

46. You could use a large condenser and lateral condensation in which alloy?

- a. lathe cut
- b. admixed
- c. spherical
- d. high copper
- e. low copper

47. Which of the following can cause a deficient margin in the proximal of an amalgam restoration?

- a. tight matrix
- b. no contouring of the band
- c. large increment of amalgam
- d. no wedge used

48. Where is recurrent decay most seen in class II composite?

- a. facioproximal
- b. linguoproximal
- c. gingivoproximal
- d. occlusal

49. Cantilever bridges are not good in the long term BECAUSE periodontal forces are best along the long axes of teeth.

- a. statement is correct reason is not
- b. statement and reason are correct NOT related
- c. statement and reason are correct and related
- d. statement is wrong but reason is correct
- e. both are wrong

50. A patient has a high caries index short crowns and minimum horizontal overlap. What restoration will you place?

- a. $\frac{3}{4}$ crown
- b. jacket crown
- c. PFM
- d. resin bonded retainer

51. There is a small carious lesion in the superficial part of the fissure. How will you treat it?

- a. composite
- b. sealant

- c. enameloplasty
- d. amalgam

52. A class V for amalgam and composite are same EXCEPT?

- a. uniformly placed in dentin
- b. retention grooves placed
- c. sharp internal angles
- d. need for contouring

53. How do you diagnose class III caries?

- a. x-ray
- b. vitality test
- c. transillumination

54. If you are doing a class II prep and there is a a deep axial wall, where do you place the retention?

- a. on the buccal and lingual wall

55. The direction of mesial and distal walls of a Class V amalgam cavity preparation is determined by the

- a. necessity of retention
- b. size of carious lesion
- c. direction of the enamel rods
- d. gingivoaxial and occlusoaxial line angles

56. When pins are included in an amalgam cavity preparation, the strength of the amalgam is

- a. increased
- b. decreased
- c. unchanged

57. It has become necessary to remove a conservative DO inlay from maxillary second premolar. The method of choice is to

- a. break the cement bond with chisel and mallet
- b. use a threaded-type inlay remover to lift the inlay
- c. cut the inlay out completely with rotary instruments
- d. use a conventional crown and bridge remove4r to break the cement bond.
- e. Cut through the isthmus to remove the proximal and the occlusal in two pieces

58. When removing a rubber dam, the first step should be to
- remove the clamp
 - release the holder
 - apply a water-soluble lubricant
 - cut the interseptal rubber with scissors
 - massage the gingival tissues under the dam
59. Cavity varnish is indicated under amalgam restorations because cavity varnish
- prevents galvanic currents from reaching the pulp
 - improves the marginal seal of the restoration
 - completely seals the dentinal tubules
 - is an effective thermal insulator
 - All of the above
60. A patient has sensitivity in a mandibular premolar. A well-condensed Class V dental amalgam restoration was placed in the tooth five months previously, with no discomfort for the first four months. Since then, it has become painful. The problem probably relates to
- marginal leakage
 - toothbrush abrasion
 - a fractured restoration
 - irreversible pupal damage
61. The most common cause of fracture at the isthmus of class II dental amalgam restoration is
- delayed expansion
 - inadequate depth at the isthmus area
 - inadequate width at the isthmus area
 - moisture contamination of the amalgam during placement
62. The outline form of a cavity preparation is the
- shape or form of the preparation after carious dentin has been excavated
 - shape or form the preparation assumes after retention form has been completed
 - shape or form of the preparation on the surface of the tooth
 - first step to be accomplished in cavity preparation after carious dentin has been removed
 - next step to be accomplished in cavity preparation after resistance form has been established

63. The amount of force needed to compact direct filling gold properly is influenced most by the
- angle of compaction
 - surface area of the condenser
 - bulk of the surrounding tooth
 - temperature at which the gold is annealed
64. Which of the following is a reason for sealing caries into the cavity?
- to eliminate the need for eventual direct pulp capping
 - to produce an aseptic field when pulp exposure is inevitable
 - to allow the formation of secondary dentin before complete excavation
 - to produce a hard surface as a foundation for the subsequent restoration
65. Adaptation of a matrix band to the gingival aspect of a class II dental amalgam cavity preparation may be most difficult in which of the following preparations?
- A DO in a mandibular second molar
 - A DO in a mandibular second premolar
 - A DO in a maxillary first premolar
 - A MO in a maxillary first premolar
 - A MO in a maxillary second premolar
66. The external shape of an initial Class V carious lesion in enamel is related to the
- lines of Retzius
 - contour of the gingiva
 - number of enamel tufts
 - enamel lamella in the lesion
67. During preparation for a cast gold restoration, the tooth tissue that is weakened by the cavity preparation and subjected to damage by the forces of mastication must be
- reduced and covered by the cast restoration
 - strengthened by the use of cement or an amalgam core
 - protected by restoring to full coverage of the tooth
 - beveled, and the patient reminded not to exert undue forces on the tooth

68. Different microstructure has been described for gold foil, mat gold and granular or powdered gold. It has been demonstrated at the microscopic level that the
- void spaces remain in any compacted gold
 - gold foil is more porous than any other form of gold
 - crystalline golds can be packed densely more readily than gold foil
 - proper compaction can remove all voids from commercially available direct filling golds
69. Retention placed in a Class V cavity prepared for direct filling gold should be at
- occlusoaxial and gingivoaxial line angles
 - mesioaxial and distoaxial line angles
 - mesio gingival and disto gingival line angles
 - axial line angles circumferentially
 - none of the above
70. Within an hour after cementation of cast gold restoration on an unanesthetized tooth, the patient complains of a "shooting pain" every time the teeth come together. The most probable explanation is
- supraocclusion of the restoration
 - an allergic reaction to components of the gold alloy
 - improper removal of cement from the onlay margins
 - a galvanic current caused by the gold onlay occluding with a large amalgam restoration
 - none of the above
71. Marginal leakage related to temperature change occurs to the greatest extent with
- amalgam alloy
 - unfilled resin
 - composite resin
 - direct filling gold
72. Threaded pins used to retain amalgam should be placed
- parallel to each other only
 - parallel to each other and parallel to the long axis of the crown
 - so the edge of the pin channel is 0.02 mm. From the dentinoenamel junction.
 - At 25,00 rpm to ensure that the pin reaches the full depth of the channel

e. None of the above

73. The treatment of choice for hypersensitive erosion areas is to

- a. apply a sodium fluoride paste
- b. place a glass ionomer restoration
- c. burnish sodium metaphosphate into the dentin
- d. apply an 8% solution of stannous fluoride
- e. treat the surface with orthophosphoric acid and apply resin

74. Dental floss is applied to the distal bow of the clamp and allowed to extend from the mouth so that the

- a. dental floss may be used to stabilize the clamp if necessary
- b. clamp may be easily retrieved if it slips from the clamp forceps or the tooth
- c. clamp may be easily removed from the tooth upon completion of the procedure
- d. all of the above

75. The occlusal isthmus of an MO dental amalgam restoration is more resistant to fracture if the

- a. pulpal depth is 1mm
- b. occlusal dovetail is present
- c. axiopulpal line angle is rounded
- d. unsupported enamel at the gingivocavosurface margin is planed

76. Which of the following statements correctly describes the relationship between marginal leakage of an amalgam restoration and age of the restoration?

