

# DENTAL CANDIDATES

## GENERAL INFORMATION

**Read this information thoroughly.**

1. This format contains information not contained in the original application concerning the conduct of the examination for dental candidates.
2. The Delaware Board of Dentistry and Dental Hygiene (“Board”) is a testing, licensing and regulatory agency. Board members are appointed by the Governor to serve in protecting the citizens of Delaware. The Board conducts two examinations annually.
3. Patients presented to the examiners for the clinical portions of the examination must meet the criteria published in this Format. Patients who do not meet the criteria will be rejected by the Examiners. **Candidates should be prepared to present two patients for each part of the examination.** If both patients are rejected, a “no show” for that portion of the examination will be recorded. A “no show” is not recorded as a failure.
4. Candidates must show proper photo ID, proof of professional liability insurance\* and a signed affidavit for each patient (composed by the candidate) stating that all restorations will be completed. In addition, hold harmless forms (releases), as well as patient medical histories must be complete and in order.

**Candidates must have proof of ONE MILLION DOLLARS of insurance in order to be admitted to the examination. NO EXCEPTIONS.**

5. Candidates are responsible for providing **ALL** materials and equipment for patient care. This includes, but is not limited to ultrasonics, hand pieces, instruments, and disposable supplies.
6. Once the candidate is satisfied with his or her performance, they must notify their examining team by signing out on the designated chalkboard. At this time, the candidate will be asked to leave the examination area during the treatment evaluation. The candidate is responsible for providing the following items for treatment evaluation by the examining team:
  - a. Patient Health History/Oral Inspection/Dental Charting/Periodontal Charting
  - b. Radiographs
  - c. Required Instruments (No scalers or curets):
    - i. Clear mirror
    - ii. 11/12 explorer
    - iii. Williams (PW) periodontal probe with the following color coded markings:  
1-2-3-5-7-8-9-10
    - iv. 17/23 explorer
    - v. Air/water tip for syringe
    - vi. Slow speed suction
    - vii. Clean gauze
    - viii. Cotton rolls
  - d. Patient napkin/bib clips
  - e. Patient safety glasses
  - f. Dental Floss

An evaluation sheet for each clinical examination will be distributed by the examiners. To receive credit, candidates must have each examiner’s initials on the check-out sheet for each examination section. The candidate should clearly understand each assignment and

make certain the candidate identification number and date are clearly recorded on each form. No credit can be given in any portion of an exercise by an examiner who has not initialed the check-out sheet.

7. The examination does not begin until the Chief Examiner makes the announcement. No patient treatment shall be started until such an announcement is made. All treatment shall cease when the Chief Examiner announces that the examination is over. At that time, all candidates must leave the treatment area.

**Candidates will not be admitted for testing later than 30 minutes after the examination has begun.**

8. Each major category of the required clinical examination is evaluated according to criteria published in this Format and when completed, requires an evaluation by all the examiners. When asking for an evaluation, the candidates should state clearly to the examiners the category which is to be evaluated. After evaluation by the examiners, the candidate should continue to the next step unless otherwise instructed. The candidate should not dismiss a patient unless permission is given by the Primary Examiner.
9. Any change should be made before calling an examiner for evaluation. **NO CHANGES MAY BE MADE AFTER CALLING AN EXAMINER.**
10. The technical procedures used in the examination, as well as the specific materials used in the clinical portion of the examination are the choice of the candidate, as long as they are those currently accepted and taught by accredited schools of dentistry. The candidate may utilize the services of a chair-side assistant during the clinical examination; however, the assistant may not be a dentist, dental student or dental technician. The candidate is responsible for the conduct of the assistant. The assistant may not function as an expanded-duty auxiliary.
11. The Board reserves the right to terminate the examination at any time if that action becomes necessary to safeguard the health, safety or comfort of the patient, or if the candidates or examiners are threatened in any manner.
12. Upon receiving satisfactory examination results from the Board, a candidate will receive a license if the other criteria for licensure are met. The criteria are outlined in the application which you have already received.
13. In the event an applicant has failed the examination, he/she may appeal in writing to the Director of the Division of Professional Regulation within 20 days of notification by the Board of failure of the examination. The Director will convene an Appeals Panel under 24 *Del. C.* §1194 within 30 days to hear the appeal. The burden of proof in such appeal is on the appellant and the Board's action is presumed correct unless proven otherwise. The address of the Director is: Division of Professional Regulation, Cannon Bldg., Ste. 203, 861 Silver Lake Boulevard, Dover DE 19904. The candidate has the right to appear before the Appeals Panel, with or without counsel, to present any information he/she feels is relevant to the appeal. The Board is not responsible for expenses incurred by any party making such a request.

## CONDUCT OF THE EXAMINATION

The complete examination requires two days. See sample time schedule of each component.

**Suggestions, questions, problems or complaints should be presented to the Chief Examiner at any time.**

The Board provides each candidate with the opportunity to have clinical and didactic skills evaluated fairly. In addition, conduct, decorum and professional demeanor are also judged. The rules and regulations of this examination must be followed. It must be understood that, in the course of this examination, any collusion between candidates or between candidates and any other person is prohibited. The policy of the Board is: **Any substantiated evidence of collusion, dishonesty or intentional misrepresentation during registration or during the course of the examination, as determined by the Chief Examiner, shall automatically result in the candidate not being allowed to continue with the examination and will be considered a failure.**

## DENTAL EXAMINATION CRITERIA

The criteria established by the Board are: (percentage points = weight of grading).

