FACULTY OF MANAGEMENT

NOVEMBER 2014 MAIN EXAMINATION

DEPARTMENT OF APPLIED INFORMATION SYSTEMS

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MODULE	:	**SYSTEM SOFTWARE 1B**
CODE	:	**SSW01B1**
DATE	:	**12 NOVEMBER 2014 MAIN EXAMINATIONS**
DURATION	:	**2.5 HOURS**
TIME	:	**12:30**
TOTAL MARKS	:	**100**

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(EXTERNAL) MODERATOR(S):		**Dr O. Bello**
NUMBER OF PAGES	:	**09**

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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

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

1. Use a ____-bit OS if you need increased performance and your system has enough resources to support it.
   a. 8
   b. 16
   c. 32
   d. 64

2. 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

3. A ____ computer is software that simulates the hardware of a physical computer.
   a. real
   b. logical
   c. virtual
   d. functional

4. The ____ partition is the active partition of the hard drive.
   a. system
   b. data
   c. recovery
   d. logical

5. The ____ command is used to copy the information from the old computer to a server or removable media.
   a. getstate
   b. loadstate
   c. setstate
   d. scanstate

6. The ____ command is used to copy the information to the new computer.
   a. getstate
   b. loadstate
   c. setstate
   d. scanstate

7. To convert a FAT32 volume to an NTFS volume, first back up all important data on the drive and then use this command at a command prompt: ____, where D: is the drive to be converted.
   a. convntfs D:
   b. convert D: /FS:NTFS /OFS:FAT
   c. convfs D: /FS:NTFS
   d. convert D: /FS:NTFS

8. The user folder for an account contains a group of subfolders called the user ____.
   a. namespace
   b. directory namespace
   c. profile namespace
   d. controlled namespace

9. 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

10. A file with a .bat file extension is called a ____ file.
    a. script
    b. block
    c. batch
    d. binary

11. 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

12. 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

13. In a console, the individual tools are called ____.
    a. consoles
    c. snap-ins
    b. add-ins
    d. views

14. 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

15. You can quickly identify a problem with memory or eliminate memory as the source of a problem by using the ____ tool.
    a. Windows Memory Diagnostics
    c. Windows System Diagnostics
    b. Vista System Diagnostics
    d. Vista Memory Diagnostics

16. The ____ tool can be used to direct information about drivers to a file, including information about digital signatures.
    a. Driver Query
    c. Problem Reports and Solutions
    b. Driver Verifier
    d. File Signature Verification

17. To retrieve the command entered in the Recovery Console one character at a time, press the ____ key.
    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. A compressed file uses a(n) ____ as the last character in the file extension.
    a. underscore
    c. equals sign
    b. dollar sign
    d. dash

20. In Event Viewer, the ____ log shows only warnings and error events
    a. Program Events
    c. Active Events
    b. Administrative Events
    d. Network Events

21. After you boot into Safe Mode, you can use the ____ commands to verify system files and clean the hard drive.
    a. SFC and Chkdsk
    c. SFC, Chkdsk, and Defrag
    b. SFC and Defrag
    d. Defrag and Chkdsk

22. Delays in network transmissions are called ____.
    a. fragmentation time
    c. latency
    b. propagation delay
    d. overhead

23. For port forwarding to work, the computer on your network must have a ____ IP Address.
    a. dynamic
    c. static
    b. converted
    d. realized

24. To disconnect a mapped network drive, use the ____ command.
    a. net use z: /kill
    c. net use z: /delete
    b. net use z: /unmap
    d. net use z: /disconnect

25. If you have a problem with connecting to a secured Web site from a corporate network, you might be using the wrong _____ server on the network.
    a. interface
    b. network
    c. redirection
    d. proxy

26. When setting up a VoIP system, each digital phone or ATA must be programmed with a phone number from the _____.
    a. VoIP provider
    b. ISP
    c. Network administrator
    d. Service Center

27. A _____ is made of several words with spaces allowed.
    a. password
    b. passphrase
    c. token
    d. credential

28. 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

29. Most encryption software products use a method called _____.
    a. Private Key Encryption
    b. Symmetric Key Encryption
    c. Shared Secret Encryption
    d. Public Key Encryption

30. _____ is any annoying and unwanted program that might or might not mean harm to you.
    a. Malware
    b. Grayware
    c. Testware
    d. Adware

31. A Trojan sometimes installs a _____ in the system, which is a hidden way to allow malware to reach the system in secret even after the Trojan has been removed.
    a. backdoor
    b. release
    c. helper
    d. beneficial routine

