

THE HONG KONG POLYTECHNIC UNIVERSITY
HONG KONG COMMUNITY COLLEGE

Subject Title : Computer Networking

Subject Code : CCN2238

Session : Semester Two, 2015/16

Numerical Answers

Question B1

(a) 01001010
11101000
11000111
10001100
00010000

(b) CRC is 1101
Bit stream sent: 10011001 1100 1111 01

Question B2

(b) 11 bits
(c) 770000bps
(d) 67.98

Question B3

(a) ONCE

Question B4

Sender: 3 bits and
Receiver: 3 bits

Question B5

(b)(i) 50512
(b)(ii) 636
(b)(iii) 234 bytes
(b)(iv) 226 bytes

Question C1

- (a) 82.16s OR 71.98s
- (b) 2.76s OR 2.463s
- (c)(i) 20 and 21.
- (c)(ii) 18, 19 and 20.

Question C2

- (a) 7 segments.

(b)

	ID	Flag	Fragment Offset
First segment	593	1	0
Second segment	593	1	260
Last segment	593	0	1560

- (c) 13 segments

(d)

	Fragment Offset in IP	Size of Ethernet frames
First segment	0	1518 bytes
Second segment	185	638 bytes
Last segment	1560	338 bytes