1. Full Mouth Radiographs - 5%
2. Periodontal Section - 20%
  - a. Medical History and Charting
  - b. Periodontal Scaling and Polishing
  - c. Alginate Impressions
3. Restorative - 60%
  - a. Class II Amalgam - 20%
  - b. Class II, III, IV Composites - 20%
  - c. Casting Exercise - 20%
4. DOR (Diagnosis, Oral Medicine, Radiology) - 10%
5. Professionalism - 5%

The purpose of the examination of dental candidates is to test the minimal skills which are critical to the practice of dentistry. Each skill is described so that all candidates will understand what constitutes a minimal performance of that skill. If that level of performance is achieved, then the candidate passes that skill. A minimum score of 75% in each section passes that section of the examination. A grade does not measure the number of errors, but rather a level at which minimal competency has been demonstrated.

## CLINICAL EXAMINATION

During the clinical portions of the examination each candidate is assigned a Primary Examiner who is responsible for checking the candidate's insurance certificate, hold harmless agreements and evaluating all designated steps. The Primary Examiner works with the other examiners, who act as Secondary Examiners when required. All required examination materials and records shall be returned to the Primary Examiner at the end of the examination. If any problems arise during the examination, the candidate should notify the Primary Examiner.

## INFECTION CONTROL

The Board requires that while treating patients, all candidates use the Center for Disease Control Guidelines for infection control (see next section). The wearing of gloves, masks and the provision for eye protection is mandatory.

## REQUIRED INFECTION CONTROL PROCEDURES

To the extent possible, dental professionals must control infectious diseases. Because many infectious patients are asymptomatic, all patients shall be treated as if they are in fact contagious. Use of barrier techniques, disposables whenever possible and proper disinfection and sterilization are essential. The following infection control procedures shall be strictly adhered to:

1. Medical history is to be taken and if necessary a medical clearance is to be obtained. (Some examples of when a medical clearance may be required include, but are not limited to, rheumatic fever and rheumatic heart disease, coronary arteriosclerosis, myocardial infarction, hypertension (uncontrolled), diabetes mellitus and blood disorders).
2. Barrier protection
  - a. Gloves shall be worn when performing any intra-oral or laboratory procedures and when cleaning up after any treatment. Gloves are not to be worn outside the operatory.
  - b. Hands are to be washed and dried between patients and whenever gloves are changed. If rips or tears occur while treating the patient, new gloves must be substituted. No hand jewelry shall be worn.
  - c. Clean long-sleeve uniforms, gowns or laboratory coats are to be worn and must be changed daily or sooner if they become visibly soiled. All uniforms, gown or laboratory coats must be free of any identifying marks (i.e. school names or insignia, embroidered names).
  - d. Face masks and protective eyewear must be worn during all procedures in which splashing of any body fluids is likely to occur. Masks are to be discarded after each patient or sooner if they become damp or soiled.
  - e. Impervious-backed paper, aluminum foil or plastic wrap may be used to cover surfaces that may become contaminated. The coverings must be removed (while gloved), discarded and replaced (after unglowing) between patients.
3. Sterilization and disinfection
  - a. Instruments. All instruments must be sterilized before and after each patient.
  - b. Surfaces and counter tops. If not wrapped with aluminum foil or plastic wrap (barrier protected), surfaces and counter tops shall be pre-cleaned and disinfected with a hospital level disinfectant that is tuberculocidal.
  - c. All handpieces, prophy angles and air water syringes must be either sterilizable or be single-use disposable items. These items shall be either sterilized or disposed of.
4. Waste disposal. All waste and disposal items shall be considered potentially infectious and shall be disposed of with special precautions, as is customary at the testing site, in accordance with federal, state and local regulations.
5. Resuscitation equipment. Pocket masks, resuscitation bags or other ventilation devices will be provided by the facility in strategic locations to minimize the need for emergency mouth-to-mouth resuscitation.

## STANDARDS

The Board conducts this examination following the highest ethical and moral standards of the profession of dentistry. **Candidates are expected to notify each patient of any continuing or corrective treatment that may be required following the examination and, further, to notify the Primary Examiner of such required treatment.** The Primary Examiner **must verify with the patient the needed treatment, and state that it is the responsibility of the candidate to see that the treatment is rendered.** This includes the setting of a completed casting for the restorative examination.

## TIME

The time allotted for the clinical exercises is outlined in the schedule. Patient treatment begins simultaneously for all candidates at the time announced by the Chief Examiner. Patient acceptability will be evaluated by the Primary Examiner and at least one other examiner. If either examiner finds the patient unacceptable, all examiners must evaluate the patient. If a majority of the examiners will not accept the patient, the patient will be rejected. Subsequent steps during the examination must be evaluated by all examiners.

## PATIENT SELECTION

**The Board does not furnish patients for the clinical examinations, nor does it accept excuses from candidates who have not procured acceptable patients. If your patients do not qualify, you will not be tested.**

The candidate is required to provide patients who shall be at least 18 years old. If a patient is presented who does not meet the criteria as published, the patient will be rejected by the examiners. If two patients are rejected for any one exercise, a “no show” will be recorded. “No shows” are not recorded as a failure, but do cause the candidate’s fee to be forfeited.

## PATIENT ACCEPTABILITY

A dentist or dental technician may not be used as a patient. A person with a medical history of an infectious or communicable disease, or a serious systemic condition, will not be allowed to sit as a patient during the examination, unless he/she presents a physician’s statement certifying that the proposed treatment will not pose an undue risk to the patient.

The patient’s blood pressure will be taken at the time of the exam. A reading of 159/94 or less will be accepted for testing. A reading of 160/95 to 197/109 will require the patient to have a letter from his/her physician approving treatment. A reading of 180/110 or higher will disqualify the patient from the exam.

