

RESTORATIVE DENTISTRY D260

PROGRESS EXAMINATION #2

April 11, 2006

NAME: _____

PRECLINIC SEAT NUMBER: _____

EXAMINATION NUMBER: _____ A

30

1. Please read all directions before starting the examination.
2. Your examination booklet should contain 3 pages with a total of 33 questions. Please check to verify you have all of the examination.
3. Write your name and preclinic seat number on the cover of the examination booklet.
4. Write your name and last four digits of your social security number 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. Be sure to 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. Choose the best answer for each question. No questions will be answered during the examination.
8. Return the computerized answer form **AND** the entire examination booklet to the proctor.

1. According to material presented in the Shillingburg text, to minimize stress in the cement interface between the preparation and the restoration, an axial wall taper of _____ degrees has been suggested as optimum; however research by Mack estimates that a minimum taper of _____ degrees is necessary just to insure the absence of undercuts.

- a. 2 - 6 ; 18 b. 3 - 5; 15 - 20 c. 6; 8 d. 2 - 6; 12

2. According to material presented in the Shillingburg text, a taper or total convergence of _____ degrees has been proposed as being achievable clinically while still affording adequate retention.

- a. 9 b. 12 c. 16 d. 20 e. 25

3. When preparing tooth # 30 for a full gold crown, lingual cusps are reduced _____ for proper structural durability.

- a. 0.5 mm b. 1.0 mm *lingual* c. 1.5 mm *buccal* d. 2.0 mm

4. What is the recommended application for a # 14 rubber dam retainer?

- a. primary molars c. partially erupted permanent molars
b. gingival retraction for a Class V lesion d. small premolars

5. Darker shades and microfilled composites are more difficult to cure because filler particles and coloring agents tend to scatter or absorb the curing light in the first 1 to 2 mm of material.

- a. both statements are true c. statement one is true; statement two is false
b. both statements are false d. statement one is false; statement two is true.

6. Trans-illumination is a valuable diagnostic aid for detection of

- a. interproximal caries on posterior teeth b. pulpal involvement
b. fissure caries e. interproximal caries on anterior teeth
a. proximal restoration overhangs

7. What is the pH threshold at which enamel demineralization begins to occur?

- a. 7.5 b. 6.5 c. 5.5 d. 4.5

b. false

8. Gingival Class 2 cavomargins ideally terminate gingival to both the contact and the lesion.
9. A preparation on a tooth with a large diameter resists pivoting movements better than a preparation of equal length on a tooth of smaller diameter.
10. The path of insertion of a preparation must parallel the adjacent proximal contacts or it will be prevented from seating.
11. A crosscut bur at low speed produces the roughest surface.
12. Inadequate isthmus width is the most likely cause for isthmus fracture of Class 2 amalgam.
13. Cross-cut burs can be used for removal of old restorations, but the horizontal ridges they produce on tooth structure make them unacceptable for crown preparation.
14. The level to which a base is built should never compromise the desired cavity preparation depth resulting in inadequate restorative material thickness.
15. If a cavity is of ideal depth, no liner or base is indicated. However, cavity varnish or dentin adhesive should be used prior to amalgam placement to reduce microleakage and seal the dentinal tubules.
16. Mature plaque is primarily anaerobic.
17. When examining a patient for caries, care must be exercised to distinguish white spots of incipient caries from developmental white spot hypocalcifications of enamel. Incipient caries will partially or totally disappear visually when the enamel is hydrated (wet), while hypocalcified enamel is unaffected by drying and wetting.
18. Arrested (remineralized) lesions can be observed clinically as intact, but discolored, brown or black spots. These discolored, remineralized, arrested caries areas are intact and are more resistant to subsequent caries attack than the adjacent unaffected enamel and should not be restored unless they are esthetically objectionable.
19. Caries advances more rapidly in dentin than in enamel because dentin provides much less resistance to acid attack.
20. Which of the following teeth is most likely to benefit from occlusal sealant placement?
- a. Maxillary first premolar
- b. Mandibular first molar
- c. Maxillary second molar
- d. Mandibular second premolar
21. *Streptococcus mutans* is considered to be a principle etiologic agent of caries because it produces organic acids and it
- a. metabolizes substrate from saliva
- b. forms a gelatinous matrix
- c. derives energy from enamel constituents
- d. lives symbiotically with *Lactobacillus acidophilus*
22. 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
23. Which of the following factors contributes the greatest amount of retention to a cast gold crown restoration
- a. proximal cavosurface margin chamfer
- b. uniform occlusal reduction
- c. rounded occlusal line angles
- d. properly placed functional cusp bevel
- e. near parallel axial walls
24. Supplemental retention on abutment teeth is made possible by
- a. parallel alignment
- b. greater bulk of metal
- c. proper cementing technique
- d. a chamfer-type preparation
- e. proper use of grooves and box forms
25. Gavelis *et al* found that tooth preparations with _____ permitted the most complete seating of a crown.
- a. parallel bevels
- b. shoulders
- c. chamfers
- d. reverse bevels
26. If crown lengthening is performed on a tooth, the alveolar crest should be surgically moved _____ apical to the location of the proposed finish line to guarantee the biologic width and prevent periodontal pathology.
- a. 1 mm
- b. 2 mm
- c. 3 mm
- d. 4 mm

