

CEDEES Work-Sheet
Radiology

1. The use of long cone is adjunct in parallel technique:

- A. To minimize the superimposition of anatomical structures
- B. To prevent the shortening of image
- C. To prevent the distortion of image
- D. To prevent the elongation of image

2. Insufficient Contrast is due to

- A. Underdevelopment and Underexposure
- B. Excessive KVp
- C. Excessive film fog
- D. All of the above

3. The Detective Quantum Efficiency (DQE)

- A. Limits the Photons from entering the patient
- B. Reduces the temperature of x-ray tube
- C. A basic measure of the efficiency of an imaging system
- D. Avoids Geometric Blurring

4. This Material has been used as an replacement for Lead Free aprons

- A. Antimony
- B. Tin
- C. Tungsten
- D. All of the above

5. The Photostimulable Phosphor (PSP) used for Radiographic Imaging is _____

6. DICOM is _____

7. JPEG is _____

8. Rapid-processing solutions have a higher concentration of

- A. Sodium Sulfite
- B. Aluminium Sulfite
- C. Ammonium Thiosulfate
- D. Hydroquinone

9. Rapid-processing solutions typically develop films in _____ Seconds and fix them in _____ seconds at room temperature

- A. 15,15
- B. 20,15
- C. 30,15
- D. 15,30

10. Increasing which of the following, will increase the density of the radiograph:

- A. Peak kilo voltage (kVp)
- B. Exposure time
- C. Milliamperage
- D. All of the above

11. The primary symptom of lichen planus is:

- A. Wickham's striae
- B. Severe pruritis
- C. Bullae
- D. Vesicles

12. A cyst that is not seen in X-ray is:

- A. Periodontal cyst
- B. Gingival cyst
- C. Lateral cyst
- D. Periapical cyst

13. Liquefactive degeneration is seen in the histologic picture is

- A. Lichen Planus
- B. Pemphigus
- C. Psoriasis
- D. Leukemia

Answer True / False

14. In SMV, Canthomeatal Line is Parallel to Film (T/F)

15. In Lateral Ceph the central beam is Perpendicular to film (T/F)

16. In Waters view, Canthomeatal line forms 37° with film (T/F)

17. PA Ceph, is useful for these structures, except

- A. Orbit
- B. Nasal cavity
- C. Frontal Sinus
- D. Zygomatic arch

18. Which is 21 st amino acid -

- A. Alanine
- B. Cystine
- C. Arginine
- D. Seleno cysteine

19. Zinc is a cofactor for-

- A. Carbonic anhydrase
- B. Pyrovate carboxylase
- C. Alpha-ketoglutarate
- D. Enolase

20. Grid is used

- A. To remove secondary radiation
- B. Filter the radiation
- C. Removes scattered radiation
- D. None of the above

21. Fluroacetate inhibits -

- A. Citrate synthetase
- B. Aconitase
- C. Succinate dehydrogenase
- D. Alphaketoglutarate dehydrogenase

22. All occur in mitochondria except

- A. ETC
- B. TCA cycle
- C. Ketogenesis
- D. Glycolysis

23. Crimp marks in a radiograph are due to:

- A. Droplets of fixing solution
- B. Droplets of developing solution
- C. Static electricity
- D. Sharp bending of the film

24. The base of dental x ray film is made up of:

- A. Silver bromide
- B. Polyester polyethylene terephthalate
- C. Lead
- D. Barium sulphate

25. The thickness of base of dental x-ray film is:

- A. 0.18 mm
- B. 0.8 mm
- C. 1.2 mm
- D. 1.8 mm

26. The size of no. 0 dental periapical film are:

- A. 22 x 35 mm
- B. 24 x 40 mm
- C. 31 x 41 mm
- D. 42 x 50 mm

27. When viewed on a light source, a dental radiograph that demonstrates many shades of gray is said to have:

- A. High contrast
- B. Low contrast
- C. High density
- D. Low density

28. The radioresistance of many biologic systems increases by a factor of _____ under hypoxic conditions

- A. Statement is wrong
- B. 2-3
- C. 8-10
- D. 11-12

29. Principle of justification refers to _____

30. Mention the three types of radiation caries

- A.
- B.
- C.

