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
21UCSCT1002 - Digital Computer Fundamentals and Architecture

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

Section B

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

1. Convert the following A) 671_{10} to binary   B) 11010_2 to decimal

2. Illustrate the digital logic gates.

3. Classify the Boolean algebra laws and theorems.

4. Illustrate the JK flip flops.

5. Explain the Arithmetic Micro operations.

6. Apply the working principles of Multiplication algorithms.

7. Explain how does Asynchronous data transfer is made.

8. Examine the how to use of I/O organization.

Section C

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

9. Describe the Number System and its types.

10. Elaborate in detail to solve K-map problems.

11. Examine the various types of Instruction Formats in computer architecture.

12. Apply with working principles of floating point arithmetic operations.

13. Justify the memory organization with details.

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