Ch2 HW Networks

P1

a) F
b) T
c) F
D) F
E) F

P4 a) "request was http://gaia.cs.umass.edu/cs453/index.html

b) runnig HTTP vs. 1.1

c) persistant connection

d) message isnot found in an HTTP message

e) Mozilla/5.0

P5 a) The server was able to locate the document succesfully
- Reply was provided on Tues., 07 Mar 2008 12:39:45

b) index.html was last modified on Saturday 10 Dec 2005 18:27:46 GMT

c) 3874 bytes in document being returned

d) <!doc. The server agreed to a persistant connection : Keep-Alive field

P9 a) Av Time = (850,000 bits) / (15,000,000 bits/sec) ≈ 0.0567 sec

Traffic intensity = (16 req/sec)(0.0567 sec/req) = 0.907

Av Time delay = (0.0567 sec) / (1 - 0.907) = 0.6

Total av Responce Time = 0.6 sec + 3 sec = 3.6 sec

b) av access delay = (0.0567 sec) / [1 - (0.4)(907)] = 0.089 sec

Ave Resp Time = 0.089 sec + 3 sec = 3.089 sec for cache missed (40%)

So Ave Resp Time = (.6)(0 sec) + (.4)(3.089) = 1.24 sec

P14 SMTP uses a line containing only a period to mark the end of a msg body

HTTP uses "Content-length header-field to indicate the length of a message body

NO, HTTP cannot use same method as SMTP, b/c HTTP message could be binary, where as SMTP must be 7-bit ASCII

P17 a) access email with POP3

C: dele 1
C: retr 2
S: (~~ ...
S: ..... ~~)
S: .
C: dele 2
C: quit
S: +OK POP3 server signing off

b) C: retr 2
S: ~~ ...
S: ..... ~~
S: .
C: quit
S: +OK POP3 server signing off

P21 Yes, you can use dig to query that Website in the local DNS server.

dig website.com will return the query time for finding website, and if recently accessed, website is cached in local DNS cache, so query should be 0 sec

P26 a) Yes, as long as enough Peers are staging in the swarm for long enough

b) Yes, Bob can run a client on each host let each "free-ride" and combine collected chunks from diff. hosts into single file

P27 Peer 3 leans that Peer 5 has left system
So Peer 3 asks first succesor (Peer 4) for identifier of imidiat successor (Peer 8)

P28 Peer 6 would send peer 15 a message about predicesor and succesor. Message gets forwarded through DHT until it reaches peer 5,

P30 yes, randomly assigning keys to peers does not concider underlying Network, so can cause missmatch. Could degrade search performance