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DATE: / /

Ans. to the ques. no: 1

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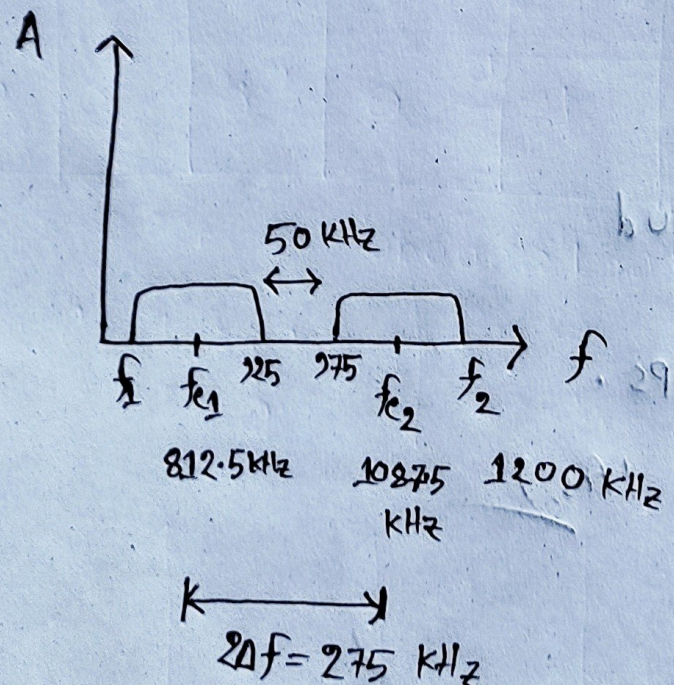
a) Given,

$f_1 = 700$ KHz

$f_2 = 1200$ KHz

Bandgap = 50 KHz

d = 1



$2\Delta f = 275$ KHz

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We know,

for FSK

$S = N$

$B = (1+d)S + 2\Delta f$

$B = (1200 - 700) = 500 \text{ kHz}$

$f_{c1} = 812.5 \text{ kHz}$

$f_{c2} = 1087.5 \text{ kHz}$

Now,

$B = (1+d)S + 2\Delta f$

$\Rightarrow 500 = 2S + 275$

$\Rightarrow 2S = 225$

$\therefore S = 112.5 \text{ kBaud}$

$\therefore S = N = 112.5 \text{ kbps}.$

(Ans:)

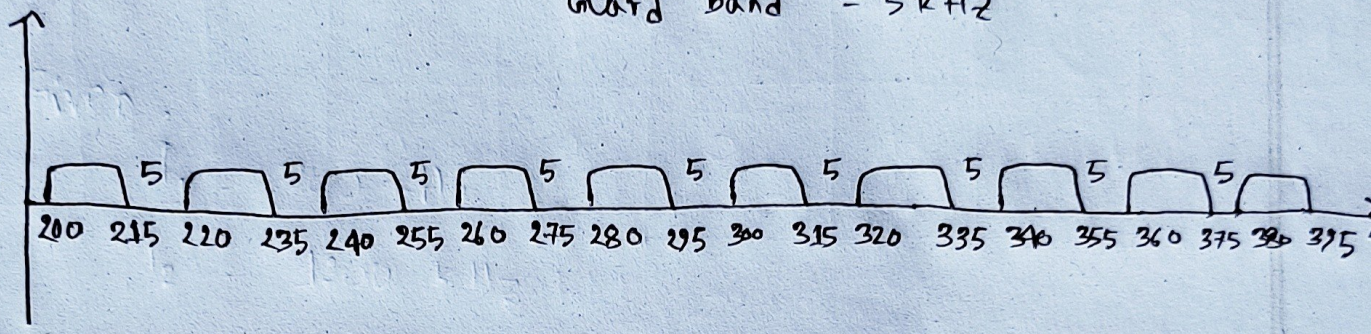
DATE: / /

Ans to the ques no: 2

a)

Each channel = 15 kHz

Guard band = 5 kHz



b) Total Bandwith = $(10 \times 15) + (9 \times 5)$

= 195 kHz

c) channel = c

$c_1 = (200 - 215)$ kHz

$c_2 = (220 - 235)$ kHz

$c_3 = (240 - 255)$ kHz

$c_4 = (260 - 275)$ kHz

$c_5 = (280 - 295)$ kHz

$c_6 = (300 - 315)$ kHz

$c_7 = (320 - 335)$ kHz

$c_8 = (340 - 355)$ kHz

$c_9 = (360 - 375)$ kHz

$c_{10} = (380 - 395)$ kHz