



FACULTY OF MANAGEMENT

JANUARY 2015 SPECIAL EXAMINATION

DEPARTMENT OF APPLIED INFORMATION SYSTEMS

<u>MODULE</u>	: SYSTEM SOFTWARE 1B
<u>CODE</u>	: SSW01B1
<u>DATE</u>	: JANUARY 2015 SPECIAL EXAMINATION
<u>DURATION</u>	: 2.5 HOURS
<u>TIME</u>	: 00:00
<u>TOTAL MARKS</u>	: 100

<u>EXAMINER(S)</u>	: Mr. G. TOKO
<u>(EXTERNAL) MODERATOR(S):</u>	Dr O. Bello
<u>NUMBER OF PAGES</u>	: 10

INSTRUCTIONS TO CANDIDATES:

- Scanner sheet [provided] must be used for multiple choice questions.
- This is a closed book assessment.
- Read the questions carefully and answer only what is asked.
- Number your answers clearly.
- Write neatly and legibly
- Structure your answers by using appropriate headings and sub-headings.
- The general University of Johannesburg policies, procedures and rules pertaining to written assessments apply to this assessment.

Section A

[50*0.5]

Multiple Choice

Identify the choice that best completes the statement or answers the question.

1. A ____ boot allows you to install the new OS without disturbing the old one so you can boot to either OS.
 - a. dual
 - b. cross
 - c. controlled
 - d. selective
2. A(n) ____ installation is performed by storing the answers to installation questions in a text file or script that Windows calls an answer file.
 - a. scripted
 - b. attended
 - c. unattended
 - d. replacement
3. To view and manually install updates, click ____, and then follow the directions on-screen.
 - a. Start and Windows Updates
 - b. Start, Windows, and Windows Updates
 - c. Start, All Programs, Accessories, and Windows Updates
 - d. Start, All Programs, and Windows Updates
4. Files can end up in ____ segments all over the drive.
 - a. blocks
 - b. fragmented
 - c. contiguous
 - d. detached
5. If you enter a command and want to terminate its execution before it is finished, you can press ____ to do so.
 - a. Ctrl+Break
 - b. Ctrl+V
 - c. Ctrl+B
 - d. Ctrl+X
6. The ____ command creates a subdirectory under a directory.
 - a. RD
 - b. MD
 - c. CD
 - d. AD
7. A dynamic disk requires ____ MB of storage for the disk management database.
 - a. 1
 - b. 2
 - c. 3
 - d. 4
8. You can use ____ to convert two or more basic disks to dynamic disks.
 - a. Disk Management
 - b. Windows Management
 - c. System Management
 - d. Computer Management
9. If you are having problems with a hard drive, volume, or mounted drive, check ____ for events about the drive that might have been recorded there.
 - a. Event Viewer
 - b. Windows Event Log
 - c. Event Log
 - d. Event Log Manager
10. If your desktop locks up, you can use ____ to refresh it.
 - a. Task Manager
 - b. Process Manager
 - c. Task List Manager
 - d. Task and Process Manager
11. You can use the ____ to find out what processes are launched at startup and to temporarily disable a process from loading.
 - a. System Access Utility
 - c. System Stability Utility

- b. System Management Utility
 - d. System Configuration Utility
12. A(n) ____ is a single window that contains one or more administrative tools such as Device Manager or Disk Management.
 - a. snap-in
 - c. view
 - b. add-in
 - d. console
 13. In a console, the individual tools are called _____.
 - a. consoles
 - c. snap-ins
 - b. add-ins
 - d. views
 14. You can use the ____ to find information about the installed processor and its speed, how much RAM is installed, and free space on the hard drive.
 - a. System Management Utility
 - c. System Configuration Utility
 - b. Computer Management Utility
 - d. System Information Utility
 15. The ____ box can protect your system against users making unauthorized changes and against malware installing itself without your knowledge.
 - a. UAC
 - c. UAN
 - b. AAC
 - d. UAK
 16. If a system is giving repeated startup errors or you have just removed several programs, you might want to search through ____ for processes left there by uninstalled or corrupted software that might be giving startup problems.
 - a. registry keys
 - c. folders
 - b. files
 - d. menus
 17. To retrieve the last command entered in the Recovery Console, press ____ at the command prompt.
 - a. F1
 - c. F3
 - b. F2
 - d. F4
 18. Enter the command ____ to see a list of all services currently installed, which includes device drivers.
 - a. listsvc
 - c. lstsvc
 - b. svclst
 - d. svclist
 19. To move to the root directory, use the command _____.
 - a. RD \
 - c. MD \
 - b. CD \
 - d. PD \
 20. A compressed file uses a(n) ____ as the last character in the file extension.
 - a. underscore
 - c. equals sign
 - b. dollar sign
 - d. dash
 21. Use the ____ command to extract .cab files.
 - a. Restore
 - c. Expand
 - b. Decompress
 - d. Decode
 22. Check ____ to verify that a device is enabled and Windows thinks the device should be working.
 - a. Computer Management
 - c. Hardware Manager
 - b. System Manager
 - d. Device Manager
 23. Errors or warnings in Device Manager are displayed as a _____.
 - a. red triangle or question mark
 - b. red triangle or yellow question mark

