Chapter 02: Image Quality Factors Ehrlich: Patient Care in Radiography: With an Introduction to Medical Imaging, 9th Edition

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UL	TIPLE CHOICE				
1.	• •		_	_	g factors: 200 mA, 0.04 seconds, 80 kVp, and ne value of the mAs?
	ANS: C	REF:	p. 22	OBJ:	3
2.	An increase in OID 1. increased magnif 2. decreased image 3. increased image a. 1 only b. 2 only c. 1 and 2 d. 1 and 3	icatior detail.	1.		
	ANS: C	REF:	p. 30	OBJ:	6
3.	The primary purpose a. protect the film b. improve the def c. reduce the quan d. reduce the possi	from lanition	ight and dama on the radiog radiation requ	ige dur graph. iired to	ing radiography. produce a satisfactory image.
	ANS: C	REF:	p. 25	OBJ:	8
4.	be increased?a. Kilovoltageb. Milliamperagec. mAsd. Exposure time	-			beam, which of the following factors should
	ANS: A	REF:	p. 28	OBJ:	4
5.	In order to increase should be increased a. Kilovoltage b. SID c. mAs d. OID	1?	al density of a	film/sc	reen image, which of the following factors

6.	Magnification is affected by: a. OID only. b. SID only. c. both OID and SID. d. neither OID nor SID.								
	ANS: C	REF:	p. 29	OBJ:	4 6 7				
7.	An image receptor processing with a la. digital radiograb. computed radioc. a film/screen syd. digital fluorosc	aser is phy (Dography ystem.	part of a syste R).		able plate that is converted to an image by ed:				
	ANS: B	REF:	p. 26	OBJ:	8				
8.	Radiation exposure a. OID. b. kVp. c. mAs. d. SID.	e is dire	ectly proportio	onal to:					
	ANS: C	REF:	p. 22	OBJ:	3				
9.	An image that is black in the darkest areas and white in the lightest areas is said to have: a. high contrast. b. sharp detail. c. low contrast. d. poor detail.								
	ANS: A	REF:	p. 31	OBJ:	10				
10.	To decrease the co a. increase the kV b. decrease the kV c. increase the ex d. decrease the m	'p. /p. posure		hic ima	nge, you should:				
	ANS: A	REF:	p. 28	OBJ:	4				
11.	 11. An increase in kVp affects the x-ray beam by causing it to: a. have greater intensity. b. be more homogeneous. c. cover a larger area. d. contain more long wavelengths. 								
	ANS: A	REF:	p. 23	OBJ:	4				
12.	Image detail is affe a. mAs and kVp b. kVp and SID	ected by	y:						

	c. focal spot size and patient motiond. focal spot size and mAs								
	ANS: C	REF: p. 28	OBJ: 12						
13.	When a radiographic image is visible immediately after exposure, without the need for processing, the image receptor system is of the type called: a. digital radiography (DR). b. computed radiography (CR). c. fluoroscopy. d. film/screen radiography.								
	ANS: A	REF: p. 27	OBJ: 8						
14.	When a large OID causes poor image detail, this can be compensated to some degree by increasing the: a. kVp. b. SID. c. mAs. d. field size.								
	ANS: B	REF: p. 28	OBJ: 7 12						
15.	_	or used to compensa	a change in another factor in order to maintain image ate is:						
	ANS: C	REF: p. 24	OBJ: 7						
16.	What is the effect of grid use on image quality, as compared to an exposure made without a grid? a. Contrast is increased. b. Optical density is increased. c. Image detail is increased. d. Image distortion is decreased.								
	ANS: A	REF: p. 27	OBJ: 11						
17.	Unequal magnification of various portions of the radiographic subject affects the image facture called: a. optical density. b. image contrast. c. image detail. d. shape distortion.								