

40

NAME: [REDACTED]

PRECLINICAL SEAT NUMBER [REDACTED]

EXAMINATION NUMBER: [REDACTED]

A

1. Please read all directions before starting the examination.
2. Excluding this page, your examination booklet should contain 3 pages with a total of 50 questions. Please check to verify you have all of the examination.
3. Write your name and preclinical seat number on the cover of the examination booklet.
4. Write your name, your Temple ID number and the exam number and letter on the computerized answer sheet in the appropriate boxes. Blacken the corresponding letters and digits below the boxes.
5. On the reverse side of the computerized answer sheet sign your name and write the number and letter (A or B) of your test booklet in the box labeled identification information.
6. Darken all circles on the answer sheet before the end of the examination. Extra time will not be given at the end of the examination for this purpose.
7. No questions will be answered during the examination. Answer each question as best you can using the information available.
8. Return the computerized answer form **AND** the entire examination booklet to the proctor.

- =====
- D 1. The best method for accurate diagnosis of interproximal caries (Class II and Class III) is
- reviewing the patient's history of caries activity
 - examining the corresponding tooth in the occluding quadrant
 - examining for color changes or loss of translucency beneath marginal ridges
 - ☒ radiographic examination
 - probing with an explorer
- A 2. Regarding a carbide bur, the number of cutting blades determines its cutting efficiency. Burs with a larger number of cutting blades results in
- | | |
|---|---|
| <input checked="" type="checkbox"/> less efficient cutting and a smoother surface | more efficient cutting and a smoother surface |
| less efficient cutting and a rougher surface | more efficient cutting and a rougher surface. |
- A 3. Diamond burs are superior to carbide burs for the removal of dental enamel. Therefore, diamond burs are better for extra-coronal cavity preparations, beveling enamel margins on cavity preparations, and enameloplasty.
- | | |
|---|---|
| <input checked="" type="checkbox"/> Both statements are true. | Statement one is true and statement two is false. |
| Both statements are false. | Statement one is false and statement two is true. |
- C 4. If in the preparation of a Class II cavity the pulpal wall is established perpendicular to the long axis of the tooth, the tooth *most* likely to have a pulp exposure is the
- maxillary first premolar
 - maxillary second premolar
 - ☒ mandibular first premolar
 - mandibular first molar
 - None of the above. The likelihood of a pulp exposure is approximately the same for each tooth listed.

5. Initial pulpal inflammation is thought to be evident clinically by production of sharp pains. A short, painful response to cold with each pain lingering only a few seconds (<10 seconds) in response to the thermal stimulus is suggestive of .

✓ reversible pulpitis reversible pulpitis necrotic pulp

6. The occlusal isthmus of an MO dental amalgam restoration is more resistant to fracture if the
pulpal depth is 1 mm
occlusal dovetail is present
✓ axiopulpal line angle is rounded
unsupported enamel at the gingivocavosurface margin is planed
axiogingival line angle is rounded

7. Ideally, the oblique ridge of maxillary molars should be preserved during cavity preparation because it retains strength in the tooth. Cutting through the oblique ridge is indicated if the pulpal floor depth exceeds 2.5 mm

Both statements are true ✓ Statement one is true and statement two is false
Both statements are false Statement one is false and statement two is true

8. The pins that offer the greatest degree of retention into dentin are
✓ self-threading cemented with glass ionomer cement
friction lock cemented with zinc phosphate

9. Materials contraindicated for placement under and in contact with composite resin include
✓ Tarnish calcium hydroxide ✓ zinc oxide-eugenol ZnPO_4 ✓ Copalite

1 and 3
✓ 1, 3, and 5
1, 2, 4
1 and 3
1 and 5

10. Fracture of a complete cusp in posterior teeth is a common occurrence. In general, in all posterior teeth, the most frequently fractured cusps are the _____

holding ✓ nonholding all cusps fracture with equal frequency
working? nonworking?

