

1. Which is the most appropriate image to use when assessing third molars?

- a) Bitewing radiograph
- b) Long cone CT
- c) Long cone periapical radiograph
- d) Orthopantomogram (OPG)
- e) PA mandible

2. When an individual is exposed to radiation a certain amount of radiation is needed before clinical signs of damage to somatic cells appear. For these effects to occur a minimum radiation dose has to be exceeded and this is known as:

- a) Background radiation dose
- b) Threshold dose
- c) Equivalent dose
- d) Absorbed dose
- e) Effective

3. according to the recent radiation protection recommendations, The annual dose limit for non classified workers shouldn't exceed:

- a) 20 MSV (classified workers)
- b) 50 MSV
- c) 6 MSV
- d) 26 MSV

4. What is the level of evidence for expert opinion

- A)1
- B)2
- C)5
- D)4

5. Secondary research papers in which all the primary studies on a particular subject have been hunted out and critically appraised according to RCT criteria are called

- a) Randomised controlled trials
- b) Case control studies
- c) Systemic reviews and meta-analysis
- d) Cross sectional surveys
- e) Cohort studies

6. When should handpieces be placed and sealed in an autoclave pouch/bag?

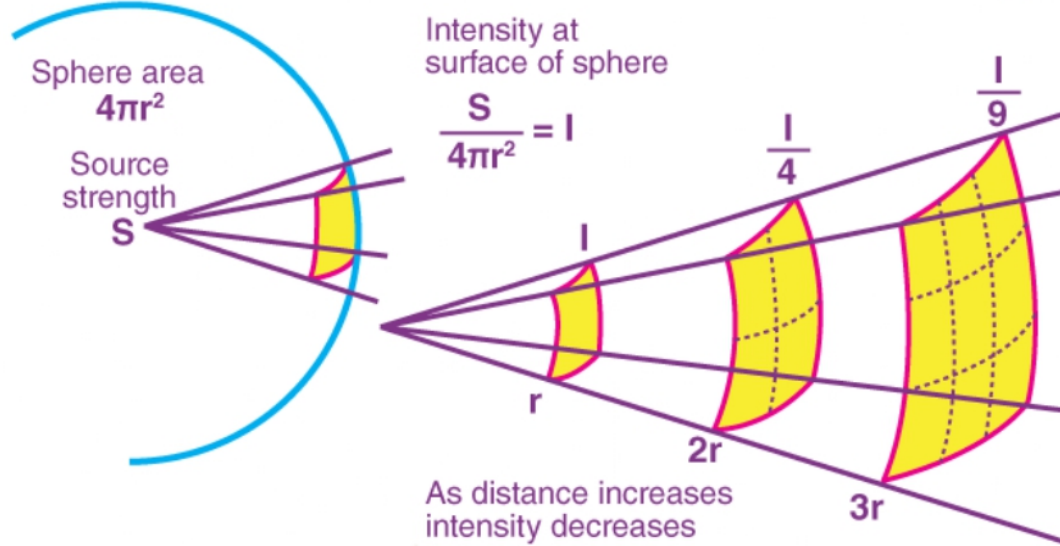
- a) Whenever they are autoclaved
- b) Never
- c) Once a day at the end of the session
- d) When autoclaved in a vacuum autoclave
- e) When autoclaved in a downward displacement type autoclave

7. X-ray films have an emulsion on one or both side of a support material. The emulsion contains particles of

- A. Silver nitrate crystal
- B. Metallic silver in gelatine
- C. Silver bromide in gelatine
- D. Silver nitrate in gelatine
- E. Potassium bromide in gelatine

8. The inverse Square Law is concerned with intensity of radiation using type D film of 200mm target to film distance, the exposure time was 0.25s. What would be the exposure for the same situation with 400mm target to film distance

- A. 0.5s
- B. 1.0s
- C. 2.0s
- D. 0.25s
- E. 0.125s



9. Exposure of the patient to ionising radiation when taking a radiograph is NOT REDUCED by

- A. The use of fast film
- B. The addition of filtration
- C. Collimation of the beam
- D. The use of an open and lead lined cone
- E. Decreasing the kilovoltage KvP

10. Randomised controlled trials enable us to establish cause and effect. The main reason for using this study design is to:

- A Ensure that making a Type II error is minimised.
- B Ensure that test and control groups are similar.
- C Ensure that test and control groups are of equal size.
- D Help recruitment of patients into the trial.
- E Provide sufficient power for the study.

