

Name: Md. Rokibul Hasan ID: 2019-1-60-114

Sem: Fall-2021 Exam: Quiz-1, Date: 10/11/2021

Course: CSE-405 Sec: 03

Instructor: Dr. Anisur Rahman.

Ans. to the Q. No: (2)

Given bit pattern,

01010000001101111100001001011111001

Using bit stuffing,

~~01111110, 01010000001101111100001001011111~~
01111110, 010100000011011111 $\frac{0}{sb}$ 00001001011111
 $\frac{0}{sb}$ 001 01111110

Here, sb \rightarrow stuffed bit.

There will be an extra '0' after each 5 consecutive '1's.

Ans: to the Q: No: (3)

Given stream,

[B] [ESC] [Flag] [D] [ESC] [ESC]

Stream pattern after Byte stuffing,

[Flag] [B] [ESC]_{Sb} [ESC]_{Sb} [ESC]_{Sb} [Flag] [D] [ESC]_{Sb} [ESC]_{Sb}
[ESC]_{Sb} [ESC]_{Sb} [Flag]

Here, Sb \rightarrow Stuffed byte.

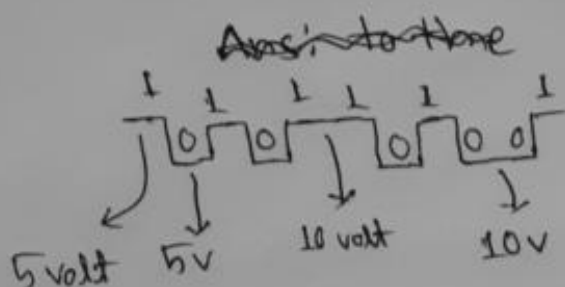
Ans: to the Q: No: (4)

In 'Physical layer coding violation' framing technique, consecutive bits are identified by multiplier of a specific voltage.

If the first bit is high voltage and its value is 05 then if in the stream there are any consecutive high voltage then it will be

10, 15, 20 ... etc. Same goes for low voltage.
 And this is the multiplication of the specific voltage
 with which is 5. This voltage value isn't fixed.

10101101001



Ans: to the Q.No: (1)