- c. yellow triangle or question mark
 - d. red question mark or yellow exclamation mark
24. To uninstall a program, in Device Manager ____ the device and select Uninstall.
 - a. left-click
 - b. right-click
 - c. shift+right-click
 - d. ctrl+right-click
 25. Use the ____ tool to test memory.
 - a. Memory Diagnostics
 - b. File Checker
 - c. Hardware Integrity
 - d. Boot Integrity
 26. Press ____ at startup to display the Advanced Boot Options menu.
 - a. F4
 - b. F8
 - c. F10
 - d. F12
 27. To connect to the Internet, a network first connects to an _____.
 - a. Internet Survey Provider
 - b. Internet Service Provider
 - c. Interconnection Service Provider
 - d. Instant Service Provider
 28. For almost all networks today, including the Internet, the communication protocol used is called _____.
 - a. TCP/IP
 - b. UDP
 - c. OSI
 - d. HTTP
 29. Apple Computer calls 802.11b _____.
 - a. AeroNet
 - b. AirNet
 - c. AirPort Extreme
 - d. AirPort
 30. The three main protocols for encryption for 802.11 wireless networks are _____.
 - a. AES, DES, and TKIP
 - b. WEP, WPA, and WPA2
 - c. WEP, WPA, and TKIP
 - d. WPA, AES, and TKIP
 31. The ____ for a cellular network is a fixed transceiver and antenna.
 - a. mobile station
 - b. intermediate station
 - c. base station
 - d. reference station
 32. ____ is a standard for short-range wireless communication and data synchronization between devices.
 - a. Bluetooth
 - b. 802.11X
 - c. 802.11G
 - d. BlueNet
 33. The ____ command tests connectivity by sending an echo request to a remote computer.
 - a. pong
 - b. tstcon
 - c. lightnt
 - d. ping
 34. In order to activate your service, the cable company must know the ____ of the cable modem you have installed.
 - a. IP address
 - b. MAC address
 - c. host address
 - d. conversion address
 35. For port forwarding to work, the computer on your network must have a ____ IP Address.
 - a. dynamic
 - b. converted
 - c. static
 - d. realized
 36. To find out what your DNS server knows about the domain name www.microsoft.com, use the ____ command.

- a. dig www.microsoft.com
 - b. fetch www.microsoft.com
 - c. nslookup www.microsoft.com
 - d. nbtstat www.microsoft.com
37. For the health care industry, the ____ includes regulations to secure patient data that apply to all health care companies and professionals.
- a. GLB
 - b. NIST
 - c. SOX
 - d. HIPAA
38. A(n) ____ account has read-write access only on its own folders, read-only access to most system folders, and no access to other users' data.
- a. user
 - b. administrator
 - c. limited
 - d. privileged
39. A network ____ map is one of the most powerful and versatile methods of communicating over a network.
- a. access
 - b. interface
 - c. drive
 - d. control
40. Most encryption software products use a method called ____.
- a. Private Key Encryption
 - b. Symmetric Key Encryption
 - c. Shared Secret Encryption
 - d. Public Key Encryption
41. A ____ is a small program contained in a document that can be automatically executed either when the document is first loaded or later by pressing a key combination.
- a. multipartite
 - b. macro
 - c. polymorphic
 - d. boot sector
42. Generally speaking, the weakest link in setting up security in a computer environment is ____.
- a. the network
 - b. the operating system
 - c. people
 - d. the hardware
43. ____ on a motherboard offers security features including power-on passwords, support for intrusion-detection devices, and support for a TPM chip.
- a. Software
 - b. BIOS
 - c. Blocks
 - d. Chipsets
44. A(n) ____ computer is not allowed to use the network, is put on a different network dedicated to them, or is only allowed to access certain network resources.
- a. unrestricted
 - b. restricted
 - c. isolated
 - d. quarantined
45. A rootkit running in ____ mode intercepts the API calls between the time when the API retrieves the data and when it is displayed in a window.
- a. root
 - b. privileged
 - c. user
 - d. executive
46. When you first purchase a notebook, make sure you have a ____ CD containing the installed OS so you can recover from a failed hard drive.
- a. development
 - b. management
 - c. diagnostic
 - d. recovery
47. ____ cards include one or more variations of PC Card, CardBus, and ExpressCard.
- a. PCMCIA
 - b. Display Port
 - c. PCM
 - d. MCIA