11. The main reason that zinc oxide-eugenol cannot be placed directly on the pulp is that
the pH remains too high for reparative dentin to form
the cement fails to harden sufficiently to support a final restoration
in high concentrations zinc is toxic to the pulpal tissues
✓ in high concentrations eugenol is toxic to the pulpal tissues

12. To remove demineralized dentin from a tooth with an extensive carious lesion, one would use
8 bur in the high speed handpiece ✓ # 6 round bur in the low speed handpiece
330 bur in the high speed handpiece # 34 bur in the low speed

13. The best way to minimize microleakage that can occur after insertion of a Class II dental amalgam restoration is to
use a triangular wedge to prevent gap formation along the gingival cavosurface margin
polish the restoration 24 hours after placement
properly mix multiple spills of amalgam to prevent "layering"
use heavier than usual condensation force
✓ place 2 coats of cavity varnish over the dentin before placement of the amalgam

14. When applying a Tofflemire matrix band to a tooth with a Class II preparation, the edge of the band with the larger circumference is always oriented occlusal and the open end of the U-shaped retainer head is always oriented ging.

occlusally, occlusally gingivally, gingivally
✓ occlusally, gingivally gingivally, occlusally

15. To increase the diameter of the matrix band, the operator should turn the _____ on the matrix retainer _____.
adjusting nut; clockwise ✓ adjusting nut; counterclockwise
locking nut; counterclockwise locking nut; clockwise

16. The direction of retention pin holes should be
parallel to the long axis of the tooth
✓ parallel to the nearest external surface
perpendicular to the occlusal or the gingival floor of the preparation
at right angles to the dentinal tubules

17. Which of the following clinical situations involving direct pulp capping would be the most likely to be successful?

A pin-point exposure having sound dentin on the periphery of the exposure, with a mild degree of pulpal inflammation restricted to the exposure site. Poor isolation using cotton rolls.

A carious exposure having decayed or infected carious dentin at its periphery, inflammation in the pulpal tissues beyond the exposure site. Isolation using rubber dam.

A pin-point exposure having sound dentin on the periphery of the exposure, with no pulpal inflammation at the exposure site. Isolation using rubber dam.

An exposure with profuse hemorrhage and great involvement (mechanical) of the pulpal and root tissues.

18. Hand instruments must be balanced to allow for the concentration of force onto the blade without causing rotation of the instrument in the grasp. This balance is accomplished by designing the angles of the shank so that the cutting edge of the blade lies within 1 - 2 mm of the long axis of the handle.

Both statements are true.

Statement one is true; statement two is false.

Both statements are false.

Statement one is false; statement two is true.

19. There is much less corrosion and marginal fracture in high-copper amalgams. They more commonly fail because of bulk fracture, presumably related to fatigue.

Both statements are true.

Statement one is true; statement two is false.

Both statements are false.

Statement one is false; statement two is true.

20. When preparing a classical Class II DO cavity preparation for amalgam in tooth # 21, which of the following line angles will usually be the shortest in the proximal box?

proxiofacial
longest

proxolingual

both line angles are equal

21. When placing pins to enhance retention form of a prepared cavity, which of the following potential pin sites should be avoided?

the mid-buccal area of the mandibular first molar

two of the above

the mid-mesial area of the maxillary first premolar

all of the above

the mid mesial area of the maxillary first molar

22. The enamel is thicker at the incisal and occlusal areas of a tooth and becomes progressively thinner until it terminates at the DEJ.

Both statements are true.

Statement one is true; statement two is false.

Both statements are false.

Statement one is false; statement two is true.

23. The interface of the enamel and dentin is called the dentinoenamel junction. The DEJ is about _____ μ m thick.

10

20

30

40

24. After the primary dentin is formed, dentin deposition continues at a reduced rate even without obvious external stimuli. This dentin is called

reparative dentin

sclerotic dentin

secondary dentin

abraded dentin

25. When the spread of caries along the DEJ exceeds the caries in the contiguous enamel, caries extends into this enamel from the junction and is termed _____ caries.

forward

backward

secondary

recurrent

just enamel - incipient
- rampant
- secondary
- recurrent

26. Polishing of high-copper amalgams is less important than it is for low-copper amalgams because high-copper amalgams are less susceptible to tarnish and marginal breakdown

Both statements are true.

Statement one is true and statement two is false.

Both statements are false.

Statement one is false and statement two is true.

27. When using calcium hydroxide as a direct pulp capping material, it is recommended to have approximately _____ mm thickness of calcium hydroxide over the exposure site.

