Answers to Chapter 1

1~5 ADCAD 6~10 BACDB 11~15 CBAAB
16~20 BBACC 21~25 DCDBB 26~30 DABBB
31~35 CABAC 36~40 BBDBC 41~45 AACBD
46~50 CDABC

51.
(1). t=5*(3000+500)/1000+0.1=17.6s
(2). t=5*(3000+200)/1000=16s
(3). t=(3000+200)/200+0.02=16.02s

Answers to Chapter 2

1~5 CACDC 6~10 CDABD 11~15 CCBAB
16~20 DDBBD 21~25 ACBDC 26~30 ABCDC
31~35 BDBDC 36~40 DBBAD 41~45 ACCAC
46~50 DACCC 51~55 CABAC 56~60 DBADA
61~65 DBDBA 66~70 CADCC 71~75 CDDAA
76~81 BACACB

82.Request line: GET /somedepartment/somedir/exp.html HTTP/1.1(or HTTP/1.0)
Header lines: Host: www.stdjtu.edu.cn (stdjtu.edu.cn)
Connection: close
User-agent: windows NT 5.1 (or windows NT/5.1)
Accept-language: fr (or French)

83.Request line: GET /somedir/exp.html HTTP/1.1
Header lines: Host: www.djtu.edu.cn
Connection: close
User-agent: windows NT 5.1
If-Modified-Since: Thu, 30 May 2007 12:00:00 GMT
Accept-language: fr

84.
2RTT0+RTT1+RTT2+....+RTTn

85.
a.
C: dele 1
C: retr 2
S: blah blah ……
S: ……blah
S: .
C: dele 2
C: quit

b.
C: retr 2
S: blah blah ……
S: ……blah
S: .
C: quit

86.
From: 123@xxx.com
To: 456@yyy.com
Subject: zzzzzzz
MIME-version: 1.0
content-transfer-encoding: base64
content-type: application/Msexcel

Answers to Chapter 3

Choices:
1~5 ADBCA 6~10 ABACD 11~15 BACDB
16~20 DDAAD 21~25 DAAAA 26~30 AAAAA
31~35 BCABC 36~40 DBCDB 41~45 BACAA
46~50 ABCDA 51~55 ABAAB 56~60 DBBDA
61~65 BAABB 66~70 DAAAA 71~75 BAAAB
76~80 AAAAC 81~85 DADBB 86~90 AACCC
91~95 DDBCB 95~100 CBABD 101~106 ABABDB

107. K=O/(WS)=500*8*1000/(5*5000*8)=200
Latency=2RTT+O/R+(K-1)(S/R+RTT-WS/R)
=0.4+500*1000*8/100000+(200-1)(500*8/100000+0.2-5*500*8/100000)
=48.36s

108. a) 12 b) 8 c) 7 d) A e) B f) 5
109. a) 12 b) 12 c) 12, 22
110. a) 1 b) 0 c) 1 d) 0 e) 93

111. (1) Latency=2RTT + O/R =2*0.1+100*8/25= 0.2+32=32.2 (s)
W* S/R > S/R+RTT---- W>1.6, so W=2
(2) Latency=2RTT + O/R =2*0.1+100*8/100= 0.2+8=8.2 (s)
W* S/R > S/R+RTT----W>3.3, so W=4

112. a) 12 b) 8 c) 7 d) timeout e) 3 triple ACK