48. In ____ sleep, all work is saved to the hard drive, but the system still maintains a trickle of power.
- standby
 - deep
 - pure
 - hybrid
49. ____ printers tend to smudge on inexpensive paper, and they are slower than laser printers.
- Laser
 - Dye-sublimation
 - Thermal
 - Inkjet
50. If symbols or other special characters don't print correctly on a laser printer, try using ____ printing rather than asking the printer to interpret the characters.
- binary
 - text
 - image
 - decimal

Section B

[25*1]

Complete each statement.

Answer Bank

Memory Diagnostics; File Checker; Hardware Integrity; Boot Integrity; mobile station; intermediate station; Bluetooth; IP address; MAC address; Dynamic; Realized; Uninstall; Notepad; Bandwidth; Cable modem; Dual; left-click; right-click; Wireless networks; Patch; NAT; Filtering; Access; Interface; Control; Private Key Encryption; Multipartite; the network; the operating system; Software; Chipsets; Internet Survey Provider; Internet Service Provider; AeroNet; Cable tester; Zone; Biometric; Incident; Administrative; Warranty; ESD; Inkjet; AirPort Extreme; Cross; Scripted; Attended; Fragmented; Event Viewer; Settings; System Restore; Wildcard; Unallocated; Not Responding; Security log; Memory leak; Delete; sfc / scannow; Windows Event Log; Task Manager; Process Manager; System Access Utility; System Management Utility; snap-in; add-in; consoles; add-ins; views; underscore; dollar sign; Restore; Decompress; Expand; Decode; Device Manager; System Manager;

- After the virtual machine is set up, you can click ____ in the console to change the hardware configuration of a machine.
- ____ restores the system to its condition at the time a snapshot was taken of the system settings and configuration.
- As you work at the command prompt, you can use ____ characters in a filename to say that the command applies to a group of files or to abbreviate a filename if you do not know the entire name.
- Space on the disk is marked as ____ if it has not yet been partitioned.
- If an application is listed as ____ in the Task Manager Applications tab, you can end it by selecting it and clicking the End Task button at the bottom of the window.
- The ____ records events based on audit policies, which an administrator sets to monitor user activity such as successful or unsuccessful attempts to access a file or log on to the system.
- A(n) ____ is caused when an application does not properly release memory allocated to it that it no longer needs and continually requests more memory than it needs.
- To remove a program from the All Programs menu, right-click it and select ____ from the shortcut menu.

9. To use the SFC utility to scan all system files and verify them, first close all applications and then enter the command _____ in a command prompt window
10. To get a clean start with a device, you can ____ it and start over.
11. The easiest way to view the logs is to boot into Safe Mode and view the files with _____.
12. The networking industry refers to _____ as a measure of the maximum rate of data transmission.
13. _____communication uses cable lines that already exist in millions of households.
14. _____ use radio waves or infrared light instead of cables or wires to connect computers or other devices.
15. A(n) _____ cable (also called a straight-through cable) is used to connect a computer to a hub or switch.
16. A router can use _____ redirection to present its own IP address to the Internet in place of IP addresses of computers on the local network.
17. Port _____ is used to open or close certain ports so they can or cannot be used.
18. A(n) _____ can be used to test a cable to find out if it is good or to find out what type of cable it is if the cable is not labeled.
19. _____ data is information about domain names and their corresponding IP addresses kept by a DNS server.
20. As part of the authentication process, rather than proving a person is in possession of a token, some systems are set to use _____ data to validate the person's physical body.
21. As a part of managing the security of a computer or network, your organization might make you accountable to fill out a(n) _____ report of unusual or atypical events.
22. _____ shares are the folders that are shared by default on a network that administrator accounts can access.
23. When a component on a notebook needs replacing or upgrading, first you need to consider the _____ and how much time the repair will take.
24. Before opening the case of a notebook or touching sensitive components, you should always use a ground strap to protect the system against _____.
25. _____ printers use a type of ink-dispersion printing.

Section C

[24*1]

Matching

Match each term with the correct statement below.

