Q2. b.) 1000 frame -

Tfr = 200/200 kbps or 1ms

If system creates 1000 frames per second.
then, $G = 1$
$S = G \times e^{-2G} = 0.135$ (13.5 percent)
This means,
throughput $= 1000 \times 0.135 = 135$ frames.

500 frames per second. or 1/2 frame
per millisecond.
Then $G = 1/2$
$S = G \times e^{-2G} = 0.184$ (18.4 percent)
This means,
throughput $= 500 \times 0.184 = 92$ frames
Only 92 frames will survive out of
500 frames

250 frames per second, or 1/4 frames
per millisecond.
then, $G = 1/4$
$S = G \times e^{-2G} = 0.152$ (15.2 percent)
This means,
throughput $= 250 \times 0.152 = 38$ frames
Only 38 frames out of 250 will survive.