**Warning: Be advised that the dental clinic is not latex-free. Please do not use patients with a severe latex allergy.**

## SUBSTITUTE PATIENTS

Each candidate must present patients who are acceptable to the examiners. **A second patient must be available in the event the first patient is unacceptable.** If using the second patient, the candidate will be required to complete the examination in the remaining scheduled time. Each candidate must have paperwork he/she has completed for each patient presented. A complete full-mouth radiograph series, completed by the candidate, must be available for each patient presented.

## MATERIALS AND EQUIPMENT TO BE FURNISHED BY THE CANDIDATE

Candidates are responsible for providing **ALL** materials and equipment for patient care. All necessary materials and instruments for the restorative amalgam, restorative casting, restorative composite and periodontic clinical sections, except operating chair, operating light and dental unit, must be furnished by the candidate. Each candidate must provide a suitable high-speed hand piece. All necessary instruments and disposables must be provided by the candidate. This includes, but is not limited to ultrasonics, hand pieces, instruments, and disposable supplies. Any rental of equipment is the responsibility of the candidate.

## GENERAL CRITERIA FOR CONDUCTING CLINICAL EXAMINATIONS

The candidate's ability to follow these general guidelines will be used in each examiner's evaluation of professionalism.

1. Significant history and pathosis not recognized. The candidate shall accurately complete the appropriate history forms and establish a diagnosis and treatment plan before treating the patients. Misinformation or missing information that would endanger the patient, candidate, auxiliary personnel or examiner is a reason to stop the examination.
2. Failure to complete the examination. All procedures, both patient treatment and laboratory exercises, shall be completed within the time allowed by the Board in order for the examination to be considered complete. Treatment or procedures performed in other than assigned times will be cause for the examination to be considered incomplete and result in failure.
3. Misappropriation/misuse of equipment. No equipment, instruments or materials shall be removed from the examination site.
4. Working in unauthorized clinics. The candidate shall work only in the assigned clinic or laboratory space. No treatment or required laboratory procedure may be performed anywhere else.
5. Use of auxiliary personnel. Dentists (licensed or unlicensed), dental students and dental technicians may not act as assistants.
6. Failure to turn in records. All records required by the Board shall be turned in to the proper person before the examination is considered complete.
7. Treating other than assigned procedures. The candidate shall perform only the treatment assigned by the examiner.
8. Lack of neatness and cleanliness. The candidate, as well as the assisting auxiliary, shall wear clean clinic attire and follow the recommended infection control barrier technique.
9. Unacceptable professional attitude/demeanor/patient management. The candidate and assisting auxiliary must behave in an ethical and proper manner. Patients shall be treated with proper concern for their safety and comfort.
10. Improper anesthetic use/administration. If an anesthetic solution is required for the patient, the candidate is responsible for ensuring that the anesthetic is properly administered in the proper dosage.
11. Radiographs. Meet the requirements set by the Board. See each section for requirements.

## RESTORATIVE TREATMENT

### Guidelines for the Amalgam, Composite and Cast Restorations

Each candidate must supply the following for each patient:

1. Medical history, oral inspection and dental charting will be accepted only on forms provided by the Board.
2. Mounted, complete series of radiographs (20 films) or a panoramic film with a bitewing survey, taken within the last two years. **Complete series will be accepted only in mounts provided by the Board.** Number 2 film will be used for posterior teeth and number 1 film for anterior teeth. If the lesion to be restored is not identified in the radiographs, a single periapical or bitewing radiograph will be required that has been taken within the previous two months. (Duplicate radiographs of diagnostic quality are acceptable). Additional radiographs may be required by the examiner during the course of the examination.

To be acceptable, an interproximal carious lesion *must*

- Be clinically demonstrable or the lesion must be evident by radiographic examination to have penetrated the dento-enamel junction
- Show no signs of previous excavation or restoration.

If an MOD amalgam restoration is to be placed, both proximal surfaces must present untreated carious lesions.

**If the candidate anticipates a pathological exposure, the Primary Examiner should be called prior to continuing with the treatment. Whenever a cavity liner or a cement base is to be used, the candidate must notify the Primary Examiner. The prepared cavity must be seen before the liner/base is placed and the completed preparation must be seen by two examiners after the liner/base is placed.**

### **Placement without authorization constitutes failure of that exercise.**

The following procedures will be evaluated:

1. The candidate will be evaluated on the adequacy and correctness of the completed Board charts and the recognition of significant facts in the history that might alter or affect the treatment plan for the patient.
2. The candidate must complete three restorative exercises on vital permanent teeth.
  - a. The Restorative Cast Exercise
  - b. The Restorative Amalgam Exercise
  - c. The Restorative Composite Exercise
3. Caries remaining in any preparation in the three restorative exercises is cause for failure of that restoration - candidate will receive a zero. Please keep this in mind when choosing lesions for this exercise.
4. Extensive damage of adjacent teeth which necessitates restoration of those teeth will result in the candidate receiving a zero on that exercise.
5. Isolation for each restorative exercise means isolation with a rubber dam. If this is not possible, it is the candidate's responsibility to explain his/her reasoning to the examiner.

Each restorative procedure is evaluated separately. The candidate must receive a minimum score of 75 on each procedure to receive a passing grade.

### **RESTORATIVE CAST EXERCISE**

The candidate will complete one restoration on a posterior tooth selected from the list below:

- Class II inlay or onlay
- Partial crown
- Complete crown.

The restoration shall be performed on a:

- Carious posterior tooth, or
- Posterior tooth with an occlusal restoration and interproximal caries, or
- Previously restored posterior tooth that has a defective restoration.

