Worksheet - 4.

Q Size of a TCP segment = 10KB

header length = 6

Seq no = 4000

URG flag = 1

URG pointer = 40

sequence no of 1st byte = 4000

URG pointer = 40

upto seq no of 4000 + 40 = 4040.

total of 41 byte.

41 byte of urgent data is 4000 - 4040.

= (size in bytes) / (maximum segment size)

= 32 / 2

= 16 mss

= 1 (1100 to 1300)

4 (a) The bandwith of STS. 768 with 40Gbps will changes the bandwith from giga bito per second to Giga byte per second (Gbps)

$$\Delta 0 = \frac{40}{8} = 5GBPS$$

b) 1GB = 1000 × 1000 × 1000

The bandwidth of link is 8×10^9 BPS.

The total number of sequence number will be

$12S_2$

5.

a) $\frac{20}{20+8} = \frac{20}{28} = \frac{10 \times 5}{14 \times 7}$

$= \frac{5}{7}$

b). $\frac{20}{20+20} = \frac{20}{40_2}$

$= \frac{1}{2}$