31. Father of oral hygiene is?

- A. John w Riggs
- B. Leonard kocharr
- C. William jj younger
- D. Levi spear pamly

32. Screen films differ from non-screen films in that

- A. They are more sensitive to light than X-rays
- B. They are more sensitive to X-rays than light
- C. They are usually used in intraoral radiography
- D. They do not need intensifying screens

33. The X-ray view which is best for maxillary sinus

- A. Waters view
- B. Towne's view
- C. Submentovertex
- D. Lateral oblique view

34. The radiographic view that has to be avoided in patients with cervical spondylitis

- A. PA view
- B. Submentovertex
- C. Towne's view
- D. Occipito mentalview

35. McGregor line and trapnell lines are seen in

- A. PNS view
- B. PA view
- C. SMV view
- D. Lateral view

36. In acute radiation syndrome, gastrointestinal symptoms are seen between this dose

- A. 2 to 4 Gy
- B. 4 to 7 Gy
- C. 7 to 15 Gy
- D. 50 Gy

37. Osteoradionecrosis is due to

- A. Endarteritis of blood vessels
- B. Damage to periosteum
- C. Damage to lymphatics
- D. All of the above

38. Broaches used for extirpation can be best sterilized by:

- A. Autoclave
- B. Hot air oven
- C. Two percent glutaraldehyde
- D. Are meant for single use only

39. Lateral Ramus projection is useful for all, except

- A. Ramus
- B. Coronoid process
- C. Condylar neck
- D. Posterior maxilla

40. In panoramic radiograph, smiling appearance of structures occurs if patient chin is

- A. Placed anterior to focal trough
- B. Placed posterior to focal trough
- C. Tilted downward
- D. Tilted upwards

41. Edge enhancement effect is seen with

- A. Xeroradiography
- B. Scintigraphy
- C. Stereoscopy
- D. None of the above

42. Multiple radiolucencies are common in all of the following except

- A. Multiple myeloma
- B. Hyperparathyroidism
- C. Osteopetrosis
- D. Metastatic tumours of bone

43. If multiple myeloma is suspected in a patient's history and intraoral radiograph, which of the following radiographs should be taken to confirm the diagnosis

- A. Lateral skull
- B. Anterior-posterior view
- C. Lateral oblique
- D. Posterior-anterior view

44. Emulsion component of X-ray film is made up of:

- A. Silver bromide
- B. Iodide
- C. Lead
- D. Barium sulphate

45. The size of occlusal film is:

- A. 33 x 22 cm
- B. 52 x 22 cm
- C. 48 x 60 cm
- D. 57 x 76 mm

46. The appearance of a uneven density of a uniformly exposed radiographic film is known as:

- A. Radiographic noise
- B. Radiographic artifact
- C. Radiographic blurring
- D. None of the above

47. The ability of the radiograph to reveal small objects close together is known as:

- A. Image sharpness
- B. Image spatial resolution
- C. Image contrast
- D. Image density

48. At 76 F° the developing time for dental X-ray film is:

- A. 2 minute
- B. 3 minute
- C. 4 minute
- D. 5 minute

49. The film characteristic that is "the amount of radiation needed to produce a radiograph of standard density" is:

- A. Contrast
- B. Speed
- C. Image resolution
- D. Size

50. A mesial projection cone adjustment during working length radiographs is indicated for what?

- A. Maxillary anterior teeth
- B. Maxillary molars with a mesiolingual canal
- C. Mandibular incisors
- D. Mandibular molars with a second distal canal

51. Film fog may be due to:

- A. Improper safelight
- B. Overdevelopment
- C. Contaminated solution
- D. All

52. Which of the following mean is used to increase the image quality and clarity?

- A. Use of as small as effective focal spot as practical
- B. By increasing the distance b/w the focal spot and the object by using a long, open ended cylinder
- C. By minimizing the distance b/w the object and the film
- D. All of the above

53. Which of the following is a preservative constituent of a developing solution?

- A. Sodium sulphite
- B. Sodium hydroxide
- C. Potassium bromide
- D. Benzotriazole

54. Which of the following film sizes is known as the standard film?

- A. Size 0
- B. Size 1
- C. Size 2
- D. Size 3

55. Which of the following interactions does not cause film fog?

- A. Coherent scattering
- B. Transient scattering
- C. Photoelectric absorption
- D. Compton scattering

