



Review Test Submission: Quiz 2

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Unit	Discrete Structures
Test	Quiz 2
Started	9/04/17 10:27 AM
Submitted	9/04/17 10:27 AM
Status	Completed
Attempt Score	0 out of 100 points
Time Elapsed	0 minute
Instructions	You can take the test twice. The higher score will be recorded.
Results Displayed	Correct Answers, Incorrectly Answered Questions

Question 1

0 out of 5 points



USASCII code chart

					0 0	0 0	0 1	0 1	1 0	1 0	1 1	1 1	
					0	1	2	3	4	5	6	7	
Bits	b ₄	b ₃	b ₂	b ₁	Column								
	↑	↑	↑	↑	Row ↓								
	0	0	0	0	0	NUL	DLE	SP	0	@	P	\	p
	0	0	0	1	1	SOH	DC1	!	1	A	Q	a	q
	0	0	1	0	2	STX	DC2	"	2	B	R	b	r
	0	0	1	1	3	ETX	DC3	#	3	C	S	c	s
	0	1	0	0	4	EOT	DC4	\$	4	D	T	d	t
	0	1	0	1	5	ENQ	NAK	%	5	E	U	e	u
	0	1	1	0	6	ACK	SYN	&	6	F	V	f	v
	0	1	1	1	7	BEL	ETB	'	7	G	W	g	w
	1	0	0	0	8	BS	CAN	(	8	H	X	h	x
	1	0	0	1	9	HT	EM	)	9	I	Y	i	y
	1	0	1	0	10	LF	SUB	*	:	J	Z	j	z
	1	0	1	1	11	VT	ESC	+	;	K	[	k	{
	1	1	0	0	12	FF	FS	,	<	L	\	l	|
	1	1	0	1	13	CR	GS	-	=	M	]	m	}
	1	1	1	0	14	SO	RS	.	>	N	^	n	~
	1	1	1	1	15	SI	US	/	?	O	_	o	DEL

Using the ASCII table above, what is the 7-bit string for N?

Correct Answer: 1,001,110

Answer range +/- 0 (1001110 0 1001110 0)

Answer range +/- 0 (100110.0 - 100110.0)

Question 2

0 out of 5 points



Using the table from question 1, what is the ASCII character for the bit string 0110010? (If you see the message "Valid numeric value required(Answer will still save, but will be marked incorrect" then you may want to try a different answer.)

Correct Answer:  2


Answer range +/- 0 (2.0 - 2.0)

Question 3

0 out of 5 points



Using the ASCII table for question 1, what is the 7-bit string for the character }?

Correct Answer:  1,111,101

Answer range +/- 0 (1111101.0 - 1111101.0)


Question 4


0 out of 5 points





Put the following bit strings into lexicographical order.


Correct Answer

 1. 001

 2. 0011001

 3. 1010

 4. 11001

 5. 1101000

Question 5

0 out of 5 points



A C-style string is encoded by

Correct

Answer:




Recording the text in ASCII and append a NULL character (00000000) to indicate the end of the string.

Question 6

0 out of 5 points



Convert the binary number 1100 to base 10

Correct Answer:  12

Answer range +/- 0 (12.0 - 12.0)

Answer range +/- 0 (12.0 - 12.0)

Question 7

0 out of 5 points



Convert the binary number 11011 to base-10.

Correct Answer:  27

Answer range +/- 0 (27.0 - 27.0)

Question 8

0 out of 5 points



What is $1100 + 1001$? Give your answer in binary.

Correct Answer:  10,101


Answer range +/- 0 (10101.0 - 10101.0)

Question 9

0 out of 5 points



What is $11111 + 11$? Give your answer in binary.

Correct Answer:  100,010

Answer range +/- 0 (100010.0 - 100010.0)

Question 10

0 out of 5 points



Convert 11101110 to hexadecimal

Correct Answer:

Evaluation Method	Correct Answer	Case Sensitivity
 <i>Exact Match</i>	EE	


Question 11

0 out of 5 points



Convert 01011101 to hexadecimal.

Correct Answer:

Evaluation Method	Correct Answer	Case Sensitivity
 <i>Exact Match</i>	5D	

Question 12

0 out of 5 points



Convert 3C to an 8-bit string.

Correct Answer:

Evaluation Method

Correct Answer

Case Sensitivity

✔ *Exact Match*

00111100

Question 13

0 out of 5 points



Convert F4 to an 8-bit string.

Correct Answer:

Evaluation Method

Correct Answer

Case Sensitivity

✔ *Exact Match*

11110100

Question 14

0 out of 5 points



Assuming 4-bit 2's complement encoding, decode the string 1011 as a base-10 number.

Correct Answer:

Evaluation Method

Correct Answer

Case Sensitivity

✔ *Exact Match*

-5

Question 15

0 out of 5 points



Assuming 4-bit 2's complement encoding, decode the string 0111 as a base-10 number.

Correct Answer:

Evaluation Method

Correct Answer

Case Sensitivity

✔ *Exact Match*

7

Question 16

0 out of 5 points



In 2's complement encoding, we can determine whether the number is negative or positive by looking at:

Correct Answer: ✔ The leftmost bit

Question 17

0 out of 5 points



2's complement n-bit encoding is derived from

Correct Answer: ✔ Arithmetic modulo 2^n

Question 18

0 out of 5 points



Identify the different parts of this number:

$$6.022 \times 10^{23}$$

Question Correct Match

6.022 ☒ A. Significant digits

10 ☒ B. Base

+ ☒ D. Sign

23 ☒ C. Exponent

Question 19

0 out of 5 points



Identify the different parts of this number:

$$-1.01101 \times 2^{1101}$$

Question Correct Match

1.01101 ☒ C. Significant digits

2 ☒ D. Base

- ☒ A. Sign

1101 ☒ B. Exponent

Question 20

0 out of 5 points



When encoding numbers in floating point on a computer we

Correct ☒

Answer: Start with the number in base-2 scientific notation, and encode the sign, exponent, and significant digits as bits.

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