



BRAINWARE UNIVERSITY

Term End Examination 2021 - 22

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

Course Name – Hardware and Operating Systems II

Course Code - BNCSC202

(Semester II)

Time allotted : 1 Hrs.15 Min.

Full Marks : 60

[The figure in the margin indicates full marks.]

Group-A

(Multiple Choice Type Question)

1 x 60=60

Choose the correct alternative from the following :

- (1) What is full form of CPU?
 - a) Central Priority Unit
 - b) Central Processing Unit
 - c) Central Process Unique
 - d) Central Purpose Unit
- (2) What function does the external data bus have in the PC?
 - a) The external data bus determines the clock speed for the CPU.
 - b) The CPU uses the external data bus to address RAM.
 - c) The external data bus provides a channel for the flow of data and commands between the CPU and RAM
 - d) The CPU uses the external data bus to access registers.
- (3) Into which socket could you place an Intel Core i5?
 - a) Socket LGA 775
 - b) Socket LGA 1155
 - c) Socket C
 - d) Socket AM2
- (4) Which of the following form factors dominates the PC industry?
 - a) AT
 - b) ATX
 - c) ITX
 - d) CTX
- (5) When Jane proudly displayed her new motherboard, the senior tech scratched his beard and asked, “What kind of ICH does it have?” What could he possibly be asking about?
 - a) The AMR slot
 - b) The CNR slot
 - c) The Northbridge
 - d) The Southbridge
- (6) What companies dominate the chipset market? (Select two.)

- a) ATI
c) NVIDIA
- b) Intel
d) SiS
- (7) Which of the following connectors is used for musical equipment?
a) PS/2
c) DVI
- b) MIDI
d) HDMI
- (8) When choosing a new motherboard, what should be your first consideration?
a) Form Factor
c) Price
- b) Desired CPU
d) Feature Set
- (9) A 15 pin, three row, female connector on the back of a PC would be used for?
a) VGA/SVGA Port
c) Parallel Port
- b) Serial Port
d) HDMI Port
- (10) What voltages does an ATX12V P1 connector provide for the motherboard?
a) 3.3 V, 5 V
c) 5 V, 12 V
- b) 3.3 V, 12 V
d) 3.3 V, 5 V, 12 V
- (11) How can you reduce the chance of ESD?
a) Raise the temperature.
c) Work in a carpeted area.
- b) Lower the humidity.
d) Use an antistatic strap.
- (12) A Power Supply is rated in?
a) Watts
c) Ampere
- b) Coulombs
d) Volts
- (13) Which of the following port types most commonly support printers? (Select two.)
a) Parallel
c) Infrared
- b) USB
d) RS-232
- (14) What must never be connected to the same UPS the PC is using?
a) laser printer
c) Monitor
- b) System unit
d) Keyboard
- (15) Why is the print drum given a negative charge?
a) To attract the toner to every area of the drum
c) To attract the toner to the areas of the drum that have a weaker negative charge
- b) To attract the toner to the areas of the drum that have a stronger negative charge
d) To attract the positively charged paper to the print drum
- (16) What is another name for a dot-matrix printer?
a) Impact printer
c) Spray printer
- b) Page printer
d) USB
- (17) What is the processor on a video card called?
a) CPU
c) GDDR
- b) GPU
d) MPU
- (18) Which two technologies are used for backlights in LCD monitors?
a) CCFL and LED
c) CCFL and AC
- b) CCFL and LCD
d) HDMI and DisplayPort
- (19) A label with the term "WARNING!" on it means what?
a) A software malfunction
c) A Potential for personal injury
- b) A fire alarm
d) A Potential for Hardware malfunction

- (20) We can align electron guns with help of
- a) shadow mask
 - b) resolution
 - c) pixel
 - d) refresh
- (21) Video controller also feature their own built-in
- a) RAM
 - b) SRAM
 - c) VRAM
 - d) DRAM
- (22) Which RAID type provides 100% fault tolerance?
- a) RAID 0
 - b) RAID 1
 - c) RAID 2
 - d) RAID 3
- (23) What is a main feature of the active partition of a hard drive that is using MBR?
- a) The Operating System uses the active drive to boot the system
 - b) The active partition is the only Primary partition.
 - c) There can be multiple active partitions.
 - d) Active partitions are considered RAM.
- (24) What is the effect of using a larger block size in a fixed block size file system?
- a) It leads to poorer disk throughput and poorer disk space utilization
 - b) It leads to poorer disk throughput but better disk space utilization
 - c) It leads to better disk throughput and better disk space utilization
 - d) It leads to better disk throughput and poorer disk space utilization
- (25) What do registers provide for the CPU?
- a) Registers determine the clock speed
 - b) The CPU uses registers for temporary storage of internal commands and data.
 - c) Registers enable the CPU to address RAM.
 - d) Registers enable the CPU to control the address bus.
- (26) Which of the following terms are measures of CPU speed?
- a) Megahertz and gigahertz
 - b) Megabytes and gigabytes
 - c) Megahertz and gigabytes
 - d) Front Side bus, backside bus
- (27) Which feature enables a single-core CPU to function like two CPUs?
- a) Hyper-Threading
 - b) SpeedStep
 - c) Virtualization
 - d) x64
- (28) Darren has installed a new CPU in a client's computer, but nothing happens when he pushes the power button on the case. The LED on the motherboard is lit up, so he knows the system has power. What could the problem be?
- a) He forgot to disconnect the CPU fan.
 - b) He forgot to apply thermal compound between the CPU and the heat-sink and fan assembly.
 - c) He used an AMD CPU in an Intel motherboard.
 - d) He used an Intel CPU in an AMD motherboard.
- (29) Amanda bought a new system that, right in the middle of an important presentation, gave her a Blue Screen of Death. Now her system won't boot at all, not even to CMOS. After extensive troubleshooting, she determined that the motherboard was at fault and replaced it. Now the system runs fine. What was the most likely cause of the problem?
- a) Burn-in failure
 - b) Electrostatic discharge
 - c) Component failure
 - d) Power supply failure
- (30) Solon has a very buggy computer that keeps locking up at odd moments and rebooting spontaneously. He suspects the motherboard. How should he test it?