27. All of the following are true regarding the use of the knife edge finish line for cast gold restorations except:
- the axial reduction may fade out instead of terminating in a definite finish line
 - difficulty in identification may make waxing of the restoration difficult
 - it is more susceptible to distortion under occlusal forces
 - ☒ can result in undercontoured restorations
28. 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 full coverage gold crowns
 - ☒ restore involved teeth as rapidly as possible using dental amalgam
 - Place the patient on a prevention regimen and delay treatment until the effectiveness of home care is evaluated.
 - ~~Perform microbiological testing to determine the type of cariogenic bacteria present and delay treatment until antibiotics can be given for the offending bacteria.~~
29. Unilateral balanced occlusion calls for all teeth on the working side to be in contact during a lateral excursion. All teeth on the nonworking side should be free of any contact to prevent the destructive, obliquely directed forces found in nonworking interferences.
- ☒ both statements are true
 - both statements are false
 - Statement one is true; statement two is false
 - Statement two is true; statement one is false
30. A large carious lesion on the distal surface of a maxillary central incisor involving the incisal angle is a
- Class I lesion
 - Class II lesion
 - ☒ Class IV lesion
 - ☒ pit and fissure lesion
 - ☒ smooth surface lesion
- a. 1 only b. 2 and 5 ☒ c. 3 and 5 d. 3 only e. 4 only
31. Bond strengths for superficial dentin close to the dentinoenamel junctions are greater than those for deep dentin because in deep dentin the greater number of tubules and the larger diameter of tubules reduce the amount of intertubular dentin available for bonding.
- ☒ both statements are true
 - both statements are false
 - statement one is true; statement two is false
 - statement one is false; statement two is true.
32. Clinical interpretation of pain from pulpal inflammation (hyperemia) is somewhat empiric, but nonetheless important to the successful practice of operative dentistry. If an irritant, such as touching ice to the tooth, causes pain that lingers more than 15 seconds after removal of the irritant, the condition of the pulp is called _____ and resolution of the condition is possible by _____.
- reversible pulpitis; root canal therapy
 - reversible pulpitis; immediate restorative treatment (operative dentistry)
 - ☒ irreversible pulpitis; root canal therapy
 - irreversible pulpitis; immediate restorative treatment (operative dentistry)
33. Overcontoured crowns can be the result of
- the need for added retention
 - overbulking by technicians
 - insufficient tooth reduction
 - periodontal considerations
 - ☒ lack of a functional cusp bevel
- a. all of the above b. 2, 3 and 4 ☒ c. 2, 3 and 5 d. 1, 3 and 5 e. 3 and 5