SOLUTION QUIZ-02 BCS-6A

QUESTION-01

1) C
2) D
3) A

TRUE/FALSE

i.   False
ii.   False

QUESTION-02

a) RTT= 2* one-way propagation delay = 5 ms= 0.005

Time to download the web page with non-persistent HTTP:

42 RTT + transmission of the base file (20 Kbytes) + time transmission of the 20 images (15 Kbytes each)

= 42 *0.005 + (8*20*10^3 / 0.5x10^6) + (20*8*15*10^3 / 0.5*10^6)

= 0.21+ 0.32 + 4.8= 5.33 sec

b) Time to download the web page with persistent HTTP without pipelining
22RTT + transmission time of the base file (20 Kbytes) + time transmission of the 20 images (15kBytes)
= (22*0.005) + (8*20*10^3 / 0.5x10^6) + (20*8*15*10^3 / 0.5*10^6)
= 0.11 +0.32 + 4.8= 5.23 sec

c) Time to download the web page with persistent HTTP with pipelining
= 3 RTT + time transmission of the base file (20 Kbytes) + time transmission of the one image (15 Kbytes)
= 3*0.005 + (8*20*10^3 / 0.5x10^6) + (8*15*20*10^3 / 0.5*10^6)
=0.015 +0.32+4.8

=5.135 sec