



BRAINWARE UNIVERSITY

Term End Examination 2020 - 21

Programme – Bachelor of Science (Honours) in Advanced Networking & Cyber Security

Course Name – Hardware and Operating Systems I

Course Code - BNCSC102

Semester / Year - Semester I

Time allotted : 75 Minutes

Full Marks : 60

[The figure in the margin indicates full marks. Candidates are required to give their answers in their own words as far as practicable.]

Group-A

(Multiple Choice Type Question)

1 x 60=60

1. (Answer any Sixty)

(i) Electronic circuits that operate on one or more input signals to produce standard output _____

- | | |
|--------------------|----------------------|
| a) Series circuits | b) Parallel Circuits |
| c) Logic Signals | d) Logic Gates |

(ii) The gate which is used to reverse the output obtained is _____

- | | |
|--------|---------|
| a) NOR | b) NAND |
| c) XOR | d) NOT |

(iii) The binary equivalent of the decimal number 10 is _____

- | | |
|---------|---------|
| a) 0101 | b) 1011 |
| c) 1010 | d) 1001 |

(iv) Convert the binary equivalent 10101 to its decimal equivalent.

- | | |
|-------|-------|
| a) 21 | b) 12 |
| c) 22 | d) 31 |

(v) Where would you find the letters QWERTY?

- | | |
|---------------------|--------------|
| a) Numeric Keyboard | b) Hard disk |
| c) Keyboard | d) Mouse |

(vi) What are the individual dots which make up a picture on the monitor screen called?

- a) Pixels
- b) Pixies
- c) Rainbow
- d) Colored spot

(vii) Which of the following storage technologies is used by traditional hard disk drives?

- a) Optical
- b) Impact
- c) Magnetic
- d) Solid-state

(viii) Each switch and LED on the front panel of a computer case has a connector attached to it that must be attached to the appropriate pins on the:

- a) Riser card
- b) Expansion slot
- c) Motherboard
- d) Power supply

(ix) The ability to replace computer system components without causing interruption to the system is referred to as:

- a) Hardware acceleration
- b) Multitasking
- c) Hot swapping
- d) Cold plugging

(x) Which of the following auxiliary connectors is used to supply dedicated power for a high-end CPU?

- a) T568A
- b) PCIe 6/8-pin
- c) 4/8-pin 12v
- d) P1

(xi) Which of the following connectors is used for musical equipment?

- a) PS/2
- b) MIDI
- c) DVI
- d) HDMI

(xii) Laser printer is?

- a) Character Printer
- b) Line Printer

c) Page Printer

d) None of these

(xiii) Which of the following should you use to clean a monitor screen if you are not sure how to do so?

a) Water

b) Mild detergent

c) Isopropyl alcohol

d) Boric acid

(xiv) A user calls you to complain that her system is totally dead today. It was working fine when she left the last evening. Which of the following must you check first?

a) Reseat the hard drive controller cable

b) Test the power supply

c) Replace the CMOS battery

d) Check the AC outlet

(xv) Which function is performed by the external power supply of a laptop?

a) Stores power

b) Increases voltage

c) Converts AC power to DC power

d) Converts DC power to AC power

(xvi) What is the full form of SMPS?

a) Switch Mode Power Supply

b) Switch Multiple Power Supply

c) Switch Mode Power Systems

d) Switch Modulation Power Supply

(xvii) What is full form of MCH?

a) Memory Central Hub

b) Memory Controller Hotspot

c) Memory Controller Hub

d) Mother controller Hub

(xviii) What connector was designed to connect your PC to a high-end television set?

a) DB-HD

b) HDMI

c) USB

d) VGA

(xix) How many types of Keyboards are available mechanism wise?

- a) 1
- b) 3
- c) 5
- d) 7

(xx) What is the color of the PS/2 port of Keyboard?

- a) Purple
- b) Green
- c) Magenta
- d) Grey

(xxi) How many types of mouse are available mechanism wise

- a) 1
- b) 3
- c) 5
- d) 7

(xxii) Which end of the USB cable plugs into the PC?

- a) A
- b) B
- c) Mini-A
- d) Mini-B

(xxiii) What do you plug into a three-row, 15-pin port?

- a) Joystick
- b) Keyboard
- c) Monitor
- d) Mouse

(xxiv) Which of the following statements apply to the USB 3.0 standard?

- a) Speed upto 480 Mbps
- b) USB 3.0 is also commonly referred to as Super Speed USB
- c) USB 3.0 is also commonly referred to as Full-Speed USB
- d) Speed of up to 800 Mbps Speed of up to 5 Gbps

(xxv) Which of the following interfaces support hot plugging?

- a) EIDE
- b) USB
- c) GUI
- d) PCI

(xxvi) Which is the most complete list of file systems Windows can use?

- a) FAT16, FAT32, NTFS
- b) FAT16, FAT32

c) FAT16, NTFS

d) FAT16, FAT32, FAT64, NTFS.

(xxvii) What is the full form of UDMA

a) Ultra Direct Memory Acknowledge

b) Ultra Directional Memory Access

c) Ultra Direct Memory Access

d) Ultra Direct Management Access

(xxviii) What program does Microsoft include with Windows to partition and format a drive?

a) Format

b) Disk Management console

c) Disk Administrator console

d) System Commander

(xxix) Which of the following file format supports in Windows 7?

a) BSD

b) NTFS

c) EXT 4

d) EXT

(xxx) Identify false statement

a) You can find deleted files in recycle bin

b) You can increase free space of disk by sending files in recycle bin

c) You can restore any files in recycle bin if you ever need

d) You can right click and choose Empty Recycle Bin to clean it at once

(xxxi) Which of the following is an advantage of running Windows on NTFS as opposed to FAT?

a) Security

b) Multiple folders

c) Long filenames

d) Speed

(xxxii) Which utility is helpful in troubleshooting hardware?

a) System Properties

b) Device Manager

c) Disk Management

d) Security Center

(xxxiii) What is the maximum cable length of an internal SATA device?

