

Dental radiology

1. Cone distance refers to the distance between the -----.
 - a. Operator & machine.
 - b. Focal spot & the outer end of the cone.
 - c. Source of the x ray & the patient skin.
 - d. Object & the source of X ray.
2. What should be the vertical angel of projection when taking radiograph of the maxillary canine -----.
 - a. +90 degree.
 - b. +45 degree.
 - c. +15 degree.
 - d. Zero degree.
3. A step down transformer in an X ray machine -----.
 - a. Prevents breakdown of the X ray machine.
 - b. Reduces secondary radiation.
 - c. Controls voltage of the tube filament.
 - d. Controls the potential between anode & cathode.
4. The fixing solution performs all of the following functions except - -----.
 - a. Stops the action of the developer.
 - b. Acts on exposed silver halide granules to separate the salts from silver.
 - c. Dissolves excess unreduced silver salts.
 - d. Fixes the metallic silver on the film.
5. Films may appear streaked or stained as a result of -----.
 - a. Contaminated solutions.
 - b. Careless & unclean handling.
 - c. Insufficient fixing.
 - d. All of the above.

6. The bisecting angel technique compared to the long cone paralling technique, involves -----.
- Lesser object to film distance.
 - Lesser vertical angulations.
 - Greater source to film distance.
 - More developing time.
7. All of the following factors will result in brown stains on the film, except -----.
- Negligence in rinsing the film adequately before transferring it to the fixer.
 - Outdated film.
 - Extreme overexposure.
 - Weak fixer.
8. The correct sequence of darkroom processing of radiographs is ----
-----.
- Developing, fixing, washing and drying.
 - Developing, fixing, washing, drying and rinsing.
 - Developing, rinsing, fixing, washing and drying.
 - Washing, developing, rinsing, fixing and drying.
9. The water's view is most useful for the radiological examination of the -----.
- Median palatal raphae.
 - Mandibular molars.
 - Torus palatines.
 - Maxillary sinuses.
10. Common causes of fogged films are -----.
- Exposure to light.
 - Stray radiation.
 - Unsafe darkroom lights.
 - All of the above.

11. Increasing the KVp in an X ray machine produces -----.
- a. Radiations of longer wavelength.
 - b. Long-scale contrast in the radiograph.
 - c. X ray beams with lower penetrability.
 - d. Radiations of poorer quality.
12. Which of the following film speed classifications for intraoral films is the slowest -----.
- a. Speed B.
 - b. Speed C.
 - c. Speed D.
 - d. Speed Z.
13. Dental X ray films are various sizes of clear film bases that are coated with an emulsion of -----.
- a. Silver sulfite.
 - b. Silver bromide.
 - c. Arsenic chloride.
 - d. Selenium tungstate.
14. A common cause of a film showing partial image is -----.
- a. Finger between tube and film.
 - b. Cone-cut film.
 - c. Movement of the tube.
 - d. Poor quality of film.
15. The basic effect of X rays on living tissue is -----.
- a. Precipitation.
 - b. Flocculation.
 - c. Ionization.
 - d. Poisoning.

16. The primary objective of placing an aluminum filter in the primary X ray beam is to -----.
- Improve sharpness of the radiographic image.
 - Reduce radiation to the skin of the patient.
 - Allow the kilovoltage to be reduced.
 - Reduce the developing time of the film.
17. The primary function of the developer is to -----.
- Remove the unexposed silver salts.
 - Bring out the object's latent image.
 - Harden the emulsion.
 - Remove the metallic silver from the film.
18. The clear film base of an X ray film is made up of -----.
- Calcium sulphate.
 - Uranin.
 - Cellulose.
 - Cellulose acetate.
19. Which of the following substances is radiopaque -----.
- Glass.
 - Cotton.
 - Lead.
 - Plastic.
20. Filters are used in the X ray beam to -----.
- Reduce the diameter of the primary beam.
 - Avoid image distortion.
 - Decrease development time.
 - None of the above.
21. Following an exposure to radiation the residual biologic damage that remains have what type of effect -----.
- Direct.
 - Indirect.

- c- Cumulative.
- d- Tolerance.