11. A dental practitioner can be

- A-Radiology adviser+physicist+operator
- B-Supervisor + adviser+physicist
- C-practitioner+refer+operator

12. What is the least important factor to reduce radiation in dental radiographs?

- A-Speed of film
- B-Collimation
- C-Filtration
- D-Cone shape and length
- E-Use of lead apron

13. in a radiograph the roots of the upper teeth are too short because of inadequate horizontal angulation

- A-Too high vertical angulation
- B-Too small vertical angulation
- C-Parallel

14. Developer contaminated with other chemical and was not mixed properly. What is the effect on the X-ray film?

- A-Too dark film
- B-Light film
- C-Foggy

15. Dentists are encouraged to carry out a thorough soft tissue examination and be vigilant for any lesions that might possibly be malignant or have malignant potential. Currently it is not recommended that dentists use a mucosal staining method for screening the general population for oral cancer. What is the most likely reason for this advice?

- A-Unnecessary intervention where there is a false positive test result
- B-False reassurance where there is a false negative test result
- C-Low uptake of screening by those with low risk
- D-Low uptake of screening by those with high risk
- E-Negative result reinforcing existing bad habits

16. All the films which have been manually processed by an unsupervised new trainee dental nurse in your practice are extremely dark. Which of the following errors could lead to a dark film?

- A-Films have been left in the developer for too long a period of time
- B-Films have been in the fixer for too long a period of time
- C-The concentration of the developer is too dilute
- D-The concentration of the fixer is too dilute

17. Your colleague is having problems as every panoramic film that he produces shows extremely wide anterior teeth which are also blurred. The film also invariably has the images of the condyles cut off from the sides of the film. The most likely cause of this

- A-The patient is incorrectly positioned too far forward relative to the image layer
- B-The patient is incorrectly positioned with the chin too low
- C-The patient is incorrectly positioned too far back relative to the image layer
- D- The patient is in a slumped position in the machine
- E-The patients is incorrectly positioned with the head tilted in the machine

18. Proportion of the patients who test positive who have disease is?

- 1. Positive predictive value
- 2. Sensitivity
- 3. Specificity
- 4. Negative predictive value
- 5. Prevalence

19. A panoramic cassette was opened in the darkroom to remove and process the exposed film. On opening the cassette, a piece of paper was discovered on the surface of the intensifying screen. What kind of artefact would the presence of paper in the cassette most likely produce?

- A. A black artefact
- B. No artefact
- C. A white artifact
- D. Reticulation
- E. Dichroic fog

20. You are interested in finding out what the risk indicators are for a rare form of oral cancer and decide to undertake a study to examine this. What type of study would be the most appropriate for addressing this issue?

- A. Cohort
- B. Prevalence study
- C. Clinical trial
- D. Case-control study
- E. Case-series

21. 3 year-old child, baby teeth to be extracted. You want to check permanent germs. Which radiograph?

Panoramic,
periapical,
Bimolar,
occlusal
, lateral skull view

22. You used B-type sterilizer for your instrument with proper packing. How long can these instruments be stored?

- A. 4 months
- B. 8 months
- C. 12 months
- D. 15 months
- E. 24 months

23. You plan to do double blinded Randomised controlled trial. Once you have finished design the trial, what do you do next?