For purposes of this examination, an existing defective restoration is defined as a:

- Restored posterior tooth that exhibits recurrent caries, or
- Restored posterior tooth that has defective margins (more than ½ mm in depth), or
- Restored posterior tooth that exhibits a fracture of the tooth or the restoration.

A candidate is not permitted to use a tooth in which the candidate has previously placed or altered a restoration.

The restoration to be replaced must have been in place at least 12 months and not of a temporary treatment material.

### **Guidelines for the Replacement of Existing Restoration with a Cast Restoration**

<b>Existing Restoration in Posterior Tooth</b>	<b>Replacement Restoration in Posterior Tooth</b>
Simple occlusal and interproximal caries	Class II cast inlay/onlay
Occlusal restoration and buccal or lingual extensions(s) with interproximal caries	Class II cast inlay/onlay
Occlusal proximal restoration with: <ul style="list-style-type: none"><li>• recurrent caries, or</li><li>• marginal defects, or</li><li>• fracture of restoration or tooth</li></ul>	Class II cast inlay/onlay
Occlusal proximal restoration with buccal and/or lingual extension and: <ul style="list-style-type: none"><li>• recurrent caries, or</li><li>• marginal defects, or</li><li>• fracture of restoration or tooth</li></ul>	Class II cast inlay/onlay complete or partial crown

### **RESTORATIVE AMALGAM EXERCISE**

The candidate must complete a Class II amalgam performed on:

1. A posterior tooth with an interproximal carious lesion, or
2. A posterior tooth with a simple occlusal restoration and an interproximal carious lesion.

### **RESTORATIVE COMPOSITE EXERCISE**

The candidate must complete a Class II, III or IV composite restoration, performed on:

1. An anterior tooth with interproximal caries, or
2. A posterior tooth with interproximal caries.

### **Individual Restorative Requirements**

Cast restoration - Complete or partial crown:

Must be in contact with adjacent proximal surface(s) and the tooth must be in occlusion.

Inlay or onlay. The restoration must be in contact with adjacent proximal surface(s) and the tooth must be in occlusion.

Amalgam Restoration - Class II amalgam:

The restoration must be in contact with adjacent proximal surface(s) and the tooth must be in occlusion.

Composite Restoration - Class II, III or IV composite:

The restoration must be in contact with adjacent proximal surface(s) and the tooth must be in occlusion.

## **PERFORMANCE EVALUATION**

The candidate's performance will be checked or evaluated at the following stages:

### Cast Restoration

Initial check by the Primary Examiner and one other examiner before the start of the preparation of the tooth.

Caries removal check before pulp protection, when required, to be seen by all examiners.

If pins are used to retain a core, the preparation with pinholes in place, must be seen by two examiners before pin placement.

Completed preparation, must be seen by all examiners.

Completed final impression and completed acrylic temporary must be seen by all examiners.

Temporary restoration shall not be cemented.

### Amalgam Restoration

The Primary Examiner and one other examiner shall initially check the patient before the candidate starts the preparation of the tooth. All examiners shall check the completed cavity preparation. If pulp protection is required, 2 examiners shall check the completed cavity preparation after base or liner placement.

Completed amalgam restoration to be seen by all examiners.

### Composite Restoration

The Primary Examiner and one other examiner shall initially check the patient before the candidate starts preparation of the tooth. All examiners shall check the cavity preparation. If pulp protection is required, two examiners shall check the completed cavity preparation after base or liner placement.

Completed composite restoration to be seen by all examiners.

## **Description of Ideal Casting Preparation**

### I. Inlay

#### A. External Outline Form

1. Contact just broken with adjacent tooth.
2. Central groove included, but not overextended.

#### B. Internal Outline Form - Dentino-Enamel Junction (DEJ) just broken.

#### C. Pulpal Protection - If base is included, it should build prep up to ideal internal outline form.

#### D. Decalcification - None remaining.

- E. Finish of Margins - Smooth and regular.
  - F. Retention and Resistance Form - Bevels or grooves used for retention.
  - G. Bevels - Bevel placed on entire cavosurface margin.
  - H. Finish of Walls - Enamel is entirely supported.
  - I. Line of Draw - Casting must be able to seat passively, (i.e., no undercuts).
  - J. Soft Tissue - No soft tissue damage.
  - K. Adjacent Tooth Damage - None.
  - L. Isolation - Rubber dam used if possible - other appropriate isolation if not possible to use a rubber dam.
- II. Onlay Preparation - Follow criteria for inlay, except as follows:
- A. External Outline Form - 1 mm reduction of both facial and lingual cusps.
- III. Crown Preparation - Follow criteria for inlay preparation except as follows:
- A. External Outline Form
    1. Preparation conforms to ideal (i.e., all defective restorations replaced).
    2. 1-1.5 mm occlusal reduction.
  - B. Internal Outline Form - Follows line of DEJ.
  - C. Pulpal Protection - Preparation restored to ideal outline form.
  - D. Retention and Resistance Form - 7 degree ideal taper in the preparation – shall have grooves, pins or other form of retention if preparation is short.

#### **Description of Ideal Casting Impression**

- A. Cleanliness - Impression free of debris and blood.
- B. Detail - Surface detail clearly showing preparation and adjacent tooth structure.
- C. Margins - All margins are clearly visible with subgingival extension of impression

#### **Description of Ideal Casting Temporary**

- A. Fit - Retention and draw - seats passively.
- B. Surfaces - Smooth and well polished.
- C. Margins - Smooth to explorer.
- D. Anatomy - Appropriate anatomy for tooth restored.
- E. Proximal Contact - Resists floss and is visibly closed.

