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.
B.Sc.(Computer Science) END SEMESTER EXAMINATIONS NOVEMBER -2023
SEMESTER - I
22UCSCT1002 - Fundamentals of Digital Computer and Microprocessor

Total Duration : 2 Hrs 30 Mins.   Total Marks : 60

Section B

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

1. Convert the following decimal number(s) to binary number(s):
   i) 129_{10} ii) 115.65_{10}

2. Describe the 'Universal Gates' with its truth table.

3. Write short notes on Decoders with neat sketch.

4. Explain the working of JK flip flop with neat diagram.

5. Illustrate the 8085 Instruction set.

6. Comment on 'Data transfer instructions' with suitable examples.

7. Describe the need of Counters.

8. Determine the concept of Memory mapped I/O.

Section C

Answer any **THREE** questions $(3 \times 10 = 30$ Marks$)$

9. Explain the Binary addition and subtraction using 1's and 2's complement with an example.

10. Identify the need of simplification of Boolean functions using K-Map.

11. Examine the working of 8085 Microprocessor with neat diagram.

12. Evaluate the concept of various Addressing modes.

13. Elucidate the functioning of DMA with neat sketch.

*****

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.
B.Sc.(Computer Science) END SEMESTER EXAMINATIONS NOVEMBER -2023
SEMESTER - I
22UCSCT1002 - Fundamentals of Digital Computer and Microprocessor

Total Duration : 2 Hrs 30 Mins.   Total Marks : 60

Section B

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

1. Convert the following decimal number(s) to binary number(s):
   i) 129_{10} ii) 115.65_{10}

2. Describe the 'Universal Gates' with its truth table.

3. Write short notes on Decoders with neat sketch.

4. Explain the working of JK flip flop with neat diagram.

5. Illustrate the 8085 Instruction set.

6. Comment on 'Data transfer instructions' with suitable examples.

7. Describe the need of Counters.

8. Determine the concept of Memory mapped I/O.

Section C

Answer any **THREE** questions $(3 \times 10 = 30$ Marks$)$

9. Explain the Binary addition and subtraction using 1's and 2's complement with an example.

10. Identify the need of simplification of Boolean functions using K-Map.

11. Examine the working of 8085 Microprocessor with neat diagram.

12. Evaluate the concept of various Addressing modes.

13. Elucidate the functioning of DMA with neat sketch.

*****