



<b>FACULTY/COLLEGE</b>	College of Business and Economics
<b>SCHOOL</b>	School of Consumer Intelligence and Applied Information Systems
<b>DEPARTMENT</b>	Applied Information Systems
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<b>ASSESSMENT OPPORTUNITY, MONTH AND YEAR</b>	Supplementary Summative Assessment Opportunity, July 2019

<b>ASSESSMENT DATE</b>	17 July 2019	<b>SESSION</b>	8:00-11:00
<b>ASSESSOR</b>	Dr Patrick Ndayizigamiye		
<b>MODERATOR</b>	Dr Guy Toko		
<b>DURATION</b>	3 hours (180 min)	<b>TOTAL MARKS</b>	100

<b>NUMBER OF PAGES OF QUESTION PAPER (Including cover page)</b>	14
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**INFORMATION/INSTRUCTIONS:**

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- This is a closed-book assessment.
  - Number your answers clearly and correctly as per the question paper.
  - Write neatly and legibly on both sides of the paper in the answer book, starting on the first page.
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**Section A**

**[25\*0.5]**

**True / False**

*Indicate whether the statement is true or false.*

1. In Windows 8/7, the Power Options applet of the control panel can help you reconfigure DIMMs
  - a. True
  - b. False
2. The GUID Partition Table (GPT) method for partitioning a drive allows up to 128 partitions.
  - a. True
  - b. False
3. A 32-bit driver can be used in a 64-bit operating system.
  - a. True
  - b. False
4. The Windows desktop is itself a folder.
  - a. True
  - b. False
5. Windows Disk Cleanup is the utility to use whenever you want to defragment your hard drive.
  - a. True
  - b. False
6. DDR memory is faster than GDDR memory since it is used by the CPU.
  - a. True
  - b. False
7. Using Windows 7 Backup and Restore, you can back up the volume on which Windows is installed.
  - a. True
  - b. False
8. In Windows, there are two types of user accounts: an administrator account and a standard account.
  - a. True
  - b. False
9. The chkdsk command will not fix anything on the drive unless the drive is unlocked.
  - a. True
  - b. False

10. To move a hard drive to another computer for the purposes of accessing the data, you always need to first physically install it in a drive bay.
- a. True
  - b. False
11. The official name for FireWire standards is IEEE 1394.
- a. True
  - b. False
12. The faster the spindle rotates on a traditional magnetic drive, the better performance it will have.
- a. True
  - b. False
13. A hard drive can only have one single root directory.
- a. True
  - b. False
14. If you need to recover data from a system that does not boot, you should install the drive in a working system.
- a. True
  - b. False
15. Windows needs free space on the hard drive for normal operation, for defragmenting the drive, for burning CDs and DVDs, and for a variety of other tasks. Therefore, it is important to delete unneeded files occasionally.
- a. True
  - b. False
16. A KVM switch allows you to use one monitor, mouse, and keyboard for multiple computers.
- a. True
  - b. False
17. Defragmenting is highly recommended for solid-state hard drives.
- a. True
  - b. False
18. A docking station provides ports to allow a laptop to easily connect to a full-sized monitor, keyboard, AC adapter and other peripheral devices
- a. True
  - b. False
19. The read/write head on a magnetic hard drive is at both the top and bottom of each disk.
- a. True
  - b. False

20. A drive making a loud clicking noise most likely is not accessible and must be replaced.
- a. True
  - b. False
21. The exFAT file system is used by large-capacity removable storage devices such as large-capacity USB flash drives.
- a. True
  - b. False
22. SDSC is one of the three standards used by SD cards
- a. True
  - b. False
23. SMART is a feature within the UEFI/BIOS that monitors the health of a hard drive.
- a. True
  - b. False
24. The OEM version of Windows 7 can only be installed on a new PC.
- a. True
  - b. False
25. The SATA drive technology utilizes a serial data path.
- a. True
  - b. False

## **Section B**

**[50\*0.5]**

### **Multiple Choice**

*Indicate the answer choice that best completes the statement or answers the question.*