#### **Ideal Amalgam Preparation**

Follow Inlay criteria except as follows:

- A. Retention and Resistance Form
  1. Preparation shall converge toward the occlusal.
  2. There shall be grooves in the proximal boxes at the bucco and linguo-pulpal line angles.
- B. Margins - shall be at 90 degrees at cavosurface margin.

#### **Ideal Composite Preparation**

- A. External Outline Form
  1. Class III - extent of caries.
  2. Class IV - all contacts with adjacent tooth broken.
  3. Class II - all contacts with adjacent tooth broken.
- B. Retention and Resistance Form - Either of the following:
  1. Enamel is beveled to provide large surface area for etching.
  2. Grooves or pits to provide mechanical retention.

## Description of Ideal Amalgam Restoration

- A. Surfaces - Smooth and regular.
- B. Margins - Not detectable with explorer.
- C. Anatomy - Proper for tooth restored.
- D. Proximal Contact - Resists floss and is visually closed.
- E. Occlusion - Tooth and restoration in normal contact.

## Description of Ideal Composite Restoration

Same as amalgam except as follows:

- A. Surfaces - Polish and color make restoration difficult to detect visually.

## Criteria for Evaluation/Point Distribution - Restorative Exercise

### CAST RESTORATION

#### CAVITY/ABUTMENT PREPARATION - 50 points

- A. EXTERNAL OUTLINE FORM
  - 5 Outline extended for convenience
  - 3 Outline over/under extended (minimally)
  - 1 Outline over/under extended (grossly)
  - 0 Outline form unacceptable for assigned procedure
- B. INTERNAL OUTLINE FORM/CAVITY DEPTH
  - 5 Pulpal floor/axial wall in dentin
  - 4 Pathological pulp exposure (no penalty if recognized)
  - 2 Pulpal floor has islands of enamel
  - 1 Pulpal floor/axial wall entirely in enamel
  - 0 Mechanical pulp exposure - fails entire cast restoration exercise
  - 0 Outline form unacceptable for assigned procedure (wall/margins undercut)
- C. PULPAL PROTECTION (BASE)
  - 4 Pulpal protection decision appropriate
  - 0 Pulpal protection decision inappropriate
- D. DECALCIFICATION
  - 4 No decalcification remaining
  - 0 Decalcification remaining
- E. RETENTION AND RESISTANCE FORM
  - 5 Adequate taper exists (7-15 total degrees)
  - 2 Minimal taper exists (less than 5 total degrees)
  - 0 Excessive taper exists (more than 20 total degrees)
- F. FINISH OF MARGINS
  - 5 Margins smooth and regular
  - 2 Margins with minimal irregularities
  - 0 Margins rough and ill defined
- G. BEVELS (FINISH LINE)
  - 5 Bevels properly placed and defined
  - 2 Bevels placed/definition lacking or too minimal
  - 0 Bevels improperly placed or lacking
- H. FINISH OF WALLS
  - 5 Enamel on walls entirely supported
  - 2 Enamel on walls partially supported
  - 0 Enamel on walls totally unsupported
- I. LINE OF DRAW
  - 4 Line of draw appropriate

- 2 Line of draw with some variance
- 0 Line of draw unacceptable
- J. SOFT TISSUE
  - 2 None, or minimal soft tissue damage
  - 0 Gross soft tissue damage
- K. ADJACENT TOOTH DAMAGE
  - 2 No adjacent tooth or restoration damage
  - 0 Slight damage but restoration not required
- L. ISOLATION
  - 4 Isolation acceptable for procedure
  - 0 Isolation not acceptable

**CASTING IMPRESSION - 30 points**

- M. CLEANLINESS
  - 10 Impression free of debris and blood
  - 5 Slight amount of debris not affecting accuracy
  - 0 Gross debris which interferes with accuracy
- N. DETAIL
  - 10 Surface detail clearly outlining preparation and adjacent tooth structure
  - 7 Some surface discrepancies on adjacent teeth
  - 4 Some surface discrepancies including bubbles on the prepared tooth
  - 0 Lacking detail making outcome of casting doubtful
- O. MARGINS
  - 10 All margins of preparation are clearly visible with extension of impression beyond bevels
  - 0 Margins unreadable - final casting questionable

**CASTING TEMPORARY - 20 points**

- P. FIT
  - 4 Retention and draw - seats passively on preparation
  - 2 Seats passively, but retention not optimal
  - 0 Retention and/or draw compromise the integrity of the temporary
- Q. SURFACES
  - 2 Surfaces smooth and well polished
  - 1 Surfaces smooth, but lack polish
  - 0 Surfaces rough, pitted, lack polish
- R. MARGINS
  - 4 Margins smooth to explorer
  - 3 Margins rough but not open
  - 2 Margins have slight overhang
  - 0 Margins have overhangs or are open to explorer
- S. ANATOMY
  - 2 Anatomy proper for tooth restored
  - 1 Marginal ridge over/under contoured
  - 0 Anatomy lacks definition
  - 0 Anatomy and contours unacceptable
- T. PROXIMAL CONTACT
  - 4 Resists floss and is visually closed
  - 0 Proximal contact is open
- U. OCCLUSION
  - 4 Tooth and restoration in normal contact
  - 0 Restoration in premature contact
  - 0 Tooth and restoration not in contact