- a. marginal leakage increases as the restoration ages
- b. marginal leakage decreases as the restoration ages
- c. marginal leakage is severe throughout the life of the restoration
- d. marginal leakage does not exist throughout the life of the restoration

77. Which of the following is a fundamental guideline that governs the outline form of a class II cavity preparation?

- a. avoid angles in the proximal outline
- b. extend the gingival margin beneath the free margin of the gingival
- c. extend the margins until sound enamel is obtained within the cavity outline
- d. include pits and fissures in the occlusal surface if the patient is very susceptible to caries

78. When using the acid etch technique to restore a class IV fracture, exposed dentin should first be covered with
- cavity varnish
 - phosphoric acid
 - a calcium hydroxide liner
 - zinc oxide-eugenol cement
79. In preparing a cavity for restoration with composite resin combined with an acid etch technique, all enamel cavosurface angles should be
- well rounded
 - right angles
 - acute angles
 - obtuse angles
80. If the proximal box is too wide to allow facioaxial and linguoaxial grooves to oppose one another, which of the following should be done?
- cut grooves in the axial wall
 - cut retentive grooves deeper
 - use a pin or slots on the gingival floor
 - extend the preparation more on the occlusal surface
81. Threaded pins are used in large dental amalgam restorations to provide
- retention form
 - resistance form
 - occlusal stops for opposing teeth
 - much needed reinforcement of the amalgam
82. Direct pulp capping is indicated when there is
- a large exposure
 - pain response to cold
 - no hemorrhage from the exposure
 - an accidental mechanical exposure in clean, dry field
 - All of the above
83. The only area where cavosurface margins or wall junctions of an onlay cavity are never beveled or planed is where the
- pupal wall meets the axial wall
 - gingival bevel meets the proximal external planes

- c. external planes of the proximal portion join the bevel of the occlusal portion
 - d. none of the above
84. In diagnosing interproximal carious lesions (class II and class III) that cannot be explored directly, a good supplement to the radiograph is
- a. reviewing the patient's history of caries activity
 - b. examining the corresponding tooth in the occluding quadrant
 - c. examining for color changes or loss of translucency beneath marginal ridges
 - d. preparing the adjacent occlusal surface and examining the exposed proximal dentinoenamel junction
85. A patient returns to the dentist's office two days after placement of an MO inlay in a maxillary premolar. His complaint that the tooth is sensitive to chewing pressure indicates
- a. a leaky margin
 - b. lack of occlusion
 - c. a need for occlusal adjustment
 - d. a need to replacethe inlay with alloy filling
86. Using the pick-up and delivery technique, which digits of the assistant's hand from the "delivery" portion?
- a. all five fingers
 - b. the thumb and first two fingers
 - c. the thumb and middle two fingers
 - d. the thumb and last two fingers
87. A 16-year old patient has large, radiolucent carious lesion on the distal aspect of a first molar. Treatment of choice is to
- a. obtain occlusal access to the pulp chamber in anticipation of endodontic therapy
 - b. remove al carious material and cap the obvious pulp exposure
 - c. remove all carious material, place a sedative dressing and a plan for a pulpectomy at the next appointment
 - d. remove the superficial portion of the decayed tooth tissue and place an indirect pulp cap

88. Two weeks ago, well-finished onlays were seated on maxillary second premolar and first molar. The patient now has fractured lingual cusp on the first premolar of the same arch. Which of the following are possible causes?

- a. the onlays are in supraocclusion
- b. the onlays are in infraocclusion
- c. the onlays accentuated a previous non-working contact on the first premolar
- d. the patient recently bit into a hard object

- 1. (a) and (c) only
- 2. (a), (c) and (d)
- 3. (b), (c) and (d)
- 4. All of the above

89. A large carious lesion on the distal surface of maxillary central incisor involving the incisal angle is a

- a. Class I lesion
- b. Class II lesion
- c. Class III lesion
- d. pit and fissure lesion
- e. smooth surface lesion

- 1. (a) only
- 2. (b) or (e)
- 3. (c) or (e)
- 4. (d) only
- 5. (e) only

90. In preparing a tooth to receive an onlay, a gingival bevel is used to

- a. improve retention
- b. remove unsupported enamel
- c. place the preparation below the free gingiva
- d. compensate for casting inaccuracy

- 1. (a) and (b)
- 2. (a) and (c)
- 3. (a) and (d)
- 4. (b) and (d)
- 5. (c) and (d)

91. Objectives of electrosurgical procedures before making impressions for cast restorations include

- a. coagulation
- b. hemostasis
- c. access to cavosurface margins
- d. vertical reduction of the gingival crest
- e. reduction of the inner wall of the gingival sulcus

- 1. (a), (b), (c) and (e)
- 2. (a),(c), (d) and (e)
- 3. (b), (c), and (d)
- 4. (b), (d), and (e)
- 5. All of the above

92. Resistance to proximal displacement in the ideal class II restoration is provided by

- a. the adjacent tooth
- b. occlusal dovetail
- c. converging proximal walls
- d. retention grooves proximoaxial line angles

- 1. (a), (b) and (c)
- 2. (a), (b) and (d)
- 3. (a) and (c) only
- 4. (b) and (c) only
- 5. (b) and (d) only
- 6. (c) and (d)

93. The axial wall of large class V cavity prepared for direct filling gold in convex in a mesiodistal direction in order to

- a. conserve tooth tissue
- b. increase retention of the foil
- c. minimize pulpal irritation
- d. reduce the amount of gold foil needed to complete the restoration

- 1. (a) and (b) only
- 2. (a), (b) and (c)
- 3. (a) and (c) only
- 4. (b), (c) and (d)
- 5. (c) and (d) only
- 6. All of the above

94. Selection of appropriate bases and liners to restore the axial wall of a class II restoration is dependant upon the

- a. size of the tooth
- b. biologic effect required

- c. surface area to be restored
- d. thickness of remaining dentin
- e. thickness of the resulting restorative material

- 1. (a), (b) and (c)
- 2. (a), (d) and (e)
- 3. (b), (c) and (d)
- 4. (b), and (d) only
- 5. (c), (d) and (e)

95. The bur should be tilted lingually when preparing the occlusal aspect of a class II dental amalgam preparation on a mandibular first premolar in order to

- a. remove all carious tooth structure
- b. prevent encroachment on the facial pulp horn
- c. prevent encroachment on the lingual pulp horn
- d. maintain dentinal support of the lingual cusp

- 1. (a) and (b)
- 2. (a) and (c)
- 3. (b) and (d)
- 4. (c) and (d)
- 5. (d) only

96. When placing composite material in a class III preparation, the wooden wedge is placed in order to

- a. provide some separation
- b. stabilize the mylar strip
- c. avoid creation of excess gingival flash

- 1. (a) only
- 2. (a) and (b)
- 3. (a) and (c)
- 4. (b) only
- 5. All of the above

97. In developing cavosurface angles for all types of restorative materials normally used in posterior teeth, which of the following features are desirable?

