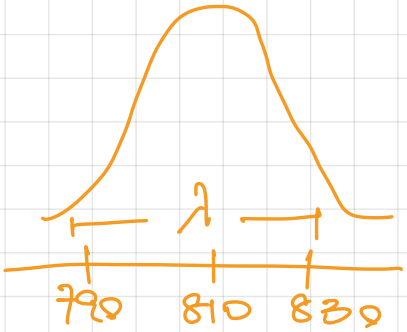
ภชิสรา สุขสมบูรณ์
6201011631188 sec. 1
Fiber Optic PAK

Quiz 2

$D_M = -55\ ps/(nm.km)$

$\lambda = 830 - 790 = 40\ nm$

$L = 100\ km.$



From $\Delta t_m = D_m(\lambda) L \Delta\lambda$

$= 55 \frac{ps}{nm \cdot km} \cdot 100\ km \cdot 40\ nm$

$\Delta t_m = 220000\ ps$

$= \frac{220000 \times 10^{-12}}{10^{-6}}\ \mu s$

$\Delta t_m = 0.22\ \mu s$ or $220\ ns$ #