## Criteria for Evaluation - Restorative Exercise

### AMALGAM RESTORATION

#### CAVITY PREPARATION - 50 points

- A. EXTERNAL OUTLINE FORM
  - 5 Outline extended for convenience
  - 4 Outline over/under extended (minimally)
  - 2 Outline over/under extended (grossly)
  - 0 Outline unacceptable for assigned procedure
- B. INTERNAL OUTLINE FORM/CAVITY DEPTH
  - 5 Pulpal floor/axial wall in dentin
  - 2 Pulpal floor has islands of enamel
  - 0 Pulpal floor/axial wall entirely in enamel
  - 0 Pathological pulp exposure - no penalty if recognized
  - 0 Mechanical pulp exposure - fails entire amalgam exercise
  - 0 Outline unacceptable - grossly overcut
- C. PULPAL PROTECTION (BASE)
  - 5 Pulpal protection decision appropriate
  - 0 Pulpal protection decision inappropriate
- D. DECALCIFICATION
  - 5 No decalcification remaining
  - 0 Decalcification remaining
- E. RETENTION
  - 5 Retention present
  - 2 Minimal retention
  - 2 Excessive retention
  - 0 No retention
- F. FINISH OF MARGINS
  - 5 Margins smooth and regular
  - 3 Margins with minimal irregularities
  - 0 Margins irregular and ill defined
- G. FINISH OF WALLS
  - 5 Enamel on walls entirely supported
  - 3 Some enamel on walls unsupported
  - 0 Enamel walls totally unsupported
- H. SOFT TISSUE
  - 5 None, or minimal soft tissue damage
  - 0 Gross soft tissue damage
- I. ADJACENT TOOTH DAMAGE
  - 5 No adjacent tooth or restoration damage
  - 0 Slight damage but restoration not required
- J. ISOLATION
  - 5 Isolation acceptable for procedure
  - 0 Isolation not acceptable

#### RESTORATION - 50 points

- K. SURFACES
  - 10 Surfaces smooth
  - 5 Surfaces rough - adequate condensation
  - 0 Surfaces rough and pitted - inadequate condensation
- L. MARGINS
  - 10 Margins not detectable with explorer
  - 7 Margins detectable with explorer - not open

- 3 Margins detectable with explorer with slight overhang (less than 1 mm)
- 0 Margins detectable with explorer- open or gross overhang (more than 1 mm)
- M. ANATOMY
  - 10 Anatomy proper for tooth restored
  - 7 Anatomy lacks definition
  - 3 Marginal ridge over/under contoured
  - 0 Anatomy and contour unacceptable
- N. PROXIMAL CONTACT
  - 10 Proximal contact resists floss and is visibly closed
  - 0 Proximal contact is visibly open
- O. OCCLUSION
  - 10 Tooth and restoration in normal contact
  - 0 Restoration in premature contact (high)
  - 0 Tooth and restoration not in contact

## **COMPOSITE RESTORATION**

### **CAVITY PREPARATION - 50 points**

- A. EXTERNAL OUTLINE FORM
  - 5 Outline extended for convenience
  - 4 Outline over/under extended (minimally)
  - 2 Outline over/under extended (grossly)
  - 0 Outline unacceptable for assigned procedure
- B. INTERNAL OUTLINE FORM/CAVITY DEPTH
  - 5 Pulpal floor/axial wall in dentin
  - 2 Pulpal floor has islands of enamel
  - 0 Pulpal floor/axial wall entirely in enamel
  - 0 Pathological pulp exposure - no penalty if recognized
  - 0 Mechanical pulp exposure - fails entire composite exercise
  - 0 Outline unacceptable - grossly overcut
- C. PULPAL PROTECTION
  - 5 Pulpal protection decision appropriate
  - 0 Pulpal protection decision inappropriate
- D. DECALCIFICATION
  - 5 No decalcification remaining
  - 0 Decalcification remaining
- E. RETENTION
  - 5 Retention present
  - 2 Minimal retention
  - 2 Excessive retention
  - 0 No retention
- F. FINISH OF MARGINS
  - 5 Margins smooth and regular
  - 3 Margins with minimal irregularities
  - 0 Margins irregular and ill defined
- G. FINISH OF WALLS
  - 5 Enamel on walls entirely supported
  - 3 Some enamel on walls unsupported
  - 0 Enamel walls totally unsupported
- H. SOFT TISSUE
  - 5 None, or minimal soft tissue damage
  - 0 Gross soft tissue damage
- I. ADJACENT TOOTH DAMAGE
  - 5 No adjacent tooth or restoration damage
  - 0 Slight damage but restoration not required

- J. ISOLATION  
5 Isolation acceptable for procedure  
0 Isolation not acceptable

## **RESTORATION - 50 points**

- A. SURFACES  
10 Surfaces smooth and polished - restoration difficult to see visibly  
7 Surfaces smooth and polished - margins are seen visibly  
3 Surfaces smooth - polish is less than adequate  
0 Surfaces rough - detectable with explorer
- B. MARGINS  
10 Margins not detectable with explorer  
7 Margins detectable with explorer - not open  
3 Margins detectable with explorer with slight overhang (less than 1 mm)  
0 Margins detectable with explorer-open or gross overhang (more than 1 mm)
- C. ANATOMY  
10 Anatomy proper for tooth restored  
7 Anatomy lacks definition  
3 Marginal ridge over/under contoured  
0 Anatomy and contour unacceptable
- D. PROXIMAL CONTACT  
10 Proximal contact resists floss and is visibly closed  
0 Proximal contact is visibly open
- E. OCCLUSION  
10 Tooth and restoration in normal contact  
0 Restoration in premature contact (high)  
0 Tooth and restoration not in contact

## **PERIODONTIC EXERCISE**

Periodontal Examination = 20% of Total Score as follows:

- Medical History - 5 points
- Dental Charting - 5 points
- Periodontal Charting - 10 points