- A. Advertise in dental research journal for participants
- B. Allow patient to choose the treatment they wish to receive
- C. Ensure potential patient understand the method of treatment allocation
- D. Inform interested patient and get their consent
- E. Seek approval from appropriate research ethics committee

24. **How to reduce radiation exposure:**

- A) speed D film
- B) lead apron
- C) speed E film

25. **Maximum temperature for washing (decontamination) instruments: •**

- A) 60C •
- B) 95C •
- C) 45C •
- D) 30C

26. **A double blind RCT was carried out to study xxxx at University. In this case who is not informed of which group were given new drugs and which group is given placebo?**

- A) nurse only •
- B) dentist only
- C) participants and dentist •
- D) participants only

27. **According to the recent infection control recommendations, the partially charged local anesthetic cartridge should be disposed via:**

- a) Clinical wastes container
- b) Sharp hazardous wastes container
- c) Amalgam container
- d) Fixer container
- e) Non clinical waste

28. the least numbers of bacterial colonies in DUWLs

- a) less than 20
- b) less than 200
- c) less than 2000
- d) less than 20000
- e) less than 200000

29. Matrix band should be disposed in:

- a) Clinical waste
- b) Sharp waste
- c) Hazardous waste
- d) Trade waste
- e) Nonclinical waste

30. Which of the following fire extinguishers should be present in the dental clinic to control electrical fire:

- a) Carbon dioxide powder
- B) Wet chemical agents
- C) Dry powder
- D) Water supply
- E) Foam

31. Extracted teeth for educational purpose are stored in :

- a) Formalin
- b) Water
- c) Sodium hypochlorite 10% diluted
- d) Distilled water
- e) Glutaraldehyde

32. Extracted teeth with amalgam restoration for educational purpose are best stored in:

- a) Formalin
- b) Water
- c) Sodium hypochlorite 10% diluted
- d) Distilled water
- e) Glutaraldehyde

33. .autoclave checking?

- A)6 months
- B)8 months
- C.12 months
- D)18 months
- E)30 months

34. radiographic x ray equipment check should be done every?

- A)Annually
- B)3 year)
- C)5 YEARS

35. dental practices should audit their decontamination processes?

- A)6 months
- B)12 months

36. Autoclave temperatures (at what temperature the sterilization is achieved)

- 121 degrees centigrade for 15 minutes
- 121 degrees centigrade for 3 minutes
- 131 degrees centigrade for 15 minutes

37. Possible infection that would occur from needle stick injury in a person who is appropriately or properly immunized

- a-Hepatitis B
- b-Hepatitis C
- c-Hepatitis A
- d-HIV

38. Patient has painful symptoms at the time of eating and also has ear pain, what x-ray would you consider. (The option of occlusal x-rays was not given in the choices)

- OPG
- Oblique Lateral
- Lateral cephalograph Postero-anterior view

39. A child has grossly broken down upper and lower molars, carious tooth, which x-ray would you consider

- IOPA
- Bitewings_
- Vertical Bitewings
- DPT

40. Risk of cancer in dental Radiography periapical

- 1:20,000
- 1:200,000
- 1:2,000,000 in essential
- 1:20,000,000 in modern

41. Palatally impacted upper maxillary canines. How would you know? Whether they are impacted palatally or buccally and which of the following x-rays are best option

- A. Paralleling technique
- B. Bisecting technique Bitewings
- C. OPG
- D Taking two x-rays, with paralleling technique

42. Defective horizontal angulations while taking bitewings results in?

- Overlapping of contact points
- Dark radiograph
- Light radiograph

43. Best ways to reduce radiation for patient who is going to have IOPA X-rays

- Lead apron
- Parallel
- Rectangular collimation
- D-Film

44. Your employer in an attempt to update office sterilization procedures; what would you recommend as the BEST method to verify that sterilization has occurred**

- A. Use spore test daily
- B. Use indicator strips in each load and color change tape on each package
- C. Use indicator strips daily and spore test weekly
- D. Use color change tape daily and spore test monthly
- E. Use color change tape in each load and spore tests weekly

