

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. - END SEMESTER EXAMINATIONS NOVEMBER - 2022

SEMESTER - I

22PPHCT1004 - Integrated Electronics and Microprocessor

Total Duration : 2 Hrs 30 Mins.

Total Marks : 60

Section A

Answer any **SIX** questions ($6 \times 5 = 30$ Marks)

1. Sketch the construction and working of Tunnel diode and Gunn diode.
2. Explain the IC technology with its limitations.
3. Classify Asynchronous counter. And also explain 4 bit ripple counter briefly.
4. Interpret the working of Schmitt trigger with neat diagram.
5. Write an assembly language program to add to decimal number.
6. Discuss the conversion of a binary number to BCD with an example.
7. Distinguish direct I/O and memory mapped I/O.
8. Infer the interfacing of ROM and RAM shortly.

Section B

Part A

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

9. Explain the construction and characteristics of MOSFET in detail.
10. Prepare the detailed note on working of D/A converter using weighted resistor method.
11. Compare the generation of square and triangular wave using IC 741.
12. Examine the architecture of 8085 with neat diagram.

Part B

Compulsory question ($1 \times 10 = 10$ Marks)

13. Differentiate the interfacing of DAC, ADC and stepper motor in detail.