### Prophylaxis

- Supragingival calculus - 15 points
- Subgingival calculus - 25 points
- Stain - 10 points
- Tissue condition - 5 points
- Oral Hygiene Instruction - 5 points
- Alginate Impressions - 20 points

## **PATIENT CLASSIFICATION**

### **Please read carefully**

The candidate has been instructed by the Delaware Board of Dentistry and Dental Hygiene to bring a patient of at least 18 years of age, having at least 20 erupted natural teeth with at least 4 posterior teeth that are in proximal contact. Posterior teeth must include at least 2 molars and 2 premolars. Patients who present for the exam with only 20 teeth may affect the patient classification as designated by the examining team. The teeth must display subgingival calculus, supragingival calculus and stain. All 3 types of deposits may or may not be on the same teeth. The patient's blood pressure will be taken at the time of the exam. A reading of

159/94 or less will be accepted for testing. A reading of 160/95 to 197/109 will require the patient to have a letter from his/her physician approving treatment. A reading of 180/110 or higher will disqualify the patient from the exam. Warning: Be advised that the dental clinic is not latex-free. Please do not use patients with a severe latex allergy.

MEDIUM - A medium patient must exhibit substantial deposits of supragingival and subgingival calculus detectable in at least 2 quadrants. Extrinsic stain must be present.

HEAVY- A heavy patient must exhibit gross deposits of supragingival and subgingival calculus with subgingival calculus generalized throughout the mouth. Extrinsic stain must be present. A heavy classification will require a 2-quadrant prophylaxis as specified by the examiners.

Guidelines for the Periodontic exercise are:

1. The candidate is required to provide a patient with clinical evidence of no less than early periodontitis (pocket depth 3-5 mm). The patient must also have significant demonstrable subgingival and supragingival calculus and stain in the segment selected for acceptance by the examiner.
2. The candidate must be prepared to perform the necessary therapeutic procedures on a segment of the mouth that is acceptable to the examiner. The segment shall consist of a minimum of six natural teeth, including four posterior teeth, of which at least two must be in proximal contact. A pocket depth of a minimum of 5 mm must be evident on at least three teeth in the segment.
3. RADIOGRAPHS

MOUNTING - Each radiograph must be mounted in proper anatomic relation to all other radiographs and only in the mounts provided by the Board. Only patient's name and candidate ID#, along with the date of exposure, should appear on the mount. Films presented in mounts other than those provided will result in a failing score for the radiographic exercise. **No allowable errors.**

CONE CUT - A cone cut will affect the diagnostic quality of the film and will be recorded as an error. **No allowable errors.**

FILM PLACEMENT - A film must incorporate completely those structures appropriate to the area of exposure.

- A. Proper horizontal film placement:
  1. Molar films show the most distal root of the most posterior tooth.
  2. Premolar films include the distal of the canine.
  3. Anterior films show the appropriate teeth reasonably centered on the film.
- B. Proper vertical film placement:
  1. All periapical films show the entire crown and 2 to 3 millimeters of bone surrounding the apices.
  2. All bitewing films have a centered occlusal plane.

**When a candidate incurs more than the allowable 3 errors, 2 points per error will be deducted up to a total of 4 points.**

ELONGATION/FORESHORTENING - Periapical film must display the entire tooth from crown to apex with a minimum of distortion and 2 to 3 millimeters of bone surrounding the apices. **When a candidate incurs more than the allowable 3 errors, 2 points per error will be deducted up to 4 points.**

INTERPROXIMAL OVERLAPPING - All contacts must be clearly defined on at least 1 periapical film in the full series. On bitewing films, all contacts must be clearly defined between the molars on the molar bitewing and the premolars on the premolar bitewing. **When a candidate incurs more than the allowable 3 errors, 1 point per error will be deducted up to a total of 5 points.**

DENSITY/CONTRAST/DEVELOPING - If the density, contrast and developing affect the diagnostic quality of the full series, it will be recorded as an error. **When a candidate incurs more than the allowable 2 errors, 1 point per error will be deducted up to a total of 3 points.**

4. The candidate will also present to the Board charts and diagnostic casts of the patient, with patient's name and candidate's ID#, completed prior to the examination.

### **CRITERIA**

1. The patient shall have received no periodontal treatment (surgery, scaling, root planing or polishing) in the selected segment for a period of at least six months prior to the examination.
2. The candidate must be able to manage patient properly, including control of pain and bleeding.

**The procedures, instruments and materials used are the choice of the candidate, as long as these are currently accepted and taught by accredited dental programs and the candidate has been trained in their use. It is the responsibility of the candidate to provide the instruments used in the examination process. Candidates may choose to use conventional hand instruments or sonic or ultrasonic instruments to complete the deposit removal on their patient. Regardless of their choice of instrument method, the evaluation of the candidate's performance is based on the final treatment of the patient as judged by the published evaluation criteria.**

Candidates must receive a minimum score of 75 to pass this examination.