1. What command should you use to check if a drive has bad sectors?
- a. Defrag
  - b. Chkdsk
  - c. Analyze
  - d. Optimize
2. What term is used to describe the unused space at the end of the last cluster?
- a. zero
  - b. slack
  - c. void
  - d. null

3. What Intel socket recommends the use of a liquid cooling system?
  - a. LGA1150
  - b. LGA1151
  - c. LGA1750
  - d. LGA2011
  
4. How many layers of data can exist on a single side of a Blu-ray disc?
  - a. 1
  - b. 2
  - c. 3
  - d. 4
  
5. Which of the following holds together many of the crucial components of a computer, including the central processing unit (CPU), memory and connectors for input and output devices?
  - a. CPU
  - b. Power Supply
  - c. RAM
  - d. Motherboard
  
6. Which of the following is used by the UEFI/BIOS and the OS to address groups of sectors on a hard drive?
  - a. logical sector addressing
  - b. low level formatting
  - c. logical block addressing
  - d. high level formatting
  
7. Which of the following is used to store flash memory in a SSD drive?
  - a. S.S.D.
  - b. S.M.A.R.T.
  - c. N.A.N.D.
  - d. E.E.P.R.O.M.
  
8. What command can be used to remove partitions and convert a drive to GPT?
  - a. fdisk
  - b. bootrec
  - c. diskpart
  - d. gptconv
  
9. Which of the following is a circuit board that provides more ports than those provided by the motherboard?
  - a. heat sink
  - b. expansion card
  - c. RAM
  - d. CPU

10. In order to enable the Windows 7 Aero user interface, how much video memory must be available to the video controller?

- a. 64MB
- b. 128MB
- c. 256MB
- d. 1GB

11. During the Windows 8.1 installation, what option must be selected in order to perform a clean install?

- a. Custom: Install Windows only (advanced)
- b. Upgrade to Windows 8.1
- c. Clean Install (advanced)
- d. Fresh Install (automated)

12. Which of the following are the two standards used by hard drives to connect to the motherboard?

- a. Omnibus and multibus standards
- b. Micro and macro standards
- c. SATA and PATA standards
- d. ATX and Micro ATX

13. Which of the following tools could be used to test a port?

- a. insulated tweezers
- b. ESD trap
- c. loophole
- d. loopback plug

14. Which of the following is a basic principle that applies to both internal and external devices?

- a. when connecting a faster device to a slower port, the port adapts to the speed of the device
- b. if you have multiple devices to install, it's best to install them at the same time
- c. for most installations, install the device first, then the device driver
- d. some devices don't require a software component for them to work properly

15. If you are adding a hard drive to a system that already has a drive with Windows installed on it, what should you do?

- a. you should boot from the Windows setup DVD to prepare the new drive
- b. boot Windows and use Disk Management to prepare the new drive
- c. use the BIOS setup screen to partition and format the new drive
- d. check that the new hard drive must use the same standard as the Windows drive

16. What is the maximum amount of memory supported by a 32-bit Windows operating system?

- a. 1GB
- b. 4GB
- c. 16GB
- d. 64GB

17. In Windows 7/Vista, what happens when a flash memory card is installed in a slot and it is recognized by Windows?

- a. a window appears prompting you to initialize the device
- b. a drive letter is assigned to the device and you can see it in Windows Explorer
- c. Windows automatically partitions and formats the device
- d. the files are copied from the device to your Documents folder

18. Which Windows utility program lists errors and issues that need attention?

- a. Action Center
- b. Control Panel
- c. System Information Windows
- d. Network and Sharing Center

19. For some brand-name computers, the hard drive contains a partition that can be used to reinstall Windows. What is the name for this partition?

- a. reinstall partition
- b. recovery partition
- c. restore partition
- d. rebuild partition

20. If a laptop user complains she cannot sign in to Windows even when she is certain she is entering the correct password, what would you advise her to do?

