



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

- c) EXT 4
- d) EXT
- (ix) Choose which of the following is suitable after you install new drivers
 - a) Hibernate
 - b) Restart
 - c) Sleep
 - d) Shut Down
- (x) Analyze the input device that can be used for marking a multiple choice test.
 - a) Microphone
 - b) Mouse
 - c) Bar Code Reader
 - d) Optical Mark Reader
- (xi) Select the following port used by Modern keyboards to connect PC
 - a) DIN
 - b) FireWire
 - c) COM Port
 - d) USB
- (xii) Choose the connector that does a typical network interface card have.
 - a) Mini-DIN
 - b) DB-9
 - c) RJ-45
 - d) RJ-11
- (xiii) The number of clock cycles per second is referred as.
 - a) Clock frequency
 - b) Clock rate
 - c) Clock speed
 - d) Clock timing
- (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
 - b) Mechanical Mouse
 - c) Optical Mouse
 - d) None of the above
- (xv) Justify that Flash memory is a non-volatile storage device in which data can be.
 - a) can be erased electrically
 - b) can be erased physically
 - c) can be erased magnetically
 - 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)