- a) Check settings and verify good components.
- b) Verify good components and document all testing.
- c) Replace the motherboard first to see if the problems disappear.
- d) Check settings, verify good components, replace components, and document all testing
- (31) If Windows recognizes a device, where will it appear?
- a) Device Manager
- b) C:\Windows\System32\Devices
- c) Desktop
- d) Safely remove hardware applet
- (32) 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
- (33) 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)
- (34) A path of circuitry that connects the CPU to the expansion slots is called?
- a) Wire
- b) Bus
- c) Connections
- d) Link
- (35) What sort of connector does a typical network interface card have?
- a) DB-9
- b) Mini-DIN
- c) RJ-11
- d) RJ-45
- (36) A modern printer usually plugs into which of the following ports?
- a) DB-9
- b) DB-25
- c) Mini-DIN
- d) USB
- (37) 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
- (38) What does DMA stand for?
- a) Direct Module Access
- b) Directory Memory Access
- c) Direct Memory Address
- d) Direct Memory Access
- (39) What sort of power connector does a floppy disk drive typically use?
- a) Molex
- b) Mini
- c) Sub-mini
- d) Micro
- (40) What should you keep in mind when testing DC connectors?
- a) DC has polarity. The red lead should always touch the hot wire; the black lead should touch a ground wire.
- b) DC has polarity. The red lead should always touch the ground wire; the black lead should always touch the hot wire.
- c) DC has no polarity, so you can touch the red lead to either hot or ground.
- d) DC has no polarity, so you can touch the black lead to either hot or neutral but not ground

- (41) What voltages should the two hot wires on a Molex connector read?
- a) Red = 3.3 V; Yellow = 5 V b) Red = 5 V; Yellow = 12 V
c) Red = 12 V; Yellow = 5 V d) Red = 5 V; Yellow = 3.3 V
- (42) A PC's power supply provides DC power in what standard configuration?
- a) Two primary voltage rails, 12 volts and 5 volts, and an auxiliary 3.3 volt connector b) Three primary voltage rails, one each for 12-volt, 5-volt, and 3.3-volt connectors
c) One primary DC voltage rail for 12-volt, 5-volt, and 3.3-volt connectors d) One voltage rail with a 12-volt connector for the motherboard, a second voltage rail with a 12-volt connector for the CPU, and a third voltage rail for the 5-volt and 3.3-volt connectors
- (43) How many pins does a SATA power connector have?
- a) 6 b) 9
c) 12 d) 15
- (44) Main motherboard power connectors typically consist of:
- a) 40 pins b) 24 pins
c) 34 pins d) 68 pins
- (45) When working on a computer, which of the following should you disconnect to prevent electrical shock?
- a) Printer b) Mouse
c) Power cord d) Telephone cord
- (46) 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
- (47) ESD occurs between two objects that have?
- a) Different Densities b) Different electrical potentials
c) Different heights d) Different Magnetic Poles
- (48) With a laser printer, what creates the image on the photosensitive drum?
- a) Primary corona b) Laser imaging unit
c) Transfer corona d) Toner
- (49) Which of these items are considered to be dot-matrix printer consumables?
- a) Drive motor b) Print Head
c) Flywheel d) Ribbon
- (50) A standalone printer prints a test page just fine, but it makes gobbledygook out of your term paper. What's probably wrong?
- a) Out of toner b) Fuser error
c) Printer interface d) Faulty software configuration
- (51) Which tool would help you determine why a print job didn't print?
- a) Printer driver b) Printer setup
c) Print spooler d) System setup
- (52) On a laser printer, what moves the toner from the drum to the paper?
- a) Primary Corona b) Transfer Corona
c) Laser Beam d) Prism
- (53) How does a thermal printer produce images?

- a) With heat and special thermal paper b) With inkjet process
 c) With laser printing technologies d) With impact procedure
- (54) Printer in which output is printed by use of light beam and particles of ink infused on paper is best classified as
- a) character printer b) line printers
 c) laser printer d) beam printer
- (55) Which of the following devices gives the paper a positive charge?
- a) The transfer corona wire b) The laser
 c) The print drum d) The registration rollers
- (56) At what voltage is the paper charged?
- a) (+) 600V dc b) (-) 600Vdc
 c) (-) 100Vdc d) (+) 100Vdc1
- (57) What device removes unused toner from the print drum?
- a) Transfer corona wire b) Static eliminator strip
 c) Laser d) Cleaning blade
- (58) What causes the ink to vaporize in an inkjet printer?
- a) Electrical pulses b) A heating element within the ink cartridge
 c) A solenoid in each chamber of the ink cartridge d) Drying of the ink when the cartridge has not been used for some time
- (59) How many pins were in the early dot-matrix print heads?
- a) 9 b) 12
 c) 18 d) 44
- (60) What type of paper-feed mechanisms do dot-matrix printers use?
- a) Continuous form feed b) Friction feed
 c) Friction continuous form feed d) Inverted gravity feed