- a. Margins of the restoration placed in areas more easily cleaned
- b. enamel rods supported by dentin
- c. bevels to facilitate proper finishing
- d. a definite cavosurface angle

1. (a), (b) and (c)
2. (a), (b) and (d)
3. (b) and (c) only
4. (b) and (d) only
5. (c) and (d)
6. All of the above

98. When making an acrylic resin temporary restoration for a large MOD onlay preparation, which of the following precautions should be taken?

- a. open margins should be avoided
- b. overextended resin should be removed
- c. polymerization should not go to completion in the mouth
- d. occlusal surfaces should remain in slight infraocclusion to minimize trauma to the tooth

1. (a), (b) and (c)
2. (a), (b) and (d)
3. (a), (c) and (d)
4. (b), (c) and (d)
5. All of the above

99. Forces for seating an inlay should be applied

- a. with a sharp blow delivered by a mallet
- b. with a sustained heavy force with an instrument
- c. with properly directed occluding forces of the patient
- d. after the initial set of the cement

1. (a) and (b)
2. (b) and (c)
3. (c) and (d)
4. All of the above

100. The specific purposes of acid etching enamel before insertion of a composite restoration or a sealant are provided

- a. a dry surface
- b. less surface area
- c. more surface area
- d. a clean surface
- e. a roughened surface

1. (a), (b), and (d)
2. (a), (c), and (d)

3. (a), (c), and (e)
4. (b), (d) and (e)
5. (b) and (e) only
6. (c) and (e) only

101. Before inserting amalgam into an MOD cavity preparation, a matrix is placed around the tooth. Which of the following procedures should be accomplished next?

- a. The band should be burnished into contact with Adjacent teeth
- b. the matrix retainer should be tightened as much as possible and reinforced facially and lingually with compound
- c. tapered wedges should be placed interproximally to obtain close adaption of the matrix at gingival margins
- d. tapered wedges should be placed carefully to hold the band in close adaption to the gingival margin without separating the teeth

1. (a), (b) and (c)
2. (a) and (c) only
3. (a), (c), and (d)
4. (a) and (d) only
5. (b) and (c) only

102. A deficient margin at a proximogingival cavosurface angle of a freshly packed class II amalgam restoration may have been caused by

- a. poor condensation of the amalgam
- b. neglecting to wedge the matrix band
- c. use of too large an initial increment of amalgam
- d. debris in the corner of the proximal box
- e. use of hand condensation rather than mechanical condensation

1. (a), (b) and (c)
2. (a), (b), (c) and (e)
3. (a), (c) and (e) only
4. (a), (c) and (d)
5. (b), (d) and (e)
6. All of the above

103. Research data indicate that pit and fissure sealants are retained best on which of the following teeth?

- a. primary maxillary molars
- b. primary mandibular molars

- c. maxillary premolars
- d. mandibular premolars
- e. permanent maxillary molars
- f. permanent mandibular molars

- 1. (a), (b), (e) and (f)
- 2. (a), (c), and (e)
- 3. (b), (d) and (f)
- 4. (c) and (f) only
- 5. (e) and (f) only

104. A dentist is preparing tooth #30 for an occlusal amalgam restoration. Once the ideal outline form and depth have been established, the dentist notes that caries remains on the facial, pulpal, and lingual walls of the preparation. The next step in treatment is to

- a. extend the outline form
- b. remove the caries with a spoon excavator
- c. remove the caries with a larger round bur

105. A dentist primarily splints adjacent abutment teeth in a fixed partial denture in order to

- a. improve the distribution of the occlusal load
- b. improve embrasure contours
- c. stabilize the abutment teeth
- d. improve mesiodistal spacing

106. A dentist inadvertently sealed a small carious lesion in the occlusal surface of maxillary first molar. This would most likely result in

- a. arrested caries
- b. extension of caries
- c. discoloration of the tooth
- d. increased microleakage

107. In constructing a fixed partial denture for a patient, the dentist will use a hygienic pontic. Which of the following will primarily determine the faciolingual dimension of the occlusal portion of this pontic?

- a. the length of the pontic
- b. the masticatory force of the patient
- c. the position of the opposing contact areas
- d. the width and crestal position of the edentulous ridge

108. Which of the following is the most effective way to reduce injury to the pulp during a restorative procedure?
- prepare dentin with slow-speed burs
 - use anesthetics without vasoconstrictions
 - minimize dehydration of the dentinal surface
 - keep the dentinal surface clean by frequent irrigation
109. What is the major difference between a class V cavity preparation for amalgam and one for composite resin by the acid-etch technique?
- depth
 - convenience form
 - position of retention points
 - angulation of the enamel cavosurface margins
110. After the dentist has completed an etching procedure on a class III composite preparation, the preparation becomes contaminated with saliva. In response, the dentist should do which of the following?
- Blow away the saliva with air, then proceed
 - Rinse away the saliva with water, dry the preparation, then proceed
 - Wipe away the saliva with a cotton pellet, rinse the preparation with water, dry it with air, then proceed
 - Rinse away the saliva with water, dry the preparation with air, then repeat the etching procedure
111. Which of the following is the most likely indication for splinting?
- primary occlusal trauma
 - mobility with patient discomfort
 - mobility with a decrease in tissue quality, secondary to hormonal imbalance
 - mobility related to a unilateral "skid" from centric relation to centric occlusion
112. How should the margins of a dental amalgam restoration be trimmed?
- By carving along the margins with a sharp instrument that rests on the tooth surface
 - by carving from the restoration to the tooth with a sharp instrument
 - by carving from the tooth to the restoration with a sharp instrument
 - by burnishing from the tooth to the restoration until the amalgam is trimmed to the margin

113. In preparing a class I cavity for dental amalgam, the dentist will diverge the mesial and distal walls toward the occlusal surface. This divergence serves to
- prevent undermining of the marginal ridges
 - provide convenience form
 - resist the forces of mastication
 - extend the preparation into areas more readily cleansed
114. In adapting a pontic to the residual ridge, the dentist must maintain a proper biologic and hygienic environment. Therefore, the pontic must NOT
- be convex mesiodistally
 - touch the residual ridge
 - be concave faciolingually
 - be concave in two directions
115. Which of the following conclusions would be correct if, after six weeks, a pulp-capped tooth were asymptomatic?
- pulp capping was a success
 - lack of adverse symptoms might be temporary
 - reparative dentin formation at the exposure site was complete
 - adjacent odontoblasts had proliferated to cover the site of exposure
116. The primary advantage of an external splint over an internal splint is
- increased rigidity
 - increased retention
 - increased durability
 - conservation of tooth structure
117. The cusps to be restored with dental amalgam should be reduced by
- 1 mm while forming flattened surface
 - 1 mm while following the original contour of the cusps
 - 2 mm while forming a flattened surface
 - 2 mm while following the original contour of the cusps
118. In class V amalgam preparation for an incipient lesion, the ideal internal form of the preparation has which of the following features?
- the axial wall is flat
 - the mesial and distal walls converge
 - the occlusal and gingival walls converge
 - the axial wall is uniformly deep into dentin