- a. perform a reboot
- b. bring the laptop to an authorized repair shop
- c. check the NumLock indicator on the laptop
- d. Replace the laptop keyboard

21. What component of a motherboard is not considered to be a field replaceable unit?

- a. processor
- b. RAM
- c. CMOS battery
- d. chipset

22. What is the other name for several small utility programs that are found in the Control Panel?

- a. downloads
- b. system processes
- c. categories
- d. applets

23. What is it called when software is used to simulate the hardware of a physical computer?
- dual boot
  - Windows XP mode
  - virtual machine
  - compatibility mode
24. Which Windows 7 utility is used to create a backup schedule that can include any folder on the hard drive and the system image?
- Automated System Backup
  - Complete PC Recovery
  - Automated System Recovery
  - Backup and Restore
25. In Windows 7/Vista, sometimes error messages disappear before they can be read as the system reboots. What should you do to disable these automatic restarts?
- press F8 as Windows starts up
  - press Pause so you can see the screen output
  - press Ctrl+Print Screen to print the screen output
  - press Esc as soon as you see the blue screen
26. What is Pagefile.sys used for in Windows?
- system file storage
  - to store E-books
  - video RAM
  - virtual memory
27. If you suspect your system is overheating, how can you determine the CPU temperature?
- in Windows, go to System Information
  - the CPU has a temperature display screen
  - press a room thermometer on the top of the CPU
  - Check the temperature monitor in the UEFI/BIOS settings
28. Which type of RAID volume is used for fault tolerance and only requires two drives?
- RAID0
  - RAID1
  - RAID5
  - RAID10
29. What GUI element is usually on the right side of the taskbar and displays open services?
- status tray
  - display area
  - system tray
  - identification area



30. What is the name of the interface that uses graphics as compared to a command-driven interface?
- a. Text-based interface
  - b. menu-based interface
  - c. common user interface
  - d. graphical user interface
31. What is a snapshot of the system settings and configuration called?
- a. rollback point
  - b. restore unit
  - c. rollback unit
  - d. restore point
32. Which of the following is a requirement for supporting the Aero user interface?
- a. at least 128 KB video memory
  - b. Video card that supports DirectX 9 or higher
  - c. an HDMI video port
  - d. Windows XP with SP3
33. What is an indication that an inadequate power supply is the source of an intermittent problem?
- a. the power supply whines when you first turn on the system
  - b. you don't see any indicator lights or fans spinning
  - c. BIOS loses its date and time settings
  - d. the system tries to boot from the wrong device
34. What should you install in a server room that will save space by allowing you to control multiple servers with a single mouse, keyboard, and monitor?
- a. a MIDI connector
  - b. a digitizer
  - c. biometric device
  - d. a KVM switch
35. If you see an error message that reads "Processor thermal trip error", what is the likely problem?
- a. the power supply is inadequate
  - b. the processor has overheated
  - c. the processor has failed
  - d. a memory module might be bad

36. What command can be used to launch the System Information window?
- a. msinfo32.exe
  - b. sysinfo.exe
  - c. info32.exe
  - d. msconfig.exe
37. A DAT72 tape is also known by what term?
- a. DDS-2
  - b. DDS-3
  - c. DDS-4
  - d. DDS-5
38. What process writes sector markings to a hard drive?
- a. partitioning
  - b. low-level formatting
  - c. high-level formatting
  - d. sector provisioning
39. When a static image stays on a monitor for many hours leaving a permanent impression of that image on the monitor, what term is used to describe this condition?
- a. image cling
  - b. burn-in
  - c. screen blanking
  - d. screen freezing
40. If you wish to install a new OS without disturbing the old one so that you can boot to either OS, what type of boot setup should you create?
- a. dual
  - b. cross
  - c. controlled
  - d. selective
41. Which of the following describes the standards that determine the size, shape, screw hole positions, and major features of computer cases?
- a. PSD factors
  - b. LGA factors
  - c. Form factors
  - d. POST factors
42. Volumes within an extended partition are known by what term?
- a. extended volumes
  - b. extra volumes
  - c. logical drives
  - d. logical expansions