45. You wish to purchase a dental X ray machine and have the choice between 50kVp and 70kVp machines. With single change from 50kVp to 70kVp what would the approximate effects on exposure time

- A. No effect
- B. Half the time
- C. Double
- D. Quarter
- E. Triple the time

46. When no radiation shield is available, the operator should stand out of the primary x ray beam and a distance from the patient's head of at LEAST

- A. 0.5 metres
- B. 1 metre
- C. 1.5 metres
- D. 2 metres
- E. 3 metres

47. in an X ray; the mesio buccal root of upper first molars is elongated which is the result of

- A. Mesio angular horizontal
- B. Too big vertical angulation
- C. Too small vertical angulation
- D. High angulation

48. Incisive foramen when are superimposed over apex of root on radiograph may be mistaken to be

- A. Cyst
- B. Cementoma
- C. Odontoma

49. Rct in which patient are not aware of treatment given is considered to be :

- a) single blinded study
- b) double blinded study
- c) non randomized trials
- d) parallel study

50. GDP in Manchester randomly selected 5000 patients aged between 45 and 55 years old who are free from periodontitis he determines that 300 of them are smokers he follows all 5000 patients for 10 years by which 150 had developed periodontitis of the patients with periodontitis 60 had previously been identified as smokers and 90 as nonsmokers what type of study is this ,

- a) case series
- b) prevalence study
- c) clinical trial
- d) case control study
- e) cohort study

51. Evidence obtained from meta-analysis of RCT

- a) Ia
- b) IIa
- c) Ib
- d) III

52. Bitewing radiography is the main special test used to help in diagnosis of proximal caries which of the following is a reasonable summary of the diagnostic accuracy of bitewing radiography ?

- Moderate sensitivity and low specificity
- Moderate sensitivity and moderate specificity
- Moderate sensitivity and high specificity
- High sensitivity and moderate specificity
- High sensitivity and high specificity

53. you want to evaluate the effectiveness of using tetracycline as an adjunct to scaling and root planning for the treatment of chronic peritonitis what type of primary study design would be most appropriate for addressing this

Cohort study

Non-randomised controlled trial

Randomised controlled trial

Case-control study

Case-series

54. You arrive at a new practice and notice that almost every radiograph in the patient's notes has turned brown. Your nurse confirms that this is a widespread problem that no-one has ever remedied and she also remarks that the films tend to get browner with age. What corrective action will you take to remedy the problem?

- A. Develop the films for the correct period of time
- B. Heat the developer to a higher temperature
- C. Ensure films are fixed for the correct period of time
- D. Wash the films properly after fixing
- E. Change the solutions more regularly

55. What is the radiation exposure when taking an OPG

a 0.001mSv

B 0.01 mSv (range from 0.01 to 0.03 mSv)

c.0.01mSv

d. 1.0mSv

e. 10 mSv

56. what is the optimal shape for collimator

- a. square
- b. rectangular
- c. round
- d. hexagonal
- e. circular

57. what is the radiation dose in milli-Sieverts for a patient associated with having an OPG??

A. 0.034 (range from 0.01 to 0.03 mSv)

B 0.34

C 34

D 3.4

E 340

58. Which one of the following statements best describes statistical power?

- a) This is when a true null hypothesis gets rejected
- b) This is when a false null hypothesis gets accepted
- c) Refers to the probability that the observed statistical difference has occurred by chance
- d) It shows that there is no difference in outcome between two groups after an intervention in one of the groups
- e) The probability of correctly rejecting a false null hypothesis

59. Which one of the following is the guiding principle of utilitarianism?

- a) It regards duties and rules
- b) It regards doing the greatest good for the greatest number
- c) The cultivation of virtue within oneself
- d) All of the above
- e) None of the above

60. According to European commission for guidelines on radiation protection in dental radiology, lateral cephalometric radiograph is surely indicated in:

- A) class II/1
- B) class I
- C) class II/2
- D) orthognathic surgery

61. A student did a study and found that her data skewed. Which of the following data will be relevant/valuable in this scenario?

- a. Mean, median
- b. Median, upper and lower
- c. Median, IQR
- d. Mean and IQR

You have been approached by a pharmaceutical company to attend a focus group for a currently available analgesic that is potentially having its license extended into treating atypical facial pain. Which one of the following phase of clinical trial is this?

- a) Phase 0
- b) Phase I
- c) Phase II
- d) Phase III
- e) Phase IV

• Comment on this Question

The lifecycle of a drug starts long before it reaches the market and often development also continues after this time.

• Phase 0 – microdosing in human studies. Gives no information about final effective dose, but intended to expedite development by showing if the drug has desired in vivo behaviour before proceeding to more expensive phases of trials with larger numbers of participants.

- *Phase I – Pharmacokinetics and pharmacodynamic studies in healthy volunteers. Small number of participants (tens).*
- *Phase II – Aimed to demonstrate efficacy of new agent. Use real patients with the disease. Compared against existing drug in hundreds of participants*
- *Phase III – Double blinded and multi-centre trials conducted in thousands of participants. Demonstrates new drug is superior to current alternatives.*
- *Phase IV – Post marketing surveillance to identify interactions, or may be undertaken to extend into new patient group/extend existing patient*

Evidence-based practice is best defined as:

- a) A part of clinical governance that is research based and not relevant to daily clinical practice.
- b) Knowledge that has been passed down from one generation to the next and which has become the professional 'norm.'
- c) Strict guidelines that must be followed in order to avoid litigation.
- d) The judicious use of current best evidence when making decisions about the care of individual patients.**
- e) The random application of small-trial research in order to make the best decisions possible for a patient.

Secondary research papers in which all the primary studies on a particular subject have been hunted out and critically appraised according to rigorous criteria are called

- a) Randomised controlled trials
- b) Case control studies
- c) Systemic reviews and meta-analysis
- d) Cross sectional surveys
- e) Cohort studies

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You are interested in finding out what the risk indicators are for a rare form of oral cancer and decide to undertake a study to examine this. What type of study would be the most appropriate for addressing this issue?

- Cohort
- Prevalence study
- Clinical trial
- Case-control study

You want to evaluate the effectiveness of using tetracycline as an adjunct to scaling and root planing for the treatment of chronic periodontitis. What type of primary study design would be most appropriate for addressing this topic?

- Cohort study
- Non-randomised controlled trial
- Randomised controlled trial
- Case-control study
- E. Case-series

A GDP in Manchester randomly selects 5000 patients, aged between 45 and 55 years, who are free from periodontitis. He determines that 300 of them are smokers. He follows all 5000 patients for 10 years, by which time 150 had developed periodontitis. Of the patients with periodontitis, 60 had previously been identified as smokers and 90 as non-smokers. What type of study is this?

- Case-series
- Prevalence study
- Clinical trial
- Case-control study
- Cohort

Randomised controlled trials enable us to establish cause and effect. The main reason for using this study design is to:

- Ensure that making a Type II error is minimised.
- Ensure that test and control groups are similar.
- Ensure that test and control groups are of equal size.
- Help recruitment of patients into the trial.
- Provide sufficient power for the study

in dental epidemiology, indices are used to measure the oral health of a population. The DMF index is commonly used to measure the prevalence and severity of dental caries. What is the main limitation of this approach?

- **It does not allow statistical analysis.**
- It gives equal weight to decayed, missing and filled teeth.
- e. It is difficult to calibrate examiners.
- It is reversible.
- There is no gold standard

The study using data from entire population to compare between lung cancer deaths in relation to per capita cigarette consumption is:

Case report

Cohort study

Correlation studies

Cross-sectional studies

A random selection of 1200 adults agreed to participate in a study of the possible effects of drug X. They are followed prospectively for a period of five years to see if there is an association between the incidence of abdominal pain and the use of drug X. This type of study is a:

Case-control study.

Randomized controlled clinical trial.

Cross-sectional study.

Cohort study

A dental company has claimed that ozone is better than conventional methods for treating decay in peoples' mouths. Which of the following would provide the best evidence to support these claims?

Systematic review of Randomised Controlled Trials

Randomised controlled trial

Cohort study

Case/control study

When drug is evaluated for uselessness in controlled condition, it is termed as trial signifying?

Efficacy

Effectiveness

Efficiency

Effect modification

Accuracy

41- Examining a patient in dental office is equivalent to community dental health;

A. Analysis of data

B. Program planning

C. Program operation

D. Surveying

E. Evaluation

A resident area has milk bottle caries. You want to investigate their diet and oral hygiene? You call together some groups of representative to discuss. What study is this?

- a. Cohort
- b. Cross-sectional
- c. Incidence
- d. Prevalence
- e. Case control

.Occurrence of new cases of disease in a population over a specified period of time is the definition of:

- a. Incidence
- b. Prevalence

Pharmaceutical company is doing randomized control trail in two groups for drug. What would be the appropriate test to get lethal dose in both groups?

- 1. chi-square test
- 2. pair t-test
- 3. Unpaired t-test

Proportion of the patients who test positive who have disease is?

- 1. Positive predictive value
- 2. Sensitivity
- 3. Specificity
- 4. Negative predictive value

5. Prevalence

You plan to do double blinded Randomised controlled trial. Once you have finished design the trial, what do you do next?

- A. Advertise in dental research journal for participants
- B. Allow patient to choose the treatment they wish to receive
- C. Ensure potential patient understand the method of treatment allocation
- D. Inform interested patient and get their consent
- E. Seek approval from appropriate research ethics committee

A student did a study and found that her data skewed. Which of the following data will be relevant/valuable in this scenario?

- a. Mean, median
- b. Median, upper and lower
- c. Median, IQR
- d. Mean and IQR

A double blind randomized controlled clinical trial was carried out to study the intervention of xx in a University. In this study, who is not informed of which group of subjects were given the new intervention and which group of subjects were given placebo?

- a. Nurse only
- b. Participants only
- c. Participants and dentist
- d. Dentist only

A student is carrying out a study on the effective use of antibiotics. Which of the following do you would be relevant in this context?

- a. Guardianship of antibiotics
- b. Antibiotics resistance
- c. Prophylactic antibiotics

Evidence from expert committee reports or opinions and/or clinical experience of respected authorities .Level of Evidence is : ?

- A)level V
- B)level Ib
- C)level Ia

Evidence obtained from metaanalysis or randomized control trials , Level of Evidence is :

- A)IIb
- B)Ia
- C)Ib
- D)IV
- E)III

want to study using vicryl suture instead of silk suture for postoperative infection what study type?

- A)RCT
- B)cohort
- C)case control

87.You suspect your patient has ectopic maxillary canines and this is confirmed by an OPG radiograph. To localise the ectopic teeth using vertical parallax what would be the best additional radiographic view to take?

- a. A lateral cephalogram
- b. An upper anterior occlusal (upper standard occlusal)
- c. 2 peri-apicals per side
- e. An antero-posterior view of the maxilla

88. Which of the following answers is a feature of a image optimisation in dental radiology?

- a. Training of staff
- b. Regular checks and maintenance of X-Ray equipment
- c. Increased (>20cm) focus to skin distance (FSD)
- d. Reviews of films and processing protocols
- e. Thorough understanding of regulations governing radiology practice

89. The percentage of values lies between $\bar{X} \pm 2SD$ is

- A) 68.26%
- B) 95.45%
- C) 99.7%
- D) 65%
- E) 99%

90. A patient presents with a swelling over the anterior mandible/lower central incisors. Which one of the following methods of imaging would be your primary choice?

- A. Orthopantomogram (OPG)
- B. Posterior—-anterior (PA) mandible image
- C. Periapical radiograph of lower incisor's
- D. Computerized tomography (CT) scan of mandible
- E. Lower occlusal radiograph

91. Which soft tissue shadow from the list below cannot be visualised on an orthopantomogram

- A. Soft palate
- B. Nasolabial fold
- C. Nasal cartilage
- D. Nasal septum
- E. Ear lobes

92. You suspect a patient has a subarachnoid hemorrhage. You will make a diagnosis based on which of the following urgent tests?

- A. Magnetic resonance imaging (MRI)
- B. Clotting screen
- C. Computerized tomography (CT) scan
- D. Lumbar puncture
- E. ECG

93. What is the average value of cosmic background radiation per year in the UK?

- A. 320 Micro sv
- B. 550 Micro sv
- C. 2000 Micro sv
- D. 4000 Micro sv
- E. 10 Micro sv

94. What is the definition of scatter?

- A. change in direction of a photon with or without the loss of energy
Deposition of energy
- B. Increase in the wavelength of X-rays with modulation of field
- C. Reduction in the intensity of the main X-ray due to scatter and absorption
- D. Removal of an electron from a neutral atom

95. You have been asked to submit a review paper for publication by your consultant. In the process of editing you find major similarities to a published article that you have recently read, with some sentences reproduced word for word. You check the references and find that May do not includes the published article, despite of fact that the content is remarkably similar. You discuss this with your consultant and he dismisses your concerns and the similarity to the article that you have shown him. What is your best action?

- A. Assume that this is just a coincidence and submit the paper as it is without any modifications.
- B. Include the similar—sounding article in the references without telling your consultant, and then submit the paper.
- C. Remove the similar-sounding parts of the submission even though this will weaken the arguments that have been made.
- D. Reword the paper so that it is subtly different from the published article that you had read.
- E. Tell your consultant that the paper requires re-working and cannot be submitted as it stands

96. What is the estimated risk per million of developing fatal radiation induced cancer from an intra-oral

- A. 1 per million
- B. 1 per 10 million
- C. 1 per 20 million
- D. 1 per billion
- E. 1 per 10 billion

97. What does a black gas cylinder with a white valve contain?

- A. Air
- B. Oxygen
- C. Nitrogen
- D. Nitrous oxide
- E. Entonox

98. Which one of the following is not an indication for taking bitewing radiographs?

- A. Assessment of existing restorations
- B. Assessment of the periodontal status
- C. Detection of dental caries
- D. Monitoring and progression of dental caries
- E. Third molar assessment

99. Possible infection that would occur from needle stick injury in a person who is appropriately or properly immunized

- A-Hepatitis B
- B-Hepatitis C
- C-Hepatitis A
- D-HIV

100. best way for decontamination of endodontic instrument & denaturation of prions

- A. Incineration
- B. B autoclave
- C. N autoclave

101. You want to do a review on water fluoridation, which method will be the most appropriate??

- a) Cohort study
- b) randomized controlled study
- c) systemic reviews
- d) cross-sectional surveys

102. First line management to needle stick injury

- A-Wash the area under running water
- B-Scrub the area
- C-Refer to infectious disease specialist

103. A dental company has claimed that ozone is better than conventional methods for treating decay in peoples' mouths. Which of the following would provide the best evidence to support these claims?

- A-Systematic review of Randomised Controlled Trials
- B-Randomised controlled trial
- C-Cohort study
- D-Case/control study

104. The most important factor in the decontamination

- A use of electronic washer
- B use of class n autoclave
- C separated area of decontamination

105. Blood spillage should be treated as follow

- A sodium hypochlorite 10000 ppm for 10 min
- B sodium hypochlorite 5000 ppm for 10 min
- C alcohol and leave it for 5 min

106. Which of the following provides the most cost-effective means of minimising patient radiation dose in dental intra oral radiography?