119. A patient presents with an amalgam restoration fractured at the isthmus six months after placement. The most likely cause is
- recurrent caries
 - inadequate depth of the preparation
 - excessive width of the preparation
 - premature occlusal contact
120. To remain stable, a rubber-dam clamp must contact the anchor tooth gingival to the height of contour. Which other criterion must the clamp satisfy?
- all four points must be sharp
 - all four points must contact the tooth
 - the bow must be directed to the distal side of the tooth
121. Each of the following is a reason for restoring an endodontically treated prosterior tooth with a dowel or post EXCEPT one. Which one is the EXCEPTION?
- to strengthen the root
 - to enhance retention of the core
 - to enhance the lateral force resistance
122. For most effective cutting and long usefulness of a tungsten carbide bur, it should be
- rotating slowly before contacting the tooth
 - rotating rapidly before contacting the tooth
 - placed in contact with the tooth before starting
123. Which of the following is the PRIMARY DETERMINANT of the outline form of a class V preparation?
- tooth anatomy
 - height of gingival crest
 - extension of the carious lesion
 - restorative material to be placed
124. A teen-aged patient presents with numerous proximal carious lesions that undermine the occlusal enamel. Which of the following is the treatment-of-choice?
- restore involved teeth with onlays to preserve

occlusion

- b. restore involved teeth as rapidly as possible using dental amalgam
- c. place the patient on a prevention regimen and delay treatment until the effectiveness of home care is evaluated

125. Why is a matrix for a class II dental amalgam restoration extended occlusally to the cavity preparation?

- a. it serves as a guide to determine the completed restoration
- b. it allows for overfilling the amalgam
- c. it prevents escape of the amalgam during condensation

126. A dentist anticipates the possibility of a pulpal exposure of a vital, asymptomatic tooth during a cavity preparation. In this situation, what should the dentist do with the carious material?

- a. remove the carious material laterally first and then remove completely from the deeper areas of the cavity
- b. remove the carious material completely and then treat the tooth endodontically
- c. leave the carious material in the deeper areas, base, and restore appropriately
- d. leave the carious material in the deeper areas, temporize appropriately, and observe on two weeks

127. The dentist bevels the gingival margins of a gold onlay preparation. This process serves each of the following EXCEPT one. Which one is the EXCEPTION?

- a. to remove loose enamel rods
- b. to facilitate finishing
- c. to minimize marginal opening
- d. to minimize the need for gingival extension

128. A fixed partial denture will be supported by both an osseointegrated implant and natural teeth. Which of the following is the MOST serious potential problem?

- a. the path of insertion will be difficult
- b. the implant has no hydroxylapatite coating
- c. esthetics will be difficult to reproduce
- d. the implant and natural teeth have different mobility

129. When seating a casting, the practitioner usually finds the initial interferences at(on) the

- a. margins
- b. axial walls
- c. proximal contacts

130. A conservative class II preparation for dental amalgam should have which of the following characteristics?

- a. independent retention and resistance form for both the proximal and occlusal portions
- b. proximal retention and resistance form that depends upon a well-defined occlusal dovetail
- c. as wide on the occlusal as one-third the intercuspal distance
- d. preparation depth twice the width of the isthmus

131. The axial walls in an MOD cavity prepared for a cast gold onlay should

- a. form acute angles with pupal wall
- b. form acute angles with the proximal walls
- c. diverge from the gingival walls to the pupal wall
- d. converge from the gingival walls to the pupal wall

132. Each of the following determines the outline form for class III composite restoration EXCEPT one. Which one is the EXCEPTION?

- a. convenience for access
- b. extension for prevention
- c. size, shape, and location of caries

133. Each of the following is a reason for beveling a preparation for restoration with composite resins EXCEPT one. Which one is this EXCEPTION?

- a. to expose more inorganic tooth structure
- b. to increase the surface area of enamel for etching
- c. to expose the ends rather than the sides of enamel rods
- d. to enhance the enamo-resin marginal seal

134. Which of the following describes osseointegrated implants?

- a. they have a direct structural and functional connection with bone only at the radiographic level of detection
- b. they are anchored directly to living bone as determined by radiographic and light microscopic analyses
- c. They form a junctional epithelium with the surrounding tissue
- d. They form pseudo-periodontal ligament

135. Two adjacent cavities involving proximal contact can be prepared and restored with composite resin at one appointment for each of the following reasons EXCEPT one. Which one is the EXCEPTION?
- a. restoration of contact is enhanced
 - b. access to adjacent cavities is simplified
 - c. color matching is easier
136. In radiographs, which of the following regions of the tooth crown is the MOST often mistaken for carious lesion?
- a. pulp horn
 - b. marginal ridge
 - c. cingulum
 - d. cemento-enamel junction
137. A 33-year old female patient states that her mandibular first molar has been hurting since the recent placement of an amalgam restoration. She describes the pain as mild-to-moderate, which is not spontaneous, but is provoked by cold, heat, and sweets. These symptoms most likely correspond with
- a. pulp necrosis
 - b. reversible pulpitis
 - c. internal resorption
 - d. irreversible pulpitis
138. Which of the following is most related to the initiation of caries in the elderly?
- a. erosion
 - b. attrition
 - c. gingival recession
 - d. a defective restoration
139. The distofacial periphery of the mandibular impression should receive special attention. Which of the following anatomical structures might cause soreness if the denture is overextended?
- a. Masseter
 - b. Buccinator
 - c. Pterygomandibular raphe
 - d. Internal pterygoid
 - e. Lateral tendon of the temporal

140. The dentist will use the acid-etch technique to make a minimal cavity preparation for composite resin. Each of the following is an advantage of this technique EXCEPT one. Which one is the EXCEPTION?
- a. It conserves tooth structure
 - b. It provides greater access for finishing procedures
 - c. It improves the esthetics of the restoration
141. An evaluation of which of the following represents the most important aspect in shade selection (for the restoration to match an existing dentition)?
- a. hue
 - b. value
 - c. chroma
 - d. size
 - e. shape
142. How do the surface characteristics of a restoration affect its perceived form?
- a. a surface smoother than normal will give the impression of a larger size.
 - b. increasing the value of the restoration makes the tooth appear smaller
 - c. horizontal highlights give an illusion of increased length
 - d. vertical highlights give an illusion of increased width
143. A patient presents with slight chipping of the enamel along the incisal edges of teeth #8 and #9. When choosing between restoring the incisal edges or reshaping by selective grinding, which of the following important factors should the dentist consider?
- a. location of proximal contacts
 - b. shape of incisal embrasures
 - c. amount of translucent enamel present
144. Fluoride therapy and occlusal sealants modify which of the following four factors the most?
- a. host
 - b. time
 - c. substrate
 - d. microflora

