week

D. Full backup Saturday night, differential backups the rest of the week

Answer: C

164. A user wants to be permanently added to the dba group. Which of the following commands or processes can be used to accomplish this?

- A. chgrp
- B. chuser
- C. setgroups
- D. edit/etc/security/group

Answer: B

165. How does a system administrator add a new user to a system and create a home directory?

- A. mkuser
- B. cruser
- C. edit /etc/security/user
- D. edit /etc/passwd

Answer: A

166. Which action changes the default editor for ALL users on the system from vi to edit?

- A. Issue the command: `xport EDITOR=/usr/bin/edit`
- B. Modify `/.profile` and change the EDITOR variable to `/usr/bin/edit`
- C. Modify `/etc/environment` and add `EDITOR=/usr/bin/edit` `xport EDITOR`
- D. Modify `/etc/security/defaults` and change the EDITOR value to `/usr/bin/edit`

Answer: C

167. For security reasons, an administrator is asked to modify the system to prevent someone from leaving a terminal logged in. Which of the following options would enable a five minute timeout for all users?

- A. Add the following line to `/etc/environment`: `TMOU=300`
- B. Add the following lines to `/.profile`: `TMOU=5` and `export TMOU`
- C. Execute the following command: `chuser -u ALL -a TIMEOUT=5M`
- D. Execute the following command: `chsec -u ALL -a TIMEOUT=600`

Answer: A

168. A system administrator would like to modify the system default user characteristics so that each new user will now be assigned (by default) the `csh` shell rather than the `ksh` shell. Which of the following actions should be performed?

- A. Run the command `chlogin -shell "csh"`
- B. Run the command `mkuser -default "SHELL=csh"`
- C. Edit `/etc/passwd` and change all `"ksh"` entries to `"csh"`
- D. Modify the contents of `/usr/lib/security/mkuser.default` file

Answer: D

169. A system administrator would like to allow root access only from the system console.

Which of the following commands can be used to accomplish this?

- A. `chuser`

- B. chcons
- C. chauthent
- D. chservices

Answer: A

170. A system administrator is unable to unmount a file system. Which of the following is the appropriate command to determine who or what is accessing the file system?

- A. `who /filesystem`
- B. `lsfs /filesystem`
- C. `fuser /filesystem`
- D. `umount -f /filesystem`

Answer: C

171. Review the following program. What is most likely the problem? VAR=1

```
(( VAR=$VAR+1 )) while[ $VAR -lt 10 ] do echo $VAR done
```

- A. `#!/bin/ksh` line is missing
- B. Variable name VAR is not properly initialized
- C. Loop variable is not incremented inside the loop
- D. Loop variable is not decremented inside the loop

Answer: C

172. Given the following script, why does the output come out as an empty line instead of

"dog"? #!/bin/ksh\$VAR=dog echo "\${VAR}"

- A. The \$VAR variable was not exported.
- B. The \$VAR should have been set as VAR.
- C. dog needs double quotes around it when setting \$VAR.
- D. The { } should not be around VAR in the echo command.

Answer: B

173. A user reports that they cannot cd to /tmp/application. A system administrator entered the following command: ls -ld /tmp/application drw-r--r-- 4 root system 512 Jan 15 14:09 application What is the most likely cause of the problem?

- A. The /tmp/application should be globally writable.
- B. The /tmp/application directory should be executable.
- C. The /tmp/application directory should be owned by the user.
- D. The /tmp/application directory should have the sticky bit set.

Answer: B

174. A system administrator wants to give full read/write/execute access to the owner and group of the /stuff directory and all subdirectories and files, but only allow read/execute for others. Which of the following commands should the administrator use?

- A. chmod -R 775 /stuff
- B. chmod -h 002 /stuff
- C. chmod -R 577 /stuff

D. `chmod ug+rwx,o+rx /stuff`

Answer: A

175. While installing an application, the administrator is instructed to perform two final tasks prior to starting the application: 1. Set the ownership of a file named 'control_file' to be owned by the user 'database' and the group 'appsvr'. 2. Change the permissions of 'control_file' to 0766. After these two tasks have been completed, what will the file permissions look like when 'ls -l control_file' is executed?