- | | |
|---------------------------|-----------------------------|
| a. Windows Vista Business | f. Windows Vista Starter |
| b. Windows XP Tablet PC | g. Windows Vista Enterprise |

- | | |
|------------------------------------|-------------------------------|
| c. Windows Vista Ultimate | h. Windows XP Home Edition |
| d. Windows Vista Home Basic | i. Windows Vista Home Premium |
| e. Windows XP Media Center Edition | |

1. Has the most limited features and is intended to be used in developing nations
2. Designed for low-cost home systems that don't require full security and networking features
3. Includes additional support for digital entertainment hardware such as video recording integrated with TV input
4. Supports 4 GB of memory in the 32-Bit version and does not support the 64-Bit version

Match each term with the correct statement below.

- | | |
|--------------------|----------------------|
| a. Dynamic volumes | f. Chkdsk utility |
| b. Virtual memory | g. Pagefile.sys |
| c. Defragmenting | h. Basic disk |
| d. Backup | i. System state data |
| e. Mounted drive | |
5. Rearranges files on the drive into as few segments as possible
 6. Searches for bad sectors on a volume and recovers the data from them if possible
 7. Used to enhance the amount of RAM in a system
 8. A hidden file stored in the root directory of drive C
 9. The files critical to a successful operating system load
 10. A volume that can be accessed by way of a folder on another volume so that the folder has more available space
 11. Can be partitioned and formatted as a stand-alone hard drive

Match each term with the correct statement below.

- | | |
|-----------------------------|------------------------|
| a. Task Scheduler | f. Safe Mode |
| b. Event Viewer | g. Gadgets |
| c. Windows Vista ReadyBoost | h. Computer Management |
| d. Task Manager | i. Service |
| e. Registry | |
12. Lets you view the applications and processes running on your computer as well as information about process and memory performance, network activity, and user activity
 13. A database designed with a treelike structure that contains configuration information for Windows, users, software applications, and installed hardware devices
 14. Uses a flash drive or secure digital (SD) memory card to boost hard drive performance
 15. Loads a minimum configuration of hardware and software
 16. Can be set to launch a task or program at a future time, including at startup

Match each term with the correct statement below.

- | | |
|------------|------------------|
| a. Rootkit | f. Macro viruses |
|------------|------------------|

- | | |
|-------------------|------------------|
| b. File virus | g. Trojan horse |
| c. Logic bomb | h. Phishing |
| d. Authentication | i. Authorization |
| e. Spam | |

17. Proves that an individual is who he says he is and it is accomplished by a variety of techniques
18. A type of identity theft where the sender of an e-mail message scams you into responding with personal data about yourself.
19. Dormant code added to software and triggered at a predetermined time or by a predetermined event

Match each term with the correct statement below.

- | | |
|-----------------------|----------------|
| a. Port replicator | f. Notebook |
| b. Touch pad | g. Hibernation |
| c. Solid State Device | h. Keyboard |
| d. Wake on LAN | i. Stylus |
| e. Graphics tablet | |

20. Provides ports to allow a notebook to easily connect to a full-sized monitor, keyboard, AC power adapter, and other peripheral devices
21. Use memory chips to hold data, have no moving parts, cost more, use less power, and are more rugged

Match each term with the correct statement below.

- | | |
|-------------------|---------------------------|
| a. Windows GDI | f. Extension magnet brush |
| b. Defragmenter | g. Laser printer |
| c. Inkjet printer | h. Impact printer |
| d. Raw data | i. Chkdsk |
| e. Ghosted images | |

22. A type of electrophotographic printer that can range from a small, personal desktop model to a large, network printer capable of handling and printing large volumes continuously
23. Creates a printed page by using some mechanism that touches or hits the paper
24. Builds the page and then sends it to the printer

Section D

[26]

Short Answer

1. Explain hard drive fragmentation. [2.5]
2. List what you will need to set up a cable modem installation. [3*0.5]
3. List the directions if you are using a USB cable to connect to your cable modem. [3*1]
4. List five criteria for a strong password. [5*0.5]
5. List three ways to lock down your workstation each time you step away from your desk. [3*1]
6. List and describe four rules that can help you use the Internet responsibly.

7. List the steps to add a certificate to an encrypted file. [6*0.5]
8. Discuss the methods to deal with infected or damaged boot sectors or corrupted BIOS code. [2]
9. Explain what you should do before attempting to replace or upgrade a component installed in a notebook. [2*1]
10. Explain how to tell the difference between a Mini PCIe slot and a Mini PCI slot. [7*0.5]
- [2*1]