145. Which of the following is the OPTIMAL reduction for the lingual cusp on tooth #3 to receive an MODL onlay?
- a. 1.0 mm
 - b. 1.5 mm
 - c. 2.0 mm
 - d. 2.5 mm
146. Parallelism of abutment preparations is determined by the
- a. volume of chamfer
 - b. degree of convergence
 - c. angulation of finish lines
 - d. long axis of the preparations
 - e. long axis of the natural teeth
147. The dentist tried-in the metal framework for a porcelain fused-to-metal crown and the margins were closed. When the completed crown was returned from the lab, the margins are all open. The most likely reason for this is the
- a. die was overtrimmed
 - b. lab cut off the margins
 - c. casting distorted during the porcelain application
 - d. porcelain proximal contact areas are over-contoured
148. A patient's permanent tooth crown fractures, creating a small (1mm) pulp exposure for about 30 minutes. Which of the following pulp therapies is the most appropriate for this patient?
- a. pulpectomy and apexification, if necessary
 - b. direct pulp capping with calcium hydroxide
 - c. pulpotomy with formocresol
 - d. pulpotomy with calcium hydroxide
149. When a nonrigid connector is used in fixed partial denture, the path of insertion of the key into the keyway should be parallel to the paths of insertion of
- a. the carrying the keyway
 - b. the retainer not involved with the keyway
 - c. both retainers
150. The best measure of the potential clinical performance of a casting alloy is its

- a. castability
- b. burnishability
- c. ADA certification
- d. tarnish susceptibility
- e. mechanical properties

151. The amalgam preparation placed an aspirin directly in the mandibular facial sulcus.

Shortly afterward, a well-circumscribed white patch appeared on the mucosa.

Which of the following if the most likely diagnosis?

- a. Maxillary second premolar
- b. mandibular first premolar
- c. mandibular second premolar
- d. mandibular first premolar

152. An 82-year old woman presents with a large four-surface pin-retained amalgam restoration on tooth #3. The dentist notes minor recurrent caries along the faciocervical amalgam margin. Which of the following is the treatment-of-choice?

- a. replace the restoration
- b. repair the defect
- c. prepare the tooth for a crown
- d. observe at recall

153. The proximal portion of a class II cavity preparation in a primary molar extends rather deep gingivally. A satisfactory gingival seat may NOT be obtained because of the which of the following?

- a. the primary teeth have marked cervical constriction
- b. the proximal contact of primary molars is broad and flat
- c. the facial and lingual surfaces of primary molars converge occlusally
- d. the enamel rods in the gingival third of the primary first molars extend occlusally

154. The axial wall of an occlusolingual amalgam preparation on a maxillary molar should be in dentin and

- a. parallel to the dentinoenamel junction
- b. parallel to the axis of the tooth
- c. at an acute angle with the pulpal floor

155. When trying-in porcelain fused-to-metal crown, the dentist observes that the gingival-margin finish-line integrity is excellent, but that the occlusal

surface is 1 mm too high. Which of the following is the most probable cause?

- a. incorrectly related casts
- b. proximal contacts being too tight
- c. a distortion of the metal during firing
- d. an expansion of the porcelain during firing

156. In an ideal class V cavity preparation for amalgam in a mandibular premolar, retention form is gained

- a. into the mesial and distal walls
- b. in the mesial and occlusal line angles
- c. in the axio-occlusal and axiokingival line angles at the expense of the axial wall
- d. in the axio-occlusal and axiokingival line angles at the expense of the occlusal and gingival walls

157. A bevel CONTRAINDICATED on the cavosurface angles of a class I dental amalgam cavity preparation. Which of the following best explains why?

- a. this type of margin is prone to microleakage
- b. the cavosurface bevel makes bur finishing more difficult
- c. a thin flange of the amalgam restorative material might fracture
- d. as the tooth undergoes natural attrition, the amalgam margin can abrade

158. Which of the following instruments should be used to plane the facio-proximal cavosurface margin of a standard class II preparation on a mandibular molar?

- a. straight chisel
- b. binangle chisel
- c. enamel hatchet
- d. bibeveled hatchet

159. If an incipient carious lesion were inadvertently covered with sealant, the lesion would most likely

- a. progress at a slower rate
- b. progress at a more rapid rate
- c. not continue to progress

160. An endodontically-treated permanent mandibular first molar has incipient lesions on its mesial and distal surfaces. During previous treatment, a minimal amount of tooth structure was removed. The appropriate treatment for this tooth is a (an)

- a. MOD amalgam
- b. MOD cast gold inlay
- c. MOD cast gold onlay
- d. $\frac{3}{4}$ crown
- e. full crown

161. Splinting adjacent abutment teeth in a fixed partial denture is performed primarily to

- a. improve distribution of the occlusal load
- b. augment retention of the fixed partial denture
- c. improve embrasure contours, thus enhancing gingival health
- d. stabilize abutment teeth, thus preventing rotational movement or distal migration
- e. improve mesiodistal spacing of abutment teeth and pontics for optimum esthetics and function

162. In designing a retainer on a noncarious mandibular first premolar abutment with a short clinical crown, which of the following restorations is most appropriate?

- a. an inlay
- b. a full crown
- c. an MOD onlay
- d. a reverse $\frac{3}{4}$ crown

163. A crown casting with a chamfer margin fits the die. In the mouth, the casting is open approximately 0.3 mm. A satisfactory fit and accurate physiologic contour of the gingival area of the crown can best be achieved by

- a. hand burnishing
- b. mechanical burnishing
- c. using finishing burs and points to remove the enamel margins on the tooth
- d. making a new impression and remaking the crown
- e. relieving the inside of the occlusal surface of the casting to allow for further seating

164. Arrange the following steps for clinical trial insertion and adjustment of a fixed partial denture

- a. check margins
- b. check centric contacts
- c. adjust functional contacts
- d. adjust proximal contacts and pontic tips

1. a, b, d, c
2. a, d, b, c
3. b, a, c, d
4. d, a, b, c

165. Which of the following are important considerations when preparing a removable partial denture abutment to receive a crown?

- a. path of draw
- b. location of rests
- c. orientation of guiding planes
- d. placement of the dental porcelain metal finish lines

1. (a), (b), and (c)
2. (a), (b), and (d)
3. (a), (c), and (d)
4. (b) and (c) only
5. All of the above

166. For a provisional restoration to protect adequately the gingiva, it is essential that external and marginal surfaces be well polished. The temporary cement must also be removed from the gingival crevice.

