



BRAINWARE UNIVERSITY

Term End Examination 2022

Programme – B.Sc.(ANCS)-Hons-2020/B.Sc.(ANCS)-Hons-2022

Course Name – Hardware and Operating Systems I/Hardware and Operating Systems

Course Code - BNCSC102

(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) Select one of the following that allows simultaneous write and read operations.

a) ROM	b) EROM
c) RAM	d) None of the above
- (ii) Identify, where would you find the letters QWERTY.

a) Numeric Keyboard	b) Keyboard
c) Hard disk	d) Mouse
- (iii) In modern PCs, the procedure of replacing BIOS contents in order to upgrade to a newer version is sometimes defined as:

a) Direct memory access (DMA)	b) Overclocking
c) Hard boot	d) Flashing the BIOS
- (iv) Illustrate, which part of the computer perform arithmetic calculations.

a) Register	b) Logic Bus
c) ALU	d) Control Unit
- (v) On a laptop, differentiate which of the following would most likely be a pointing device.

a) Serial mouse	b) PS/2 mouse
c) USB mouse	d) Touchpad
- (vi) Predict the default port of Keyboard & Mouse that is available.

a) COM port	b) PS/2
c) LPT	d) VGA
- (vii) Determine the types of Keyboards that are available mechanism wise.

a) 1	b) 3
c) 5	d) 7
- (viii) Predict the file format that supports in Windows 7.

a) BSD	b) NTFS
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- c) EXT 4
(ix) Choose which of the following is suitable after you install new drivers
a) Hibernate
c) Sleep
(x) Analyze the input device that can be used for marking a multiple choice test.
a) Microphone
c) Bar Code Reader
(xi) Select the following port used by Modern keyboards to connect PC
a) DIN
c) COM Port
(xii) Choose the connector that does a typical network interface card have.
a) Mini-DIN
c) RJ-45
(xiii) The number of clock cycles per second is referred as.
a) Clock frequency
c) Clock speed
(xiv) Devise the type of mouse that contain a ball on its underside and sensors to detect direction of ball movement.
a) Opto-Mechanical Mouse
c) Optical Mouse
(xv) Justify that Flash memory is a non-volatile storage device in which data can be.
a) can be erased electrically
c) can be erased magnetically
- d) EXT
b) Restart
d) Shut Down
b) Mouse
d) Optical Mark Reader
b) FireWire
d) USB
b) DB-9
d) RJ-11
b) Clock rate
d) Clock timing
b) Mechanical Mouse
d) None of the above
b) can be erased physically
d) cannot be erased

Group-B

(Short Answer Type Questions)

3 x 5=15

2. Explain the types of ROM that are available. (3)
3. Write the functions of the CU and ALU in the CPU of a computer. (3)
4. Explain the advantage of a multiprocessor system. (3)
5. Explain the feature of mechanical Keyboard. (3)

OR

- Distinguish between NTFS and FAT 32. (3)
6. Predict the types of PCI-Express slots that are available. (3)

OR

- Sketch the block diagram of the linear power supply. (3)

Group-C

(Long Answer Type Questions)

5 x 6=30

7. Write down the different parts & their function of HDD with proper diagram. (5)
8. Evaluate the differences between the PCI & AGP slot. (5)
9. State the advantages & disadvantages of computer. (5)
10. Classify with briefly the types of keyboards that are available mechanism wise. (5)

11. Explain how many types of volumes are available in case of Dynamic Disk. (5)

OR

- Explain the working principle of LCD monitor. (5)
12. Explain different types of Power Supply mode. (5)

OR

Write the role of interrupt controller.

(5)
