Business Data Communications Infrastructure, Networking, and Security, 7^{th} Edition, by William Stallings and Tom Case

CHAPTER 2: BUSINESS INFORMATION

TRUE OR FALSE

T	F	1. Today, all networked information is sent using digital formats.
T	F	2. A single bit of information represents two states or values.
T	F	3. The terms byte and octet describe the same amount of information.
T	F	4. Voice communication can only be done using an analog signal.
T	F	5. PBX and Centrex systems provide similar functionality from the users point-of-view.
T	F	6. Services transmitting video information use a series of vector images to represent moving images.
T	F	7. System response time and system cost are closely related to each other.
T	F	8. Response time is extremely important when implementing email systems.
T	F	9. When transmitting video information, compression ratios can range as high as 100:1 with little loss of perceived quality.
T	F	10. Interlacing is a method of reducing the bandwidth requirements for video transmissions.
T	F	11. When using analog communications, channel capacity is measured in hertz (Hz) where 1 Hz equals 1000 oscillations per second.
T	F	12. The United States national version of IRA is referred to as the American Standard Code for Information Interchange (ASCII).
T	F	13. Common examples of data include text and numerical information.
T	F	14. Raster graphics involves the use of binary codes to represent object type, size, and orientation.
T	F	15. The Joint Photographic Experts Group (JPEG) is a collaborative standards-making effort between ISO and ITU-T.

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1. Which of the following represents a digital form of information?

MULTIPLE CHOICE

	A. a ga	s gauge					
	B. a fax	transmission					
	C. a wa	tch that displays tin	ne as HH:	MM			
	D. a pa	ge filled with Englis	h prose				
2. Which of the following represents the most basic u				nit of digita	al information	n?	
	A. byte		B. nibbl	e			
	C. pixel		D. bit				
3.	Standard voice telephone lines, such as those found in residences, limit bandwidth to:				nces, limit		
	A. 300	Hz	B. 3,400	0 Hz			
	C. 20,0	00 Hz	D. 1,41	0,000 H	Z		
4.	A stereo comp be:	act disc typically red	quires the	e bandv	vidth for ea	ch channel to)
	A. 300	Hz	B. 3,400	0 Hz			
	C. 8,000) Hz	D. 20,00	00 Hz			
5.	When using da	ata communications	with 8-b	it codes	, the numb	er of alphabe	tic
	A. mus	t be exactly 256		Е	3. must be 6	exactly 512	
	C. can	be greater than 1024	4 bytes	Γ). must be l	ess than 256	
6.		val between when a ives at his or her wo				en the result (of
	A. resp	onse time	I	3. turn-	around tim	e	
	C. thin	k time	I	D. delay	time		

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7.	In digital systems, the information rate and the capacity of a digital channel are measured in:		
	A. mhz	B. dps	
	C. bps	D. ghz	
8.	Analog information sources	s include:	
	A. sounds	B. music	
	C. video	D. all of the above	
9.		nonly used text code is the, in which each presented by a unique 7-bit pattern.	
	A. UTF-8	B. IRA	
	C. Morse code	D. none of the above	
10.	The number of different characteristics and Reference Alp	aracters that can be represented in the phabet text code is:	
	A. 512	B. 256	
	C. 128	D. 64	
11.	is capable of representation major languages spoken are	senting symbols and characters used in all the ound the world.	
	A. UTF-8	B. ASCII	
	C. IRA	D. UCST	
12.	A is the smallest sin	gle component of a digital image.	
	A. RGB	B. megapixel	
	C. pixel	D. none of the above	

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13.	images are the most common type of image being transmitted over today's enterprise networks.				
	A. Color	B. Black and white			
	C. Pixilated	D. Grayscale			
14.	The most widely used for	ormat for raster-scan images is referred to as			
	A. TIFF	B. JPEG			
	C. PNG	D. PDF			
15.	screens use thin material to display imag	n sandwiches of glass containing a liquid-crystal ges.			
	A. PDF	B. LCD			
	C. CRT	D. all of the above			
SHOR	T ANSWER				
1.	A system uses symbols to represent in	a sequence of discrete, discontinuous values or formation.			
2.	Nondigital syst	tems use a continuous range of values to represent			
3.	of the original audio str	ion receivers can reproduce an exact digital duplicate eam transmitted by the sender by ing the file that is received.			
4.	_	sion is used, irreversible changes are made to the the quality of the original audio stream when the the file.			
5.	organization that interc	nise telephone switch, owned or leased by an onnects the telephones at that location and provides blic telephone systems and other voice services.			
6.	files contain very as boldface, italics, or un	y little formatting and do not support formatting such nderline.			

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7.	consists of information that can be represented by a finite alphabet of symbols, such as the numbers 0 through 9 or the symbols represented on a computer keyboard.
8.	Some of the International Reference Alphabet text code patterns represent invisible, nonprintable characters called
9.	The (IRA) character set is the most common format for English language text files.
10.	is a 16-bit code that is backward compatible with IRA/ASCII.
11.	The service supports the communication of individual pictures, charts, or drawings.
12.	A representation of images that uses straight and curved line segments is called
13.	A representation of images that uses an array of pixels is called
14.	is a page-description language that is built into many desktop printers and virtually all high-end printing systems.
15.	is a subjective measure of the user's perception of the overall value of the network application or service.