56. An example of a isotope that is predominantly a beta emitter is

- A. 125 Iodine
- B. 32 Phosphorus
- C. 51 Chromium
- D. 99m Technetium

57. Addition of which of the following component in ultra-speed film increases the sensitivity of film to the radiation:

- A. Silver
- B. Bromide
- C. Iodide
- D. Lead

58. Standard periapical and bitewing film size used for adult is:

- A. Size 0 film
- B. Size 1 film
- C. Size 2 film
- D. Size 3 film

59. "High level" pulpotomy is known as all, except
A. Cervical pulpotomy B. Total pulpotomy
C. Shallow pulpotomy
D. Conventional pulpotomy
60. Full swallowing and sucking is established around
A. 32-36 weeks IU life B. 18-20 weeks IU life
C. 22-24 weeks IU life D. 26-28 weeks IU life
61. A low kilovoltage technique is most advantageous in demonstrating
A. Resorption of alveolar crest
B. Periapical lesions
C. Incipient caries D. Nutrient canals
62. Which of the following is not an antioxidant
A. SOD B. Vitamin A
C. Glutathione peroxidase D. Xanthine oxidase
63. Endotoxin of which gram negative bacteria doesn't cause pathogenesis of natural disease
A. E.coli B. M.tuberculosis
C. V. Cholera D. Pseudomonas aeruginosa
64. Shy Drager syndrome is
A. Vasovagal syncope B. Orthostatic hypotension
C. Intestinal polyps D. Acute adrenergic shock
65. Water: powder ratio for type IV dental stone is:
A. 0.65 to 0.70 B. 0.45 to 0.50
C. 0.22 to 0.24 D. 0.28 to 0.30
66. Maximum permissible dose of Articaine in a healthy patient is
A. 1.3 mg/kg B. 5 mg / Kg
C. 2 mg/ kg D. 7 mg/ kg
67. Carold gerrard device is used for:
A. Surgically assisted rapid palatal expansion
B. Zygoma reduction C. Condylar reduction
D. None of the above
68. Most aggressive, common and recurrent odontogenic keratocyst is:
A. Orthokeratinised B. Parakeratinised
C. Both of the above D. None of the above
69. Hypothyroidism in children causes:
A. Acromegaly B. Cretinism
C. Gigantism D. Myxedema
70. The amount of fresh developer which should be added per gallon of the seasoned developing solution in order to replenish the seasoned developer should be:
A. 2 ounces B. 4 ounces
C. 6 ounces D. 8 ounces
71. The fastest dental film with a speed rating of F has a speed range of:
A. 6-12 roentgens B. 12-24 roentgens
C. 48-96 roentgens D. 100-148 roentgens
72. The range of the exposure that can be recorded as distinguishable densities on a film is expressed as:
A. Film latitude B. Film density
C. Radiographic noise D. None of the above
73. Fixer should be replenished daily at the rate of:
A. 2 ounces/gallon B. 4 ounces per gallon
C. 6 ounces/gallon D. 8 ounces per gallon
74. The developing time for dental x-ray film at a temperature of 68 F is :
A. 2 minute B. 3 minute
C. 4 minute D. 5 minute
75. The size of no. 2 periapical film is:
A. 22 x 35 mm B. 24 x 40 mm
C. 31 x 41 mm D. 42 x 50 mm
76. Which of the following is not a component of fixing solution?
A. Clearing agent B. Acidifier
C. Hardener D. Restrainer
77. Which of the following occurs only at 70 kVp or higher and accounts for a very small part of the x-rays produced in the dental x-ray machine?
A. General radiation B. Characteristic radiation
C. Compton scatter D. Coherent scatter
78. A new born infant is diagnosed with phenylketonuria. The enzyme that is deficient is
A. Phenylalanine hydroxylase
B. Phenylalanine oxidase
C. Dihydropteridine reductase
D. Tyrosine hydroxylase
79. Which of the following type of scatter occurs most often with dental x-rays?
A. Compton B. Coherent
C. Photoelectric D. None of the above
80. Too much vertical angulation results in images that are
A. Elongated B. Foreshortened
C. Overlapped D. None of the above
81. The view in which patient's chin placed touching radiographic cassette
A. PA view of skull B. Towne's view
C. Submentovertex D. Waters view
82. Gross fog is typically _____
83. Subject Contrast is influenced by
A. Subjects thickness B. Subjects density
C. Subjects atomic number D. All of the above
84. Grids are preferred with a ratio of
A. 1-2 B. 3-4
C. 8-10 D. 10-12
85. One advantage of a film with an emulsion coating on both sides (double-emulsion film) is that:
A. The film requires less radiation exposure to make an image
B. The image produced is less distorted
C. The film has less sensitivity to radiation
D. Processing solutions are absorbed more easily
86. The purpose of a lead foil sheet in the film packet is:
A. To protect the film from primary radiation
B. To protect the film from saliva
C. To protect the film from backscattered radiation
D. To distinguish between the patient's right and left sides

