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18101009

CSE-303

3RD YEAR - 1ST SEMESTER .

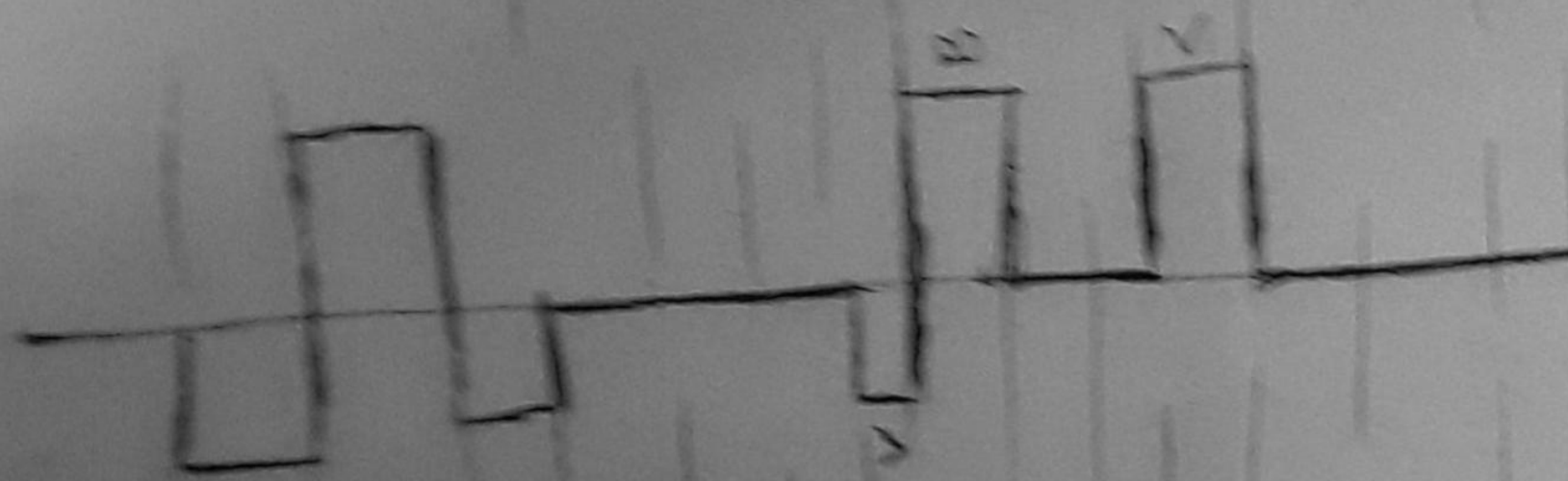
Ans 1

ID = 18101009

My id is odd. So, if we use HDDB3 technique.

11100000000011000000000000

Q. 1. A signal is given by the following waveform.



Here the last non zero signal has
assumed to be positive.

2. Here ~~the~~ characters = 1000.
= encoded bits = 8.

(a) Transmitted bits for Synchronous

$$\text{transmission} = 1000 \times 8 = 8000 \text{ bit}$$

(b) For asynchronous transmission we have

$$1000 \times 10 = 10,000 \text{ bits.}$$

(c) For case (a), redundancy is 0%.

For case (b) we send 2000 extra for

8000 required bits.

So, the redundancy is 25%.

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