22. Diameter of X ray beam must not exceed -----.
- a- 1.50 inches.
 - b- 2.50 inches.
 - c- 2.75 inches.
 - d- 1.75 inches.
23. Diaphragm which is used to limit the diameter of X ray beam is made up of -----.
- a- Aluminum.
 - b- Lead.
 - c- Carbon.
 - d- Silver.
24. The X ray beam is filtered to -----.
- a- Soften the beam.
 - b- Increase patient exposure.
 - c- Remove long wave photons.
 - d- Remove short wave photon.
25. Which of the following X ray films require lesser exposure time as compared to the others -----.
- a- B speed.
 - b- C speed.
 - c- D speed.
 - d- E speed.
26. Which of the following is preferred -----.
- a- Short cone (8 inches).
 - b- Long cone (16 inches).
 - c- All the above.
 - d- None of the above.

27. The distance between the source of X ray and the operator should be at least -----.
- a- 14 feet.
 - b- 12 feet.
 - c- 6 feet.
 - d- 3 feet.
28. Periapical radiograph is useful in diagnosing -----.
- a- Periapical infection.
 - b- Periapical bony lesion.
 - c- Impaction.
 - d- All of the above.
29. Paralleling radiographic technique does the following except -----.
- a- No special equipment such as long cone and film holder.
 - b- Reduce magnification.
 - c- No superimposition.
 - d- Reduce distortion.
30. In bisecting angle technique -----.
- a- The film is placed as close to tooth as possible.
 - b- The film is supported parallel to the axis of the tooth.
 - c- The patient should sit in upright position.
 - d- a , c are correct.
31. The vertical angulations (cone position) for upper incisors are -----.
- a- +ve 40 – 50.
 - b- -ve 40 – 50.
 - c- +ve 35 -40.
 - d- - ve 35 -40.

32. Elongation or shortening of the image on radiograph can be controlled by -----.
- a- Altering the vertical angulations.
 - b- Altering the horizontal angulations.
 - c- Altering the source film distance.
 - d- None of the above.
33. Bite-wing radiography is useful in diagnosing all the following except -----.
- a- Incipient inter proximal caries.
 - b- Periapical infection.
 - c- Overhanging restoration.
 - d- Inter proximal calculus deposit.
34. Best X ray view for TMJ is -----.
- a- Lateral skull.
 - b- Lateral oblique.
 - c- Trans pharyngeal.
 - d- Panoramic.
35. Which radiograph would give the best view of fracture of zygomatic arches -----.
- a- PNS view.
 - b- Submento vertex.
 - c- Lateral oblique mandible.
 - d- Transpharyngeal view.
36. The radiographic view taken with the patient chin placed on the cassette is -----.
- a- P-A view.
 - b- Towne's view.
 - c- Water's view.
 - d- Submentovertex view.

37. Maxillary sinus is best viewed on -----.
- a- P-A view.
 - b- Towne's view.
 - c- Water's view.
 - d- Submentovertex view.
38. Subcondylar fractures are best viewed on -----.
- a- P-A view.
 - b- Towne's view.
 - c- Water's view.
 - d- Submentovertex view.
39. Overexposure results in -----.
- a- Fogging.
 - b- Light film.
 - c- Dark film.
 - d- Less contrast.
40. Radiographic film may appear too light because of using -----
-----.
- a- A concentrated developer solution.
 - b- Overexposure film.
 - c- Depleted developer solution.
 - d- Incorrect safe light.
41. Yellowish brown discoloration in X ray is due to -----.
- a- Low temperature.
 - b- High temperature.
 - c- Insufficient washing.
 - d- Exposure to light.
42. Fogging in the radiograph is caused by -----.
- a- Increased humidity.
 - b- Improper safe lighting.
 - c- Overdevelopment.

d- All of the above.

43. Film speed or sensitivity is determined by -----.

- a- Size of silver halide crystals.
- b- Thickness of the emulsion.
- c- Presence of radiosensitive dyes.
- d- All of the above.

44. One of the following can differentiate soft tissues of different densities -----.

- a- CT scan.
- b- Panoramic radiography.
- c- Submentovertex view.
- d- None of the above.

45. Blurred imaging is due to -----.

- a- High temperature.
- b- Increasing KVP.
- c- Overexposure.
- d- Patient movement during exposure.