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Program : B.Sc in CSB
course : 213 - Digital Logic Design

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Ans to the q: NO; 2. (a)

(a) $(275)_1$

$$\begin{array}{r} 2 \overline{) 275} \\ \underline{2 \ 137} \ 1 \\ 2 \overline{) 68} \ 1 \\ \underline{2 \ 34} \ 0 \\ 2 \overline{) 17} \ 0 \\ \underline{2 \ 8} \ 1 \\ 2 \overline{) 4} \ 0 \\ \underline{2 \ 2} \ 0 \\ 2 \overline{) 1} \ 0 \\ \underline{0} \ 1 \end{array}$$

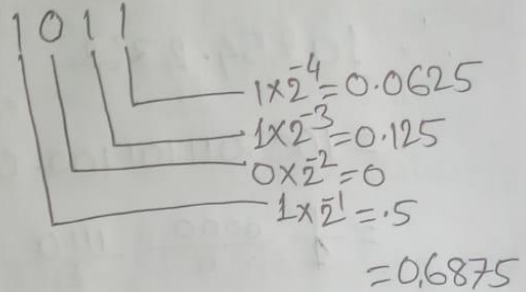
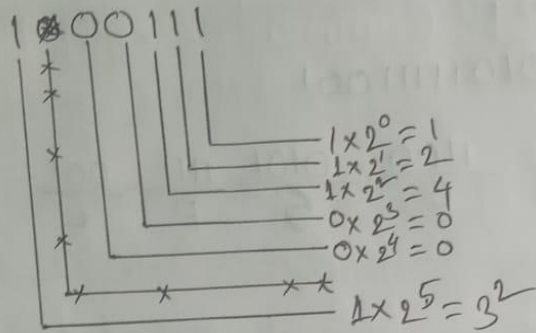
$$\begin{array}{r} .125 \times 2 = 0.25 \\ .25 \times 2 = 0.5 \\ 0.5 \times 2 = 1 \\ \hline 1.75 \\ = 1 \end{array}$$

$$= \frac{100}{4} \frac{010}{2} \frac{011}{3}$$

$$= (42B.A)_8 \text{ Ans}$$

Ans to the q no: 2(c)

c// $(1000111.1011)_2 = 10$



39

$\therefore (39.06875)_{10}$ Ans

Ans to the q no 2(d)

d// $(15435.063)_8 = 1$

$= (1 \times 8^4) + (5 \times 8^3) + (4 \times 8^2) + (3 \times 8^1) + (5 \times 8^0) + (0 \times 8^{-1}) + (6 \times 8^{-2}) + (3 \times 8^{-3})$

$= 6941.099609375$ Ans.

Ans to the QNO 1. (a)

a// DLD: Digital Logic Design (DLD) is a field of electrical Engineering & computer Science that focuses on Designing & analyzing Digital circuit. Digital circuits are composed of logic gates flip-flops Registers and other digital components and they form the foundation of Digital Systems such computers and microcontrollers.
It fields of it: AND, OR, NOT, NAND, NOR, XOR, and XNOR gates.

b// Advantage DLD:- A digital computer stores data in the terms of digital digits (numbers) and proceed steps from one state to the next.

* The states of a Digital computer typically involve binary digits which may take form of the presence or absence of magnetic markers in a storage medium, on off switches or relay in Digital computers even letters words and whole texts are represented Digitally.