0.01

0.05

0.1

1.5

28. The rake angle is the most important design characteristic of a bur blade. A rake angle is said to be _____ when the rake face is ahead of the radius (from cutting edge to axis of bur).

positive

negative

zero

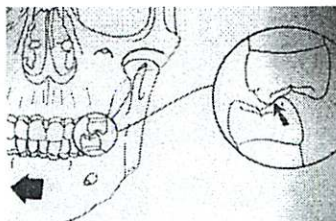
29. The interference shown to the right is a(n)

working interference

nonworking interference

protrusive

premature contact

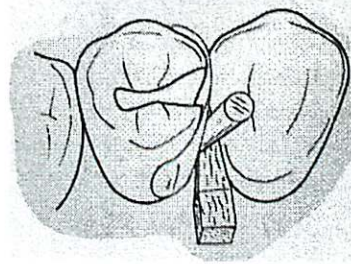


inner inclines of support.

W
N
N
S

30. The type of wedging shown to the right is called _____

- ✓ wedge-wedging
- piggyback wedging
- double wedging



31. Resistance form in a cavity preparation is achieved by

- 1. pulpal and gingival walls that are perpendicular to occlusal forces. T
- 2. adequate thickness of restorative material T
- 3. walls that converge occlusally Ret. 4 220. 124
- 4. rounded internal line angles T
- 5. placement of a dovetail Ret.

all of the above

✓ 1, 2, and 4

✓ 1, 2, 3, and 4

1 and 4 only

2 and 4 only

32. Once the matrix band has been removed from a Class II amalgam restoration, the next step would be to

develop occlusal anatomy

reduce the marginal ridge

✓ remove excess interproximal amalgam

check for proper contact using dental floss

According to material presented in lecture and Sturdevant, identify the following statements (questions 33 - 50) as true or false.

Darken (a) on your answer sheet if the statement is true. Darken (b) on your answer sheet if the statement is false.

a. True

b. False

- F 33. When operating in the mandibular arch, the mandibular occlusal surfaces should be oriented approximately perpendicular to the floor. Parallel
- T 34. The anatomic wedge is preferred for deeply extended gingival margins because its greatest cross-sectional dimension is at its base.
- T 35. When preparing a carious pit on the lingual surface of a maxillary central incisor the bur should be positioned so that it is perpendicular to the lingual surface of the tooth.
- F 36. When the second number in the formula for a gingival margin trimmer is 85 to 75, the pair is used on the distal gingival margin.
- T 37. Regarding cusp reduction (capping): cusp reduction usually is mandatory when the outline form has extended two-thirds the distance from a primary groove to a cusp tip.
- T 38. Gingival Class II cavomargins ideally terminate gingival to both the contact and the lesion.
- T 39. According to material presented in lecture and the reading, when removing an old amalgam any base material found under the amalgam should be removed if the tooth was symptomatic preoperatively.
- T 40. When restoring a quadrant of Class II amalgam tooth preparations, if adjacent proximal boxes differ in size, teeth with smaller boxes should be restored first.
- T 41. Mercury can be drawn to the surface of set amalgam during polishing procedures if improper use of rotary instruments (polishing cups and points) raises the temperature of the amalgam.
- T 42. When punching holes in the rubber dam, the distance between holes is equal to the distance from the center of one tooth to the center of the adjacent tooth, measured at the level of the gingival tissue.
- T 43. When viewing an inverted cone, the head length is about the same as the diameter.
- F 44. When the second number in the formula for a gingival margin trimmer is 85 to 75, the pair is used on the distal gingival margin.
- T 45. Restorative intervention primarily repairs damage caused by caries and by itself does not rid the patient of the factors that caused the disease.
- T 46. According to material presented in the Sturdevant text, in tooth preparation, it is desirable that only infected dentin be removed, leaving the affected dentin, which may be remineralized in a vital tooth after the completion of restorative treatment.
- T 47. Diamond instruments create thicker smear layers.
- T 48. When two pit-and-fissure preparations have less than 1.0 mm of sound tooth structure between them, they should be joined to eliminate a weak enamel wall between them.
- F 49. The level to which a base is built is determined by the thickness of the remaining dentin.
- T 50. As a rule, the teeth being treated should be at the same level as the operator's elbow. 12-18 in