Date 26-05-2021 Day M T W T F S

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R.NO :- 20P-0101.
DIGITAL LOGIC DESIGN

(b)

$(93)_{16} + (DE)_{16} = (?)_{16}$

$(93)_{16}$
$+ (DE)_{16}$

right column $= 3_{16} + E_{16} = 3+14 = 17$
$= 17-16 = 1$

Left column $= 9+D+1 = 9+13$
$= 23$
$= 23-16$
$= 7$ with 1 carry

171

(a)

~~It~~ The number entered is 165.535_{10} in decimal number system

- We want to convert it into hexadecimal.

→ Converting 165.535_{10} in hexadecimal

→ Whole part of no is obtained by dividing on the basis new.

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165	16
-160	10
5	

Happened $165_{10} = A5_{16}$

→ Fractional part is obtained by multiply on the basic new,

0	535
	16
8	96
	16
15=F	36
	16
5	76
	16
12=C	16
	16
2	56
	16
8	96
	16
15=F	36
	16
5	76
	16
12=C	16 ... 3
	16
2	56 ... 55
	16

Happened $0.535_{10} = 0.88F5C28F5C2_{16}$

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Add up together whole and fractional part here so.

$A5_{16} + 0.88F5C28F5C2_{16} = A5.88F5C28F5C2_{16}$

Result of converting:

$165535_{10} = A5.88F5C28F5C2_{16}$

~~Part C:~~

(c)

68

64	32	16	8	4	2	1
1	0	0	0	1	0	0

27

64	32	16	8	4	2	1
0	0	0	0	1	1	1

68

0	1	0	0	0	1	0	0
0	0	0	1	1	0	1	1

We will now add this,

0	1	0	0	0	1	0	0
0	0	0	1	1	0	1	1
0	1	0	1	1	1	1	1

64 32 16 8 4 2 1

95 = 0 1 0 1 1 1 1 1

$68 - (-27) = 95$

8F5C2₁₆

MUHAMMAD ADEEL HKHWK