- a. both statements are TRUE
- b. both statements are FALSE
- c. the first statement is TRUE, the second is FALSE
- d. the first statement is FALSE, the second is TRUE

167. The most desirable finished surface for a composite resin can be provided by

- a. white stones
- b. hand instruments
- c. aluminum oxide disks
- d. carbide finishing burs
- e. diamond finishing burs

168. In class III composite preparation, retention points should be placed

- a. in the axial wall
- b. entirely in dentin
- c. at the dentinoenamel junction
- d. at the expense of facial lingual walls, but not the axial wall

169. Whenever possible, a syringe should be used for placing composite resin because

- a. the need for etching procedures is eliminated
- b. the need for applying enamel bonding agent is eliminated
- c. the possibility of trapping air in a restoration is minimized
- d. a syringe allows for less amount of composite material to be mixed

170. Restoration of a cusp using dental amalgam requires that

- a. all the enamel be removed from the cusp to provide bulk of amalgam
- b. only the enamel be removed to conserve tooth structure
- c. at least 2 mm. Of the cusp be removed to provide retention form
- d. at least 2 mm. Of the cusp be removed to provide resistance form
- e. a reverse bevel be provided on the cusp to provide retention form

171. The most important consideration for pulp protection in restorative techniques is

- a. an adequate protective base
- b. complete removal of caries
- c. thickness of the remaining dentin
- d. proper sealing of the remaining dentin

172. Which of the following is most likely to cause damage to the gingival papilla?

- a. punching holes that are too small in the rubber dam
- b. punching holes that are too far apart in the rubber dam
- c. punching holes that are too close together in the rubber dam
- d. failure to lubricate the rubber dam before placement

173. For an onlay preparation, which of the following is the most effective means for verifying adequate occlusal clearance?

- a. wax bite chew-in
- b. proper depth cuts
- c. visual inspection
- d. articulating paper

174. When two teeth have class III lesions adjacent to each other, the operator should prepare the

- a. smaller lesion first and fill the smaller one first
- b. larger lesion first and fill the larger one first
- c. smaller lesion first and fill the larger one first
- d. larger lesion first and fill the smaller one first

175. Which of the following procedures is recommended when deep caries has been excavated and the cavity is close to the pulp?

- a. place a zinc phosphate cement base followed by the restoration
- b. coat the entire area with cavity varnish, place a liner of calcium hydroxide followed by a zinc phosphate cement base
- c. place a liner of calcium hydroxide, coat the entire area with cavity varnish followed by a zinc phosphate cement base
- d. place a liner of calcium hydroxide, coat the entire area with cavity varnish followed by a liner of calcium hydroxide and a zinc phosphate cement base
- e. coat the deep excavation with prednisolone, coat the entire area with cavity varnish followed by a liner of calcium hydroxide and a zinc phosphate cement base

176. One month after polishing a class V amalgam on a mandibular right first molar, the gingival tissue was receded apically from the gingival margin of the restoration. The dentist should suspect

- a. periodontitis
- b. marginal gingivitis
- c. allergic response between tissue and metal
- d. irreversible tissue change related to finishing

177. The position of mesial and distal cavity margins in Ferrier Class V direct filling gold restoration should be

- a. in an easily cleansable area
- b. perpendicular to the gingival margin
- c. parallel to the long axis of the tooth
- d. just past the extent of the carious lesion
- e. at the respective line angles of the tooth

178. When preparing a pin hole for a pin retained amalgam restoration, the spiral drill tip enters a vital pulp chamber. The next step is to

- a. temporize the tooth
- b. perform endodontic therapy
- c. apply calcium hydroxide in the pin channel and proceed

- d. coat the tip of the pin with calcium hydroxide, insert the pin just up to the pulp and then place the restoration

179. Proper retention form in Class V cavity prepared for direct filling gold is dependent upon

- a. the relationship of mesial and distal walls
- b. acute mesioaxial and distoaxial line angles
- c. the angulation of gingivoaxial and occlusoaxial line angles
- d. an acute gingivoaxial angle together with an obtuse angle formed between axial and occlusal walls

180. The only area where cavosurface margins or wall junctions of an onlay cavity are never beveled or planed is where the

- a. pulpal wall meets the axial wall
- b. gingival wall meets the proximal external planes
- c. external planes of the proximal portion join the occlusal of the preparation
- d. none of the above

181. Which of the following factors contribute the greatest amount of retention to the onlay restoration?

- a. near parallel axial walls
- b. flat pulpal and gingival walls
- c. cusp reduction and contrabevels
- d. proximal cavosurface margin bevels

182. An MO amalgam restoration is more resistant to fracture if

- a. an occlusal dovetail is present
- b. the axiopulpal line angle is beveled or rounded
- c. pins are placed in the dentin of the cavity preparation
- d. the unsupported enamel at the gingivocavosurface margin is planed

183. The outline form of a cavity preparation is the

- a. shape or form of the preparation after carious dentin has been excavated
- b. shape or form the preparation assumes after retention form has been completed
- c. shape or form of the preparation on the surface of the tooth
- d. first step to be accomplished in cavity preparation after carious dentin has been removed

e. next step to be accomplished in cavity preparation after resistance form has been established

184. It is preferable to prepare narrow cavities rather than wide cavities in order to

- a. reduce operating time
- b. conserve tooth strength
- c. avoid undermining the enamel
- d. avoid overheating the pulpal tissues

185. The gingival cavosurface margin of a class II inlay in a patient with gingival recession should ideally terminate

- a. at the cervical line
- b. under the free gingival margin
- c. at the crest of the gingival papilla
- d. gingival to the contact area and gingival to the lesion

186. Most detrimental to the strength of a posterior tooth in a cavity preparation is an increase in

- a. axial depth
- b. pulpal depth
- c. gingival depth
- d. faciolingual width
- e. mesiodistal dimension of the cavity

187. Preparations of class I cavities for the reception of amalgam, direct filling gold and gold inlay have in common

- a. undercutting mesial and distal walls
- b. divergence of mesial and distal walls occlusally
- c. divergence of facial and lingual walls occlusally
- d. converge of facial and lingual walls occlusally

188. A patient returns to the office one week after a tooth was restored and complains of an intermittent, vague pain in the same quadrant. The thermal reaction test produces a quick, sharp pain that passes away immediately. The electric pulp test produces more response than normal. The condition described probably is

- a. acute pulpitis
- b. acute periodontitis
- c. cervical hypersensitivity
- d. hyperemia of the pulp

189. Local anesthetics aid in reducing flow of saliva during operative procedures by

- a. blocking cholinergic nerve endings
- b. blocking innervation to major salivary glands
- c. blocking efferent parasympathetic nerve pathways
- d. reducing sensitivity and anxiety during tooth preparation

190. Which of the following hand instruments is the most applicable for placing the retention grooves in the distal box of class II amalgam preparation on a mandibular left second premolar?