### **DATA COLLECTION**

**All papers are to be identified by candidate ID# and patient(s) name only.**

1. PATIENT HEALTH HISTORY/ORAL INSPECTION - Candidates are required to record and review a complete and accurate medical history for each patient on the forms provided. Examiners must be alerted to conditions that might contraindicate treatment or require alteration of procedures such as a blood dyscrasia, heart condition, valvular infections, rheumatic fever, uncontrolled diabetes, hepatitis, or any communicable disease. A written clearance by the patient's physician will be required for any systemic condition that may jeopardize the health of the patient, operator or examiner. Candidates are expected to record and review a complete and accurate oral inspection for each patient on the form provided. Acceptable performance is demonstrated if 100% of the findings are correct. 5 points. **No allowable errors.**
2. DENTAL CHARTING and OCCLUSAL CLASSIFICATION - The candidate must chart the status of the patient's dentition using the provided format. All the restorations, missing teeth and obvious carious lesions, which can be detected visibly, radiographically or by penetration with light pressure on the explorer, shall be identified. The candidate must assess and record the status of the patient's occlusion and wear patterns using the

provided format. Acceptable performance is demonstrated if 100% of the findings are correct. 5 points. **No allowable errors.**

3. PERIODONTAL CHARTING - The candidates must chart the depth of the gingival sulcus for all teeth. The depth of each sulcus/pocket must be measured to the nearest millimeter on 6 aspects (MB, B, DB, ML, L, DL) of each tooth. 10 points, 2 allowable errors. **When a candidate incurs more than the allowable 2 errors, 2 points per error will be deducted up to a total of 10 points.**

### PROPHYLAXIS

1. SUPRAGINGIVAL CALCULUS - The candidate must effectively remove all deposits so that all surfaces are visually clean when air-dried, tactile smooth and free of plaque when disclosed. Acceptable performance will be based upon the patient classification.
  - a. MEDIUM - 4 allowable errors will be permitted for this type of patient. For each error above the allowable, 5 points per error will be deducted up to a total of 15 points.
  - b. HEAVY - 5 allowable errors will be permitted for this type of patient. For each error above the allowable, 5 points per error will be deducted up to a total of 15 points.
2. SUBGINGIVAL CALCULUS - The candidate must effectively remove calculus so that no deposits are detectable with an explorer or visible when deflected with air. Acceptable performance will be based on the patient classification.
  - a. MEDIUM - 8 allowable errors will be permitted for this type of patient. For each error above the allowable, 5 points per error will be deducted up to a total of 25 points.
  - b. HEAVY - 12 allowable errors will be permitted for this type of patient. For each error above the allowable, 5 points per error will be deducted up to a total of 25 points.
3. STAIN - The candidate must effectively remove extrinsic stain from all surfaces. Acceptable performance will be based on the patient classification.
  - a. MEDIUM - 3 errors will be permitted for this type of patient. For each error above the allowable, 5 points per error will be deducted up to a total of 10 points.
  - b. HEAVY - 5 allowable errors will be permitted for this type of patient. For each error above the allowable, 5 points per error will be deducted up to a total of 10 points.
4. TISSUE CONDITION - The candidate must effectively utilize an instrumentation method so that unwarranted soft tissue trauma (abrasions or lacerations) does not occur as a result of the prophylaxis. Acceptable performance will be based upon the patient classification.
  - a. MEDIUM - 3 allowable errors will be permitted for this type of patient. (5 points)
  - b. HEAVY - 4 allowable errors will be permitted for this type of patient. (5 points)

### ORAL HYGIENE INSTRUCTION

The candidate must instruct the patient in proper oral hygiene and its relationship to the patient's oral health. The patient will be requested to describe the techniques discussed by the candidate. Acceptable performance level is 100%. (5 points)

### PROFESSIONALISM

1. PROFESSIONAL Demeanor - Each candidate must demonstrate professional standards: suitable operating attire, i.e. uniform, stockings, shoes, nails, hair and all aspects of professional appearance.
2. PATIENT MANAGEMENT - Each candidate must demonstrate professional consideration in the management of his/her patient.
3. ASEPTIC TECHNIQUES - Each candidate must comply with aseptic protocol.

**A maximum of five (5) points will be deducted for failure to comply with professionalism.**

**CRITERIA - ALGINATE IMPRESSIONS - 20 points**

2 points each:

1. Hard tissue shall be adequately reproduced.
2. There shall be no more than three bubbles in each impression on hard surfaces and these shall be smaller than 1-1/2 mm.
3. Soft tissue shall be adequately reproduced.
4. There shall be no more than four voids in the soft tissue of each impression and these are less than 3 mm in size.
5. The buccal-labial border extensions shall be acceptable.
6. The posterior border extensions shall be acceptable.
7. The impression material shall be adequately supported.
8. The impression material shall be evenly distributed in the tray.
9. There shall be no more than one area of tray exposure and, if so, it is in a non-critical area.
10. The impression shall be clean and free of debris, blood, etc. (candidate must insure that the impression shall be adequately disinfected).

## **SAMPLE EXAM SCHEDULE**

### **A. THURSDAY MORNING - CAST GOLD RESTORATION**

1. 6:30 – 7:00 a.m.: Check in
2. 7:00 – 7:15 a.m.: Orientation
3. 7:15 – 8:00 a.m.: Patient Check in
4. 8:00 – 11:30 a.m.: Class II Gold Restoration (Inlay or Onlay) **or**  $\frac{3}{4}$  Crown **or** Full Crown

Preparation  
Final impression  
Checks

**11:30 a.m. – 12:30 p.m.: BREAK**

### **B. THURSDAY AFTERNOON - OPERATIVE EXAMINATION, CLASS II AMALGAM AND CLASS III COMPOSITE**

1. 12:30 – 1:00 p.m.: Check in - One or both lesions (do not prepare both restorations simultaneously)
2. 1:00 – 5:00 p.m.: Prepare first restoration and check  
Finish first restoration and check  
Prepare second restoration and check  
Finish second restoration and check

### **C. FRIDAY MORNING - PERIO AND ALGINATE IMPRESSION**

1. 6:30 – 7:00 a.m.: Check in
2. 7:00 – 7:15 a.m.: Orientation
3. 7:15 – 8:00 a.m.: Patient Check in
4. 8:00 – 11:00 a.m.: Prophylaxