

**Task:**

A communication channel is of 10kbps bandwidth. The transmission media is fiber optic. We need to send a window of size 15 packets, where each packet is containing 5000bytes. The total time to transfer all data from one to another node is:

- (a) 50ms
- (b) 25ms
- (c) 75ms
- (d) None of these

**Solution:**

Calculate the amount of data that must be transmitted:

$$D = 15 \cdot 5000b = 75000b = 75kb$$

Bandwidth determined by the formula  $V = \frac{D}{T}$ , based on this we find the total time to transfer all data  $T = \frac{D}{V}$ .

$$T = \frac{75kb}{10kb/s} = 7.5s$$

**Answer: (d) 7.5s.**

This answer is right, but I think that there is an error in condition by specifying bandwidth and the correct answer should be (C)