BRAINWARE UNIVERSITY

Term End Examination 2022
Programme – M.Sc.(ANCS)-2022
Course Name – Core Hardware
Course Code - MNCS101
(Semester I)

Full Marks : 60　　　　　　　　　　　　　　　　　　　　**Time : 2:30 Hours**

[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 15=15

1.　Choose the correct alternative from the following :

(i)　Choose total PATA hard drives can you have on a system with two PATA hard drive controllers

　　a) 1　　　　　　　　　　　　　　　　b) 2
　　c) 3　　　　　　　　　　　　　　　　d) 4

(ii)　Select the best way to determine the total capacity and specific type of RAM your system can handle

　　a) Check the motherboard book.　　　　b) Open the case and inspect the RAM.
　　c) Check the Device Manager.　　　　　d) Check the System utility in the Control Panel.

(iii)　Recall the type of security features can be set in BIOS

　　a) Restrict to access Boot sequence　　　b) Group Policy settings
　　c) Password-restricted access to the BIOS setup　　d) User password required to proceed when the
　　　　utility　　　　　　　　　　　　　　　computer is powered on

(iv)　Which utility is helpful in troubleshooting hardware?

　　a) System Properties　　　　　　　　b) Device Manager
　　c) Disk Management　　　　　　　　d) Security Center

(v)　Identify the following storage technology is used by traditional hard disk drives

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

(vi)　Select the memory form factors used in laptops

　　a) ECC　　　　　　　　　　　　　b) SO-DIMM
　　c) AGP　　　　　　　　　　　　　d) CRIMM

(vii)　Select if a disk is being formatted, what will happen

　　a) Data Copied from the disk　　　　b) Data Saved to the disk
　　c) Data Cut from the Disk　　　　　d) Data Deleted from the disk.

(viii)　Identify the data stored in RAM

A 3

a) The BIOS

b) Data and instructions for use by the CPU

c) The operating system

d) Save files for your games

(ix) Select the function 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.

(x) Choose the voltage od DDR-3 RAM

a) 1.8 V

b) 1.5 V

c) 2.5 V

d) 1.2 V

(xi) Choose the feature feature enables a single-core CPU to function like two CPUs

a) Hyper-Threading

b) SpeedStep

c) Virtualization

d) x64

(xii) With a laser printer, Choose what creates the image on the photosensitive drum

a) Primary corona

b) Laser imaging Module

c) Transfer corona

d) Toner

(xiii) Which CPU feature enables the microprocessor to support running multiple operating systems at the same time?

a) Clock multiplying

b) Caching

c) Pipelining

d) Virtualization support

(xiv) Select the following port used by Modern keyboards to connect PC

a) DIN

b) FireWire

c) COM Port

d) USB

(xv) After completing the initial diagnostics and assigning system resources, the startup BIOS program checks for information about secondary storage devices that might contain the OS. The list of devices and the order in which they should be checked can be found and arranged in the CMOS setup utility. Select the option which is commonly referred to as

a) Power-on self-test (POST)

b) Boot record

c) Partition table

d) Boot sequence

Group-B
(Short Answer Type Questions)

3 x 5=15

2. Explain the working principle of Dot Matrix Printer. (3)
3. Explain Basic Logical Structure Of A Computer. (3)
4. Explain the feature of mechanical Keyboard. (3)
5. Explain the booting procedure. (3)
6. Write the advantage of a multiprocessor system (3)

OR

Write the different types of Power Supply mode (3)

Group-C
(Long Answer Type Questions)

5 x 6=30

7. Explain Virtual Memory (5)
8. Explain the different parts & their function of HDD (5)
9. Explain how many types of volumes are available in case of Dynamic Disk (5)
10. Explain the working principle of Laser Printer (5)
11. State the functions of the CU and ALU in the CPU in computer (5)
12. Conclude the function of North Bridge chip in motherboard (5)

OR

Summarize supervisor password setting in BIOS & how can you set it

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