87. Which of the following results if the intensifying screens are not in perfect contact with the screen film?

- A. The screen may be damaged.
- B. The film may be damaged.
- C. A loss of image sharpness occurs.
- D. None of the above.

88. The inherent filtration of X-ray machines range from thickness of aluminium

- A. 0.5 - 2mm
- B. 1.5 - 2.5mm
- C. 2.5 - 5mm
- D. 1.0 - 2.5mm

89. Rotating anode is mainly used to:

- A. Focus photons
- B. To avoid heel effect
- C. To dissipate heat from focal spot
- D. Increase the energy of photons

90. For a bitwing X-ray angulation of cone should be:

- A. 10° above horizontal
- B. 15° below horizontal
- C. 10° below horizontal
- D. 15° above horizontal

91. For effective group discussion, ideally there should be:

- A. Minimum 4 and maximum 8 members
- B. Minimum 5 and maximum 10 members
- C. Minimum 6 and maximum 12 members
- D. Minimum 7 and maximum 14 members

92. According to ADA, this is the most used method in public health surveying

- A. Type 1
- B. Type 2
- C. Type 3
- D. Type 4

93. For maintaining parallelism between object the and film, film is placed at a distance to avoid distortion what should be done:

- A. Increase target to object distance
- B. Decrease target to object distance
- C. Both of the above
- D. None of the above

94. Pentose pathway produces -

- A. ATP
- B. NADPH
- C. ADP
- D. Acetyl CoA

95. Aminoacid containing indole ring is -

- A. Arginine
- B. Tryptophan
- C. Tyrosine
- D. Histidine

96. NaF inhibits -

- A. Enolase
- B. Glucokinase
- C. Hexokinase
- D. G-6PD

97. Rate controlling enzyme of fatty acid synthesis -

- A. Thioesterase
- B. Transacetylase
- C. Acetyl-CoA carboxylase
- D. Ketacyl synthase

98. The anatomic form of the roots of teeth is determined by

- A. Hertwig's sheath
- B. Hammock ligament
- C. Stellate reticulum
- D. Dental papilla

99. Zygomatic arch fractures are best viewed in

- A. Occipitomental view
- B. Lateral oblique
- C. submentovertex
- D. Lateral view

100. Characteristic of screen film used for cephalometric radiograph

- A. High contrast, medium-speed
- B. Low contrast, faster film
- C. Low contrast, wide latitude
- D. High contrast, high speed

101. Agranular endoplasmic reticulum is involved in the synthesis of:

- A. Protein
- B. Lipid
- C. Carbohydrate
- D. Vitamin D

102. Site of RBC formation in 20 year old healthy male is:

- A. Flat bones
- B. Long bones
- C. Liver
- D. Yolk sac

103. Cone cut error results from incorrect

- A. Packet placement
- B. Vertical Angulation
- C. Horizontal Angulation
- D. Centering the x-ray beam

104. With an optical density of 1, _____ % of the light is transmitted

- A. 100
- B. 50
- C. 10
- D. 1

105. Calculus deposits are located by:

- A. Probe
- B. Explorer
- C. Scaler
- D. Radiographs

106. Instrument designed for two point contact is:

- A. Scaler
- B. Curette
- C. Morse scaler
- D. Hoe scaler

107. Half value layer refers to

- A. The rate at which an X-ray photon transfers its energy to irradiated matter
- B. The thickness of a substance required to reduce the number of X-ray photons by half
- C. The time taken for X-ray photons to travel half the distance from the source to the object
- D. The heel effect seen when the anode is placed at an angle to the electron stream in the X-ray cathode tube

