

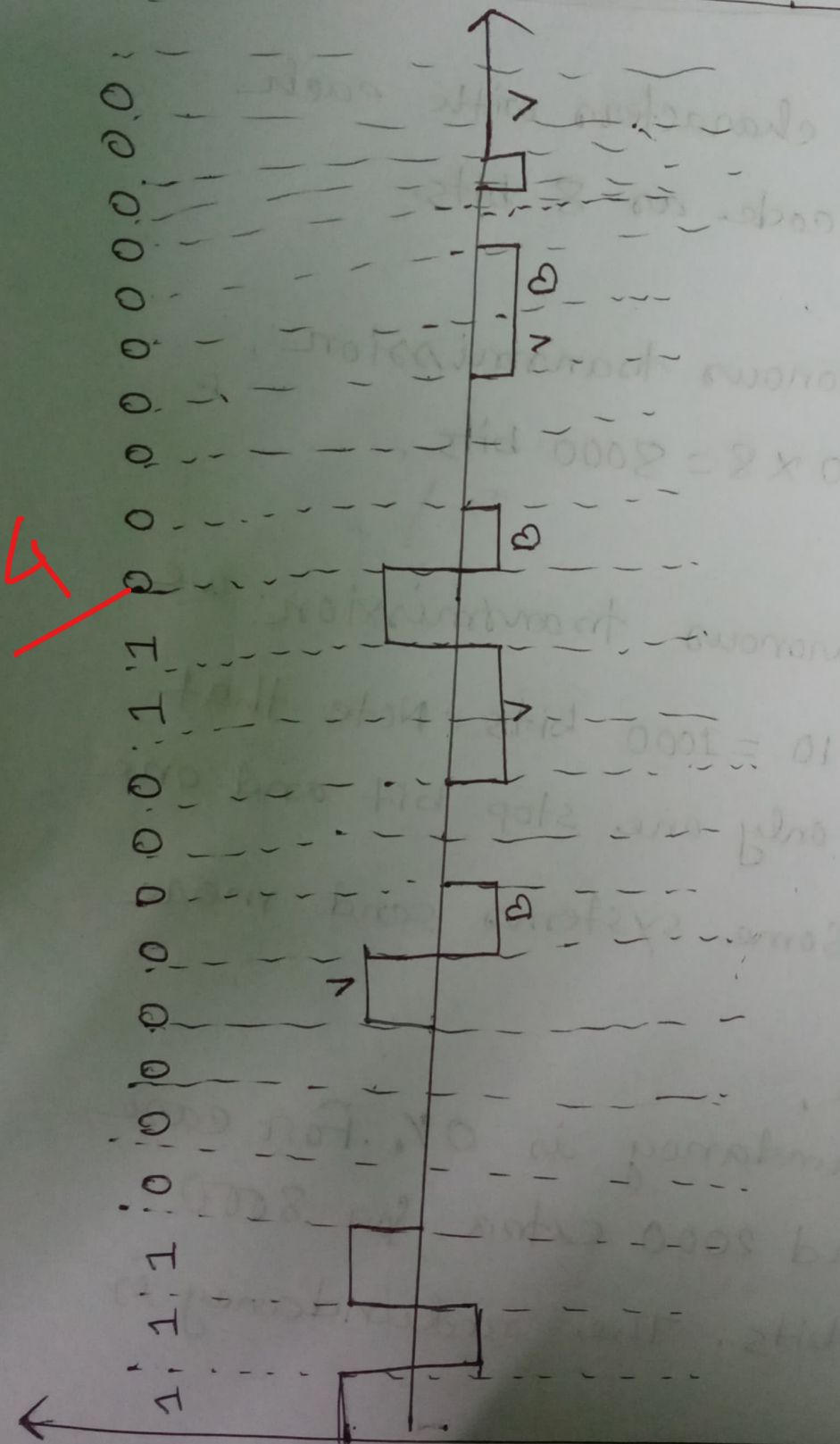
ID: 18101011 (Ruhin)

12

Answer to the question no: (1)

my id is

18101011



Answer to the question no: 2

Transmit 1000 characters with each character encode as 8 bits.

a) For synchronous transmission, we have $1000 \times 8 = 8000$ bits.

b) For asynchronous transmission we have $1000 \times 10 = 10000$ bits. Note that we assume only one stop bit and one start bit. Some systems send more start bit.

For case a,
c) The redundancy is 0%. For case b, we send 2000 extra for 8000 required bits. The redundancy is 25%.