43. How often does Windows 7/Vista automatically defragment a magnetic hard drive?
- a. once a week
  - b. once a day
  - c. once a month
  - d. once an hour
44. What important information is needed if you are installing an OEM version of Windows 7?
- a. installation code
  - b. Receipt of purchase
  - c. OEM license
  - d. product key
45. Which of the following devices uses a mix of components sized for a desktop and a laptop?
- a. all-in-one computer
  - b. phablet
  - c. tablet
  - d. PDF reader
46. Why might you want to use a RAID 0 disk configuration?
- a. to improve overall disk performance
  - b. RAID 0 drives are less expensive than other RAID drives
  - c. to prevent data loss in case of a drive failure
  - d. because RAID 0 provides an automatic disk backup
47. The ability to snap a page to the left or right side of the screen so a second page can share the screen is a function of what feature?
- a. Aero
  - b. App multitasking
  - c. side-by-side apps
  - d. app tiling
48. You can use what utility to convert two or more basic disks to dynamic disks?
- a. Disk Management
  - b. Windows Management
  - c. System Management
  - d. Disk Config
49. On a magnetic drive, what is the most common sector size?
- a. 512 bytes
  - b. 512 KB
  - c. 16 KB
  - d. 4 KB

50. What is the name for the 3D user interface provided by Windows 7 and Vista?
- a. Glass
  - b. Aero
  - c. Air
  - d. Shield

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**Section C**

**[25\*1]**

**Matching**

Match each item with a statement below.

- a. virtual memory
  - b. file system
  - c. Dynamic volumes
  - d. restore points
  - e. Backup
  - f. Basic Disk
  - g. Defragmenting
  - h. Mounted drive
  - i. Pagefile.sys
  - j. Chkdsk utility
- 
- 1. can span more than one hard drive
  - 2. used to enhance the amount of RAM in a system
  - 3. rearranges files on the drive into as few segments as possible
  - 4. an extra copy of a data or software file that you can use if the original file becomes damaged or destroyed
  - 5. a volume that can be accessed by way of a folder on another volume so that the folder has more available space
  - 6. searches for bad sectors on a volume and recovers the data from them if possible
  - 7. a hidden file stored in the root directory of drive C
  - 8. can be partitioned and formatted as a stand-alone hard drive
  - 9. snapshots of the system and include Windows system files that have changed
  - 10. the overall structure an OS uses to name, store, and organize files on a drive

Match each item with a statement below.

- a. lithium ion
- b. BSOD
- c. Memory Diagnostics
- d. Windows pinwheel
- e. heat sink
- f. sheet battery
- g. dual rail
- h. driver store
- i. CAG
- j. UPS

- 11. indicates that the system is waiting for a response from a program or device
- 12. Windows errors that are caused by problems with devices, device drivers, or a corrupted Windows installation
- 13. a component made of metal that is designed to draw heat away from a processor into the fins
- 14. a round air duct that helps direct air to the processor
- 15. a power supply with a second +12v rail
- 16. a location where Windows keeps a copy of driver software
- 17. a device that provides battery power when the main power source goes out
- 18. a component that fits on the bottom of a laptop that can improve charge times and increase time between charges
- 19. the technology most commonly used by battery packs
- 20. a tool in Windows 8/7/Vista that tests memory

Match each item with a statement below.

- a. System window
- b. Device drivers
- c. gadget
- d. Navigation pane
- e. OneDrive
- f. Desktop
- g. Action Center
- h. Network and Sharing center
- i. Compressed folder

j. Child directories

21. a mini-app that provides information such as the time, date, news headlines, or weather.
22. Can give you a quick look at what hardware and software is installed
23. The initial screen that is displayed when an OS has a GUI interface loaded
24. A tool that lists errors and issues that need attention
25. Creates a folder with a .zip extension

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**Section D**

**[37.5]**

**Subjective Short Answer**

1. What are three things you can do to solve an overheating problem?  
**[3\*3]**
2. Why should a power supply be rated about 30 percent higher than expected needs?  
**[5]**
3. List three steps that can be taken to troubleshoot a Windows startup issue.  
**[3\*3]**
4. Describe the two different kinds of tapes accepted by tape drives.  
**[2\*3]**
5. Discuss some cautions about software RAID.  
**[4.5]**
6. What is a user profile, and what are the two general items it consists of?  
**[3]**
7. How does Light-Emitting Diode (LED) backlighting work, and how do you identify a monitor that uses LED?  
**[4]**