108. Rare Earth Element used in intensifying screens producing green emission

- A. Yttrium tantalite
- B. Gadolinium oxysulfide
- C. Niobium
- D. Terbium

109. The device that transfers x-ray energy into visible light is termed a:

- A. Cassette
- B. Nonscreen film
- C. Screen film
- D. Intensifying screen

110. Essential pentosuria is due to deficiency of-

- A. Gulonolactone oxidase
- B. Phosphoglucomutase
- C. Xylulose reductase
- D. Fructokinase

111. Ascorbic acid is required for synthesis of-

- A. Phenylserine
- B. Homoserine
- C. Hydroxylysine
- D. Selenocysteine

112. This is true about CBCT Imaging Systems

- A. Most Contemporary CBCT units use Flat Panel Detectors
- B. Charge Coupled Device detective are larger and bulkier than FPDS
- C. All Currently available CBCT units use detectors that record grayscale differences of 12 bits or greater
- D. All of the above

113. According to medial complexity status classification, the patient is suffering with epilepsy and that is controlled with medications, falls under which category?

- A. MCS-1B
- B. MCS-1A
- C. MCS-2A
- D. MCS-2C

114. In patients on radiation therapy on oral structures, there is significant increase in which of the following micro organisms

- A. Streptococcus mutans B. Lactobacillus
C. Candida D. All of the above

115. For an ideal isotropic material of constant volume, the poisson's ratio is

- A. 0.1 B. 0.2
C. 0.5 D. 0.8

116. The Community Periodontal index for Treatment Needs is recorded for

- A. Quadrants B. Sextants
C. One arch D. Whole dentition

117. 'Maturation' of GIC restoration takes place due to this component

- A. Sodium B. fluoride
C. Aluminum D. Water

118. Which of the following instrument is used to curette furcation areas?

- A. Naber's probe B. Hu-friedy Mini 5 curette
C. Hu-friedy After 5 curette D. Universal curette

119. Compressive strength of ZOE cement ranges from

- A. 60-70MPa B. 75-105 MPa
C. 3-55MPa D. 80-110MPa

120. The number of working surfaces in case of magnetostrictive ultrasonic scaler is:

- A. 1 B. 2
C. 4 D. 6

121. Which of the following bacteria is lethal to actinomycetemcomytans?

- A. S. sanguis B. S. mitis
C. S. salivarius D. S. mutans

122. IQ 25-50 suggestive of?

- A. Imbecile B. Idiot
C. Moron D. Genius

123. According to Melcher concept, the regeneration of new attachment is from :

- A. Periodontal ligament B. Gingival connective tissue
C. Alveolar bone D. Junctional epithelium

124. Type of calculus in mandibular anteriors?

- A. Brushite B. Hydroxy appetite
C. Octa calcium Po4 D. Whitlockite

125. The appropriate size of LMA for an average adult patient weighing 50 kg is

- A. 2.5 B. 3.0
C. 4.0 D. 5.0

126. Which of the following kVp settings will produce greatest contrast of images on a radiograph

- A. 65 KVP B. 75 KVP
C. 80 KVP D. 90 KVP

127. Which of the following enzymes is stable at acidic pH:

- A. Pepsin B. Trypsin
C. Chymotrypsin D. Carboxypeptidase

128. In bone biopsy decalcification and fixation is done simultaneously by?

- A. Nitric acid and formalin
B. Formic acid and Formalin
C. EOTA and Formic acid D. Nitric acid and EDTA

129. Positive pathergy test is seen in

- A. Sarcoidosis B. Histoplasmosis
C. Candidiasis D. Behcet's disease

130. Scaphocephaly seen in cruro syndrome (Cranifacial dysostosis) means:

- A. Bridge shaped head B. Boat shaped head
C. Triangle shaped head D. Short head

131. This is a constant oral finding of marfan syndrome:

- A. Fissured tongue B. High arched palatal vault
C. Macroglossia D. Supernumerary teeth