

SHRIMATHI DEVKUNVAR NANALAL BHATT VAISHNAV COLLEGE FOR WOMEN
(AUTONOMOUS)

(Affiliated to the University of Madras and Re-accredited with 'A+' Grade by NAAC)
Chromepet, Chennai - 600 044.

M.Sc.Physics - END SEMESTER EXAMINATIONS - APRIL 2025

SEMESTER - IV

24PPHET4B04 - Computer and Peripheral Hardware

Total Duration : 1 Hrs.30 Mins.

Total Marks : 40

Section B

Answer any **TEN** questions ($10 \times 2 = 20$ Marks)

1. Differentiate von Neumann and Harvard Architecture.
2. Expand RAID and give its importance.
3. What is the difference between modular and non-modular power supplies?
4. Explain Address multiplexing.
5. Explain Bus multiplexing.
6. What is the difference between modular and non-modular power supplies?
7. Define mother board form factor.
8. Differentiate single data rate and second data rate.
9. Write the vector form of Ohm's law and explain its terms.
10. Differentiate 16-bit, 32-bit, 64-bit computing.
11. Differentiate Internal and External Computer Buses.
12. What are the advantages and disadvantages of Multiple CPU?

Section C

Answer any **FOUR** questions ($4 \times 5 = 20$ Marks)

13. What is SCSI? How it helps to connect and transfer data between computers and peripheral devices.
14. What is DMA? Explain its functions, Merits and Demerits.
15. Explain North Bridge and South Bridge.
16. Explain Volatile and Non-Volatile memory in detail.
17. What is Cache? Explain its working and Importance of Cache.
18. Explain the structure and Implementation of the CPU.