- a) 2 meters
- b) 12 inches
- c) 18 inches
- d) 1 meter

(xxxiv) What is the maximum number of SATA drives you can have on a system?

- a) One master, one slave
- b) Two, with no master/slave distinction
- c) Eight
- d) There is no maximum other than the limitations of your motherboard

(xxxv) How can you effectively expand the capacity of an NTFS drive?

- a) Install a second drive and mount it to a folder on the original smaller NTFS drive
- b) Create an extended partition to extend the capacity.
- c) Convert the drive to a dynamic disk and create a mirrored set.
- d) Format the drive with the Quick Format option

(xxxvi) A group of sectors is called_____

- a) Track
- b) Cluster
- c) Cylinder
- d) Actuator

(xxxvii) In modern PCs, the procedure of replacing BIOS contents in order to upgrade to a newer version is sometimes referred to as:

- a) Direct memory access (DMA)
- b) Overclocking
- c) Hard boot
- d) Flashing the BIOS

(xxxviii) Which of the following is an example of firmware?

- a) Basic Input / Output System (BIOS)
- b) Universal Serial Bus (USB)
- c) Dynamic Random-Access Memory (DRAM)
- d) CMOS RAM

(xxxix) After replacing a modular hardware component inside computer case, the updated information about specific parameters of the new device is stored in:

- a) CMOS RAM
- c) Startup BIOS

- b) System BIOS
- d) Secondary storage

(xl) Which of the following acronyms refers to an integrated circuit that keeps track of the current time in a PC?

- a) CRT
- c) MBR

- b) RTC
- d) CMOS

(xli) Setting an administrator password in the BIOS accomplishes which of the following?

- a) Prevents an attacker from opening the case
- c) Prevents a user from reading e-mail

- b) Prevents a virus from infecting the MBR
- d) Prevents a user from rearranging the boot order

(xlii) What operating CPU temperature is typical?

- a) 72 Degree Celsius
- c) 60 Degree Celsius

- b) 72 Degree Fahrenheit
- d) 60 Degree Fahrenheit

(xliii) A customer complains he has corrected the time on his computer on several occasions but the computer just can't keep the right time. Which one you will replace?

- a) CPU
- c) CMOS battery

- b) Motherboard
- d) Power Supply

(xliv) Which of the following component is not tested by POST?

- a) BIOS
- c) System RAM

- b) Motherboard
- d) Power supply

(xlv) When a computer is first turned on or restarted, a special type of absolute loader is executed. What is its name?

- a) Boot loader

- b) Relating Loader

c) Compile & Go loader

d) Bootstrap Loader

(xlvi) What is the correct boot sequence for a PC?

a) CPU, POST, power good, boot loader, operating system

b) POST, power good, CPU, boot loader, operating system

c) Power good, boot loader, CPU, POST, operating system

d) Power good, CPU, POST, boot loader, operating system

(xlvii) Jill boots an older Pentium III system that has been the cause of several user complaints at the office. The system powers up and starts to run through POST, but then stops. The screen displays a “CMOS configuration mismatch” error. Of the following list, what is the most likely cause of this error?

a) Dying CMOS battery

b) Bad CPU

c) Bad RAM

d) Corrupt system BIOS

(xlviii) In optical media group which is the latest addition from the following?

a) CD-RW DVD-RW

b) Blu-Ray Disk

c) DVD-RAM

d) DVD-ROM

(xlix) What is the main advantage of selecting a 64-bit operating system over a 32-bit operating system?

a) The ability to run multiple 16-bit programs in separate memory spaces

b) The ability to use unsigned drivers

c) The ability to access more than 4 GB of RAM

d) The ability to use software-based data execution prevention (DEP)

(l) What is the full form of IRQ

a) Interrupt Requisition

b) Interrupt Request

c) Internal Requisition

d) Internal Request

(li) What is the primary reason that DDR2 RAM is faster than DDR RAM?

a) The core speed of the DDR2 RAM chips

b) The input/output speed of the DDR2

is faster.

RAM is faster

c) DDR RAM is single-channel and DDR2 RAM is dual-channel.

d) DDR RAM uses 184-pin DIMMs and DDR2 uses 240-pin DIMMs.

(lii) Which of the following Control Panel applets will display the amount of RAM in your PC?

a) System

b) Devices and Printers

c) Device Manager

d) Action Center

(liii) After a sudden power outage, Samson's PC rebooted, but nothing appeared on the screen. The PC just beeps at him, over and over and over. What's most likely the problem?

a) The power outage toasted his RAM.

b) The power outage toasted his video card.

c) The power outage toasted his hard drive

d) The power outage toasted his CPU

(liv) RAM stands for...

a) Random Access Memory

b) Random Access Memories

c) Robust Access Memory

d) Redundant Array Memory

(lv) How is the size of RAM normally measured nowadays?

a) In KB.

b) In MB

c) In GB.

d) With a tape measure

(lvi) ROM stores...

a) The operating system.

b) Programs currently in use.

c) The work that you save in My Documents.

d) The instructions needed to start up the computer including the BIOS.

(lvii) When the CPU is first powered on it looks in this place first before anything else.

a) RAM

b) ROM

c) Keyboard

d) Monitor

(lviii) Which of the following is not an operating system?

- a) DOS
- b) Linux
- c) Windows
- d) Oracle

(lix) Linux is an(a) ... operating system

- a) Open source
- b) Microsoft
- c) Windows
- d) Mac

(lx) Which of the following is not a multitasking operating system?

- a) Windows
- b) Linux
- c) Win NT
- d) DOS