32. A _____ virus is a combination of a boot sector virus and a file virus and can hide in either.
    a. polymorphic
    b. boot sector
    c. multipartite
    d. macro

33. 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

34. As a defensive and offensive measure to protect against malicious software, install and run _____ software and keep it current.
    a. virus
    b. antivirus
    c. spyware
    d. Trojan

35. When you share folders on the network, the _____ permissions for remote users need to be set.
    a. share
    b. file
    c. folder
    d. disc

36. For a stand-alone computer that is not part of a Windows domain, the EFS encrypting process generates a _____ digital certificate to be used for the encryption.
    a. publicly-signed
    b. network-signed
    c. system-signed
    d. self-signed

37. Many notebook computers have a chip on the motherboard called the ____.
    a. MPM
    b. CPM
    c. UPM
    d. TPM

38. AV software detects a known virus by looking for distinguishing characteristics called ____ signatures.
    a. behavior
    b. process
    c. virus
    d. malicious

39. If viruses are launched even after you boot in Safe Mode and you cannot get the AV software to work, try searching for suspicious entries in the subkeys under ____.
    a. HKLM\System\CurrentControlSet\Control\SafeBoot
    b. HKLM\System\CurrentControlSet\System\SafeBoot
    c. HKCU\System\CurrentControlSet\Control\SafeBoot
    d. HKLM\System\CurrentControlSet\Services\SafeBoot

40. You can recognize a program as a counterfeit process if it's not running under System, Local Service, or ____.
    a. Administrator
    b. Guest
    c. Local
    d. Network Service

41. Use ____ to search for malware processes, especially those that mask themselves as core Windows processes and elude AV software.
    a. Computer Manager
    b. Task Manager
    c. System Manager
    d. Event Viewer

42. 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

43. Most notebook manufacturers provide ____ software that can help you test components to determine which component needs replacing.
    a. diagnostic
    b. management
    c. development
    d. installation

44. 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

45. You can adjust the way the touch pad works on a laptop using the ____ box.
    a. Mouse Properties
    b. Display Properties
    c. Control Properties
    d. Track Properties

46. Use the ____ box to adjust pointer speed, mouse trails, pointer size, how the touch pad buttons work, and other settings for pointing devices.
    a. Control Properties
    b. Display Properties
    c. Track Properties
    d. Mouse Properties

47. For tablet PCs, the stylus can be controlled from the ____ box.
    a. Input Devices
    b. Pen and Input Devices
    c. Mouse and Input Devices
    d. Pen and Stick Devices

48. A MicroDIMM that contains SDRAM has _____ pins.
    a. 120   c. 144
    b. 124   d. 172

49. To find out how many pages a printer has printed so that you know if you need to do the maintenance, you need to have the printer give you the _____ count since the last maintenance.
    a. page   c. coverage
    b. sheet   d. image

50. Check _____ for recorded events that have to do with the printer or the port it is using.
    a. Event Log   c. Resource Monitor
    b. System Monitor   d. Event Viewer

Section B

[25 * 1]

Complete each statement.

Answer Bank
NAT; Filtering; cable tester; virus; incident; Setstate; Scanstate; Namespace; directory namespace; profile namespace; controlled namespace; script; Task Manager; Process Manager; Task List Manager; Consoles; add-ins; snap-ins; views; UAC; AAC; Vista System Diagnostics; Vista Memory Diagnostics; Driver Query; Dual; Cross; Controlled; dual boot; Settings; wildcard; unallocated; Security log; memory leak; Microsoft; Bubble; patches; Selective; Real; Logical; Virtual; Functional; System; Data; Recovery; Logical; Getstate; Computer Management; Rootkit; hibernation; warranty; ESD; Screws; Default; Humidity; Loadstate; Setstate; Scanstate; Getstate; Loadstate; Bandwidth; Cable modem; Ethernet; Driver Verifier; Underscore; dollar sign; equals sign; dash; Program Events; Administrative Events; Active Events; Network Events; fragmentation time; propagation delay; latency; overhead;

1. If you are not sure if your devices will work under the OS you are upgrading to, one solution is to set up a(n) _____.

2. After the virtual machine is set up, you can click _____ in the console to change the hardware configuration of a machine.

3. 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.

4. Space on the disk is marked as _____ if it has not yet been partitioned.

5. 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.

6. 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.

