

Theme:

D. com Assignment

21-44543-1
AB-CDEFGH

BCF = 145 kHz channel bandwidth

Guard band = DG = 43 Hz = 0.43 kHz

Number of channels = 10

② ⇒ The required minimum bandwidth for the 10 multiplexed channel would be:

$$(\text{No. of voice channels} \times \text{voice channel bandwidth}) + (\text{No. of guard bands} \times \text{guard band})$$

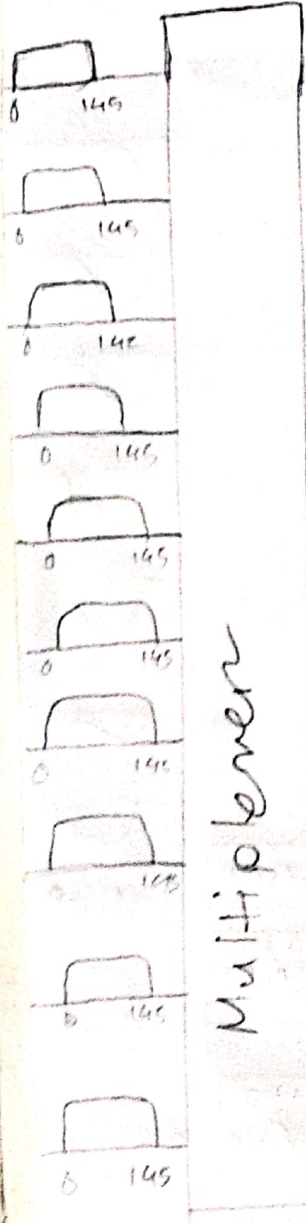
for 10 channels we need at least 9 guard bands.

$$\begin{aligned} \therefore \text{Bandwidth of setup} &= (10 \times 145) + (9 \times 0.43) \\ &= 1453.87 \text{ kHz} \end{aligned}$$

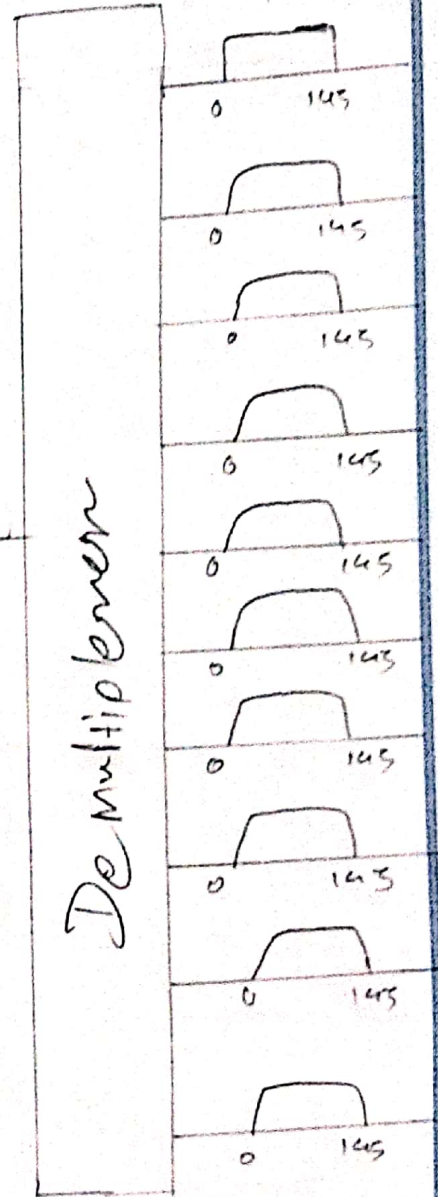
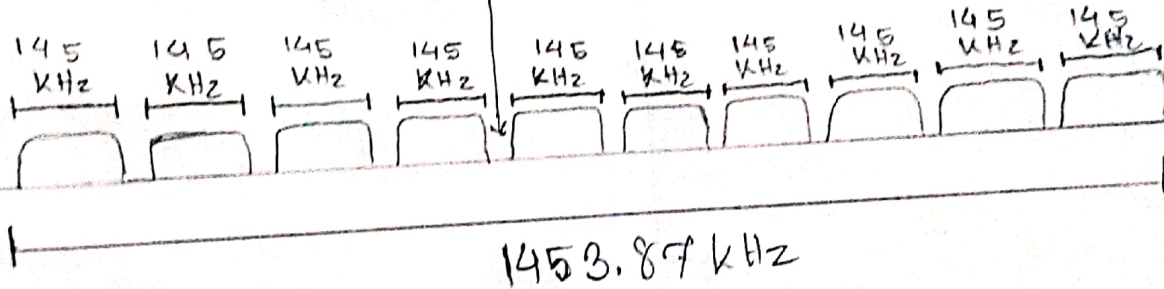
Ans

Theme:

b) ⇒



Guard band
0.43 kHz



Date: / /
☐ Sat ☐ Sun ☐ Mon ☐ Tue ☐ Wed ☐ Thu ☐ Fri