- a. 10-17-14
- b. 15-8-8
- c. 15-8-14
- d. 13-80-8-14
- e. 13-95-8-14

191. The bevel on the cavosurface angle of an onlay preparation permits closer adaptation of the gold margin structure because the

- a. thin of gold can be drawn over pronounced margin deficiencies to eliminate the defect
- b. wax pattern can be more accurately carved to the margins of the preparation
- c. wax margins are less likely to distort when the pattern is invested
- d. thinner margin of the gold overlying the bevel is more adaptable

192. In radiographs of an incipient carious lesion limited to the enamel on proximal surfaces of a posterior tooth, the lesion appears

- a. as a radiopaque area
- b. as a triangle with the apex at the tooth surface
- c. larger in the radiograph than actually exists clinically
- d. all of the above
- e. none of the above

193. Within an hour after cementation of a cast gold onlay on an unanesthetized tooth, the patient complains of a "shooting pain" every time the teeth come together. The most probable explanation is

- a. supraocclusion of the restoration
- b. excess acid in the cement mix
- c. retained cement in the gingival sulcus

- d. a galvanic current caused by the gold onlay occluding with a large amalgam restoration
194. Use of a gold casting instead of dental amalgam should be considered in the restoration of an MOD carious lesion on a maxillary second molar when
- a. greater sealing of the cavity is desired
 - b. the preparation is wider than a third of the intercuspal distance
 - c. esthetics is the primary concern of the patient
 - d. all of the above
195. In differentiating predisposing and including factors in the genesis of pulpal pain, an example of an inducing factor is
- a. caries
 - b. trauma
 - c. a thermal change
 - d. a defective restoration
 - e. any of the above
196. The first step in fitting a gold inlay casting in the mouth is to
- a. seat the casting
 - b. adapt accessible margins
 - c. adjust the occlusion
 - d. adjust the proximal contact areas
197. Clinically, a maxillary left first molar shows an extensive proximal carious lesion. Hot beverages trigger a sharp, momentary pain in the carious molar. Which of the following conditions can be eliminated as a cause of the patient's complaint?
- a. acute pulpitis
 - b. exposed sensitive dentin
 - c. acute maxillary sinusitis
 - d. partial necrosis of the pulp tissue without periapical involvement
198. A deficient margin at a proximogingival cavosurface angle of a freshly condensed class II amalgam restoration may have been caused by
- a. poor condensation of the amalgam
 - b. neglecting to wedge the matrix band
 - c. use of too large an initial increment of amalgam
 - d. debris in the corner of the proximal box
 - e. use of hand condensation rather than mechanical condensation

1. a, b, and c only
2. a, b, c, and e
3. a, c, and d
4. a, c, and e only
5. b, d, and e

199. Proper proximal contour is given to an amalgam restoration placed in a class II cavity preparation by

- a. carving restoration
- b. the matrix retainer
- c. adapting a contoured matrix
- d. restorative material
- e. overfilling the cavity preparation with the restorative material

1. a, and b
2. a, and c
3. b, and c
4. b, and d
5. c, and d
6. c, and e
7. all of the above

200. Beveling the enamel margin of a composite resin preparation is accomplished in order

- a. improve esthetics
- b. improve wettability of the surface during bonding
- c. smooth the enamel and cavosurface margins
- d. expose the ends of the enamel rods for acids attack

1. a, and b
2. a, and c
3. a, and d
4. b, and c
5. b, and d
6. c, and d

201. The bur should be tilted lingually when preparing the occlusal aspect of a class II preparation on a mandibular first premolar in order to

- a. remove unsupported enamel
- b. prevent encroachment on the facial pulp horn
- c. prevent encroachment on the lingual pulp horn
- d. maintain dentinal support of the lingual cusp

1. a, and b
2. a, and c
3. b, and d
4. c, and d
5. d only

202. Threaded pins used in a dental amalgam restoration should be placed

- a. at the dentinoenamel junction
- b. approximately 1 mm. In depth at a position axial to the
- c. approximately 2 mm. In depth at a position axial to the dentinoenamel junction
- d. parallel to the external surface between the pulp and the tooth surface
- e. occlusal to the bifurcation to avoid entering the pulp

1. a, b, and e
2. a, c, and d
3. a, c, and e
4. b, and d
5. c, and d only

203. Inclusion of pins in an amalgam restoration results in an increase in

- a. retention
- b. reinforcement
- c. tensile strength
- d. compressive strength

1. a only
2. a, and b
3. a, c, and d
4. a, and d only
5. b only
6. all of the above

204. Resistance to proximal displacement in the ideal class II restoration is provided by

- a. the adjacent tooth
- b. occlusal dovetail
- c. converging proximal walls
- d. retention grooves in proximoaxial line angles

1. a, b, and c
2. a, b, and d
3. a and c only

4. b, and c only
5. b and d only
6. c and d

205. When preparing an MO cavity for an inlay on maxillary first molar, the oblique ridge should be crossed when

- a. the ridge has defective fissure
- b. it is undermined by the carious lesion
- c. there is incipient caries in the distal pit
- d. extension into distal pit is necessary for retention of the mesial restoration

1. a, b, and c
2. a, b, and d
3. a, c, and d
4. b, c, and d
5. all of the above

206. When sealants are placed and maintained over pits or fissures, the effect on progression of carious lesions is

- a. increased development of new lesions
- b. decreased development of new lesions
- c. no effect on development of new lesions
- d. progression of pre-existing lesions
- e. decreased progression of pre-existing lesions
- f. no effect on pre-existing lesions

1. a and d
2. a and e
3. a and f
4. b and d
5. b and e
6. b and f
7. c and d
8. c and f

207. The application of rubber dam for a class V facial preparation to include a #212 clamp on a mandibular second premolar requires the hole for the second premolar punched

- a. larger than usual
- b. smaller than usual
- c. slightly to the lingual of the holes in the arch
- d. slightly to the facial of the other holes in the arch

1. a only
2. a nad c
3. a and d
4. b and c
5. b and d
6. c only

208. Which of the following faults in class II restorations may be predisposing factors to periodontal disease?

- a. gingival overhang
- b. weak proximal contact
- c. broad contact faciolingually
- d. contact in the gingival third
- e. improperly shaped occlusal embrasure

1. a, b, c and d
2. a, b, c and e
3. a, c and e only
4. b, d and e
5. all of the above

209. The periapical film is the film of choice in evaluating

- a. root surfaces
- b. occlusal caries
- c. proximal caries
- d. supporting bone
- e. the periodontal ligament space

1. a, b and e
2. a, c and d
3. a, d and e
4. b, d and e
5. all of the above

210. The marginal ridges of posterior teeth are frequently involved in cast restorations. It is usually necessary that the restored marginal ridges be

- a. in contact with opposing fossae
- b. out of contact with opposing teeth
- c. in contact with the cusps of opposing teeth
- d. in contact with the marginal ridges of opposing teeth
- e. rounded to help form the occlusal embrasures

1. a and c

2. a and e
3. b and e
4. c and d
5. c and e
6. d and e

211. The jaws of a rubber dam retainer should NOT extend beyond the line angles of the anchor tooth in order to prevent

- a. possible breakage of the retainer
- b. impingement on the interdental papilla
- c. possible interference with placement of a wedge

1. a only
2. a and b
3. a and c
4. b only
5. b and c
6. c only

212. Good oral hygiene and fluoridation will least protect which of the following?

- a. groove defects
- b. inaccessible areas
- c. facial smooth surfaces
- d. proximal smooth surfaces

213. When preparing a tooth for an MOD onlay, occlusal reduction is influenced is influenced by all of the following EXCEPT

- a. ideal location of subsequent centric contacts
- b. amount of clearance existing before reduction
- c. thickness of enamel present on the occlusal surface
- d. minimal thickness needed to satisfy physical requirements of the restorative material