7. For a bare-bones Vista system, the ___ folder will be the only item listed in the Task Scheduler Library on the left.

8. User mode errors that don't produce a STOP error can appear as a(n) _____ in the notification area.

9. Software manufacturers often publish updates or _____ for their software to address known problems.

10. The networking industry refers to _____ as a measure of the maximum rate of data transmission.

11. _____ communication uses cable lines that already exist in millions of households.

12. A network cable is sometimes called a(n) ___ cable or a patch cable.

13. 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.

14. Port _____ is used to open or close certain ports so they can or cannot be used.

15. 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.

16. A(n) _____ is a program that replicates by attaching itself to other programs.

17. 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.

18. If you need to change the rights of a user account to the administrator's level, use the _____ console and add the user to the administrators group.

19. A(n) _____ running in kernel mode actually interferes with the Windows kernel and substitutes its own information in place of the raw data read by the Windows kernel.

20. The disadvantage of using ___ is that it takes longer for the computer to go into suspend mode and resume from suspend mode.

21. When a component on a notebook needs replacing or upgrading, first you need to consider the _____ and how much time the repair will take.

22. Before opening the case of a notebook or touching sensitive components, you should always use a ground strap to protect the system against _____.

23. Notebooks contain many small _____ of various sizes and lengths.

24. The _____ printer is the one Windows prints to unless another is selected.

25. Extreme _____ can cause the toner to clump in the cartridge and give a Toner Low message.

Section C

[23*1]

Matching

Match each term with the correct statement below.
a. Task Scheduler   f. Safe Mode
b. Event Viewer   g. Gadgets

c. Windows Vista ReadyBoost
d. Task Manager
e. Registry

h. Computer Management
i. Service

1. 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

2. A database designed with a treelike structure that contains configuration information for Windows, users, software applications, and installed hardware devices

3. Uses a flash drive or secure digital (SD) memory card to boost hard drive performance

4. Loads a minimum configuration of hardware and software

5. 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. WLAN
b. Broadband
c. Bandwidth
d. MAN
e. PAN

f. Data throughput
g. WAN
h. LAN
i. Gateway

6. Consists of personal devices at close range such as a cell phone, PDA, and notebook computer in communication

7. Covers a limited geographical area, and is popular in places where networking cables are difficult to install, such as outdoors, in public places, and in homes that are not wired for networks

8. Covers a large geographical area and is made up of many smaller networks

9. The theoretical number of bits that can be transmitted over a network at one time

10. A computer or other device, such as a router, that allows a computer on one network to communicate with a computer on another network

Match each term with the correct statement below.
a. Private profile
b. Jitter
c. Man-in-the-middle attack
d. Proxy server
e. VoIP

f. Public profile
g. Quality of Service
h. Nslookup
i. FTP

11. Offers the highest level of protection when you are connected to a public network

12. Offers moderate protection when you are connected to a private network

13. Lets you read information from the Internet name space by requesting information about domain name resolutions from the DNS server's zone data

14. A computer that intercepts requests that a client makes from a server

15. Transfer files between two computers using the same or different operating systems

16. Provides voice communication over a computer network

17. The term used to describe a voice conversation that is mingled with varying degrees of delays

Match each term with the correct statement below.

a. Rootkit
b. File virus
c. Logic bomb
d. Authentication
e. Spam

f. Macro viruses
g. Trojan horse
h. Phishing
i. Authorization

18. Proves that an individual is who he says he is and it is accomplished by a variety of techniques

19. Determines what an individual can do in the system

20. A type of identity theft where the sender of an e-mail message scams you into responding with personal data about yourself.

21. Hides in an executable program having an .exe, .com, .sys, .vbs, or other executable file extension, or in a word-processing document that contains a macro

22. The most common viruses spread by e-mail

23. Malware that loads itself before the OS boot is complete

Section D

[26]

Short Answer

1. Discuss the purpose of the priority level for CPU resources.

    [2]

2. Explain what the debugging mode is.

    [2]

3. Explain how to update device drivers.

    [2]

4. Explain what to do if you think you might be low on system resources.

    [2.5]

5. List and describe the three cell phone network technologies.

    [3*0.5 +2]

6. List the three most important things you can do to protect a single computer or network.

    [3*1]

7. Explain why it is important to change a router's password.

    [3*0.5]

8. List five criteria for a strong password.

    [5*0.5]

9. List three ways to lock down your workstation each time you step away from your desk.

    [7*0.5]

10. List and describe four rules that can help you use the Internet responsibly.

    [4 *0.5]

11. List three methods for protecting a system against malicious software.

    [3*0.5]