- A. `-rwxrw-rw- 1 database appsvr 4913 Mar 17 08:24 control_file`
- B. `-rwxr-xr-x 1 appsvr database 4913 Mar 17 08:24 control_file`
- C. `-rw-rw-rw- 1 database appsvr 4913 Mar 17 08:24 control_file`
- D. `-rwxrw-rw- 1 appsvr database 4913 Mar 17 08:24 control_file`

Answer: A

176. How can permissions be set up on /tmp so that a user cannot delete another user's files?

- A. `chmod +s /tmp`
- B. `chmod 775 /tmp`
- C. `chmod 1777 /tmp`
- D. `chmod 4755 /tmp`

Answer: C

177. Given the following scripts, both found in /usr/local/bin, what would the output be when executing /usr/local/bin/script1? script1 #!/bin/ksh var1="dog" var2="cat" export var1 export var2 var1="mouse" /usr/local/bin/script2 script2 #!/bin/ksh var2="fish" echo "\${var1} \${var2}"

- A. dog cat
- B. dog fish
- C. mouse cat
- D. mouse fish

Answer: B

178. Given the following scripts, what output would be generated?

```
/usr/local/bin/script1 #!/usr/bin/ksh VAR1=red export VAR1=green VAR1=blue  
  
/usr/local/bin/script2 VAR1=yellow /usr/local/bin/script2 #!/bin/ksh echo "The sky is  
${VAR1}."
```

- A. The sky is red.
- B. The sky is blue.
- C. The sky is green.
- D. The sky is yellow.

Answer: C

179. A 1500 page print job was sent to the "pcl" queue. The job was running for several minutes before it was determined that the job was not needed. Which of the following

options will delete the job?
lpstat Queue Dev Status Job Files User PP % Blks Cp Rnk pcl

pcl RUNNING 201 STDIN.27648 root 750 10 1000 1 1

- A. kill 201
- B. cancel 201
- C. disable pcl
- D. lp -d /var/spool/lpd/STDIN.27648

Answer: B

180. A user's printjobs default to PRINTER_A. The user wants to change their default printer to PRINTER_B. How can the system administrator change the user's default printer to PRINTER_B?

- A. Execute the command 'lpoptions -q PRINTER_B'
- B. Edit the user's stanza in the /etc/qconfig file
- C. Execute the command 'chuser -a QUEUE=PRINTER_B user'
- D. Add the line 'export PRINTER=PRINTER_B' to the user's .profile

Answer: D

181. Which of the following commands will find all the rc files in /etc and display them?

- A. ls -l /etc/r?
- B. ls -l /etc/rc.d/*
- C. ls -l /etc/rc? | grep -v ^d
- D. ls -l /etc/rc* | grep -v ^d

Answer: D

182. A system administrator wants to rewrite a how-to guide. Each chapter is a file called chapter.* where * is the chapter number. Chapters 110-120 have replaced chapters 10-19.

How would the System Administrator remove the files containing chapters 10 thru 19?

- A. `rm chapter.1?`
- B. `rm chapter.1*`
- C. `rm $(ls chapter | grep 1)`
- D. `for i in 1 2 3 4 5 6 7 8 9`

Answer: A

183. Which of the following commands will run `myscript` and redirect stdout and stderr to `/tmp/myoutput`?

- A. `./myscript >> /tmp/myoutput`
- B. `./myscript 2>&1 /tmp/myoutput`
- C. `./myscript > /tmp/myoutput &1>2`
- D. `./myscript > /tmp/myoutput 2>&1`

Answer: D

184. A system administrator wants to run a script called `myscript`, but does not want to see the errors that might be generated by the script. How would this be accomplished?

- A. `./usr/local/bin/myscript > /dev/null`

- B. `/usr/local/bin/myscript < /dev/null`
- C. `/usr/local/bin/myscript 2> /dev/null`
- D. `/usr/local/bin/myscript 1> /dev/null`

Answer: C

185. Which cron entry will run `/usr/local/bin/myscript` at 0500 every Saturday?

- A. `0 5 * * 6 /usr/local/bin/myscript`
- B. `0 5 6 * * /usr/local/bin/myscript`
- C. `6 * * 5 0 /usr/local/bin/myscript`
- D. `5 0 Sat * * /usr/local/bin/myscript`

Answer: A

186. How would a system administrator review root's current cronjobs?

- A. `crontab -l`
- B. `cron -l root`
- C. `ls cron -l root`
- D. `cat /var/cron/crontabs/root`

Answer: A

187. Which of the following commands restarts a TCP/IP subsystem that provides network services?

- A. `refresh -s inetd`

B. refresh -s tcpip

C. refresh -g /etc/rc.tcpip

D. refresh -g /etc/inetd.conf

Answer: A

188. Which of the following commands would restart the mail daemon?

A. sendmail -bi

B. refresh -s sendmail

C. restart -a sendmail

D. /etc/sendmail.cf -stop /etc/sendmail.cf -start

Answer: B