- A-Constant potential ('DC) x-ray set
- B-Rectangular collimation
- C-Lead apron
- D-D speed film
- E-F speed film

107. Which of the following will increase sharpness:

- A. Larger focal spot
- B. Smaller focal spot
- C. Increase object-film distance
- D. Decrease patient-source distance

108. Lateral Cephalometric Radiograph :

- A. Immediately prior to orthognathic surgery
- B. Used in IOTN more than 2
- C. Detect unerupted upper incisor
- D. Routinely used in orthodontic treatment

109. Patient with history of trauma and fracture zygoma which x ray we will choose

- a) Occipito mental 0-30 degree
- b) Reverse town
- c) Anteroposterior view
- d) Occiptomental 45 degree

110. Practitioner role according to IRMER

- A. Referral
- B. Optimisation
- C. Maintains and supervision
- D. justification

111. Which metal is commonly used as the heat sink for the anode in simple X-ray machines?

- A. Copper
- B. Gold
- C. Iron Lead
- D. Tungsten

112. You identify a research paper that examines the effectiveness of a new drug (drug a) for prevention of migraines the study randomises 40 patients (20 to each group) drug a and the current standard . Following 8 weeks treatment the number of patients who have migraine in each group recorded . Four patients receiving drug a have migraine compared to six patients receiving standard protocol What do the results tell you about the risk of migraine in patients receiving drug a?

- A. The risk is 0.2
- B. The risk of migraine is greater for who receiving drug a
- C. The risk is is 0.3
- D. There is insufficient information to calculate the risk
- E. The risk is 4/40

113. A 13 year old girl presents with an unerupted permanent canine and a retained primary canine. You cannot palpate the unerupted canine in the buccal sulcus and you are uncertain as to whether it is displaced palatally or in the line of the arch. Which single radiographic view would be most helpful in locating the unerupted tooth?

- A. Bitewing
- B.DPT
- C.Lateral oblique
- D.Single perapical
- E.Upper anterior occlusal

114. A patient has immunity to hepatitis B. What is the serological marker that proves this?

- A. HBsAg (surface antigen)
- B. HBsAb (surface antibody)
- C. HBcAg (core antigen)
- D. HBcAb (core antibody)
- E. HBeAb (antibody to e antigen)

115. GDP in Manchester randomly selected 5000 patients aged between 45 and 55 years old who are free from periodontitis he determines that 300 of them are smokers he follows all 5000 patents for 10 years by which 150 had developed periodontitis of the patients with periodontitis 60 had previously been identified as smokers and 90 as nonsmokers what type of study is this ,

- a. case series
- b. prevalence study
- c. clinical trial
- d. case control study
- e. cohort study

116. Evidence obtained from expert opinion with no raised respected authorities :

- a. Ia
- b. IIa
- c. IV
- d. V

117.) Evidence obtained from meta-analysis of RCT

- a. Ia
- b. IIa
- c. Ib
- 18
- d. III

118. . female patient attended at your practice she is a heavy alcohol drinker

How many unites is the maximum level for females binge drinking

- a) 4
- b) 7
- c) 10
- d) 14

119. **secondary research papers in which all the primary studies on a particular subject have been hunted out and critically appraised according to rigorous criteria are called**

- a) Randomised controlled trials
- b) Case control studies
- c) Systemic reviews and meta-analysis
- d) Cross sectional surveys
- e) Cohort studies

120. **Bitewing radiography is the main special text used to help in diagnosis of proximal caries which of the following is a reasonable summary of the diagnostic accuracy of bitewing radiography ?**

- a) Moderate sensitivity and low specificity
- b) Moderate sensitivity and moderate specificity
- c) Moderate sensitivity and high specificity
- d) High sensitivity and moderate specificity
- e) High sensitivity and high specificity

Good luck