214. A patient with a high caries index, short clinical crowns and minimal horizontal overlap requires restoration of a broken-down maxillary central incisor. The restoration of choice is a

- a. pin ledge
- b. metal-ceramic crown
- c. partial veneer crown
- d. porcelain jacket crown

215. The incisal guidance, which is generally agreed to be the anterior path traveled by the mandible during functional movements, is a path that

- a. should never be altered during restorative procedures if a normal occlusion is to be maintained
- b. is influenced by the contacting surfaces of mandibular and maxillary anterior teeth
- c. cannot be influenced by the anatomic relationship of the occluding surfaces of posterior teeth during mastication

216. Prolonged sensitivity to heat, cold and pressure after cementation of a crown or a fixed partial denture is usually related to

- a. occlusal trauma
- b. improper cementation
- c. impingement on the marginal gingival
- d. failure to desensitize abutment teeth

217. Retention and resistance forms in full coverage preparations on short molars can be enhanced by

- a. using a zinc phosphate cement
- b. placing several vertical grooves
- c. using a full shoulder finish line
- d. minimizing the depth of occlusal carving

218. Which of the following are important when evaluating abutments for fixed prostheses?

- a. crown-root ratio
- b. root configuration
- c. periodontal surface area

- 1. a and b
- 2. a and c
- 3. b and c
- 4. all of the above

219. A thin application of cavity varnish over the cut surface of a prepared tooth just before cementation of a crown or a fixed partial denture with zinc phosphate cement will function to

- a. increase the possibility of leakage of the restoration

- b. facilitate seating of the restoration
- c. insulate the tooth against thermal stimuli following insertion
- d. reduce the possibility of irritation of the pulp due to the acidity of the cementing agent

- 1. a and b
- 2. b and c
- 3. c only
- 4. c only
- 5. d only

220. A pontic becomes enveloped with inflamed gingival tissue several weeks after cementation of a fixed partial denture. Bleeding occurs while brushing. This condition could be caused by

- a. inadequate oral hygiene
- b. insufficient gingival embrasures
- c. tissue displacement by the pontic
- d. lack of sufficient contact with the ridge
- e. mechanical irritation caused by not removing excess cement

- 1. a, b, c and e
- 2. a, b, d and e
- 3. b, c and d
- 4. c, d and e
- 5. all of the above

221. Which of the following considerations are important in coping framework design?

- a. retainers should be no less than 0.3 mm. in thickness
- b. porcelain should be supported by metal
- c. all surfaces should be smooth, well rounded and convex to prevent porcelain shrinkage

- 1. a and b
- 2. a and c
- 3. b and c
- 4. all of the above

222. Usually, the mucosal-contacting surface of a maxillary pontic should be

- a. convex faciolingually
- b. concave mesiodistally

- c. saddle-shaped
- d. concave faciolingually
- e. convex mesiodistally

- 1. a only
- 2. a and b
- 3. b and c
- 4. d and e

223. In order to maintain the health of the tissue beneath a pontic, it is desirable to

- a. scrape the ridge area on the cast and use gold for the ridge contact
- b. scrape the ridge area on the cast and use porcelain for the ridge contact
- c. have passive contact with the ridge tissue with no blanching apparent when the restoration is placed in the mouth
- d. have slight blanching of the ridge tissue when the restoration is placed in the mouth
- e. have minimal tissue coverage

- 1. a and d
- 2. a and e
- 3. b and c
- 4. b and d
- 5. c and e
- 6. d and e

224. Diagnostic casts are used to help determine the

- a. teeth that should be extracted
- b. teeth that require restorations
- c. areas that require osseous and soft tissue surgery

- 1. a and b
- 2. a and c
- 3. b and c
- 4. c only
- 5. all of the above

225. All of the following are purposes of diagnostic casts EXCEPT to serve as

- a. a final survey and design
- b. an analysis of existing occlusion
- c. a medicolegal reference after completion of treatment

- d. a guide for construction of final impression trays
- e. N/A available

Materials

1. Color is a.
 - a. light reflected from the object
 - b. pigment

2. If you are wearing protective glasses, to what wave length is the eye protected?
 - a. 400 nanometers

3. Where is the gold directed on an MO onlay sprue?
 - a. faces pulpal axial line angle
 - b. occlusal floor
 - c. pulpal floor
 - d. gingival floor

4. What is the minimum thickness of porcelain to prevent fracture of the porcelain?
 - a. 2mm
 - b. 3mm
 - c. 4mm
 - d. 6mm

5. What is the impression material with the best dimensional stability 24 after taking the impression?
 - a. polyvinyl siloxane
 - b. reversible colloid
 - c. irreversible colloid

6. Bonding on a tooth does all the following except
 - a. intra oral surgical approach
 - b. extra oral surgical approach
 - c. antibiotics

7. Immediately after cementing a full cast gold crown, the patient complains of a shooting every time the opposing teeth touch because of

- a. galvanic current
- b. microleakage
- c. hyper-occlusion of the crown
- d. excess acid in cement

8. When placing a ceramic veneer you are required to

- a. etch the fitting surface of the veneer
- b. resin cement on veneer
- c. a and b

9. When having difficulty matching the colors of adjacent teeth for a bridge, select a shade that is

- a. lower color saturation and less gray
- b. higher color saturation and less gray
- c. higher color saturation and more gray
- d. lower color saturation and more gray

10. The most likely cause of porcelain fracturing on a bridge constructed from teeth #6 through 11 is

- a. bending of metal
- b. inter arch distance as a result of soldering
- c. soldering in sections
- d. incorporating a premolar tooth

11. Formula given for a cutting instrument. One of the numbers asked If three numbers are given First number = width of blade = primary cutting edge is given in tenth of a mm Second number = blade length in mm Third number = blade angle relative to long axis If four numbers are given

First number = width of blade

Second number = blade length in mm

Third = blade length in mm

Fourth = blade angle relative to long axis

12. What is the composition of a composite?

Matrix = BisGMA Filler particles = quartz and silicate

Coupling agent = silane

13. All the following are advantages of hybrid light cured ionomers EXCEPT

- a. bond strength
- b. esthetics
- c. wear resistance
- d. coefficient of expansion

14. For adequate curing of composite what wave length do you need

- a. 275-375
- b. 400-475
- c. 500-600
- d. 600-700

15. What is the composition of a composite?

Matrix=BisGMA filler particles=quartz and silicate.
Coupling agent = silane

16. What is the cement of choice for composite inlays?

- a. zinc phosphate
- b. resin cements
- c. polycarboxylate

17. When do you clean the zinc phosphate cement from crown margins?

- a. immediately after cementation
- b. after the cement is completely set
- c. 24 hours after cementation
- d. one week after cementation

18. When do you clean resin cements from crown margins?

- a. after the cement is completely set
- b. immediately after cementation
- c. 24 hours after cementation
- d. one week after cementation

19. Which component of amalgam will cause contraction?

- a. copper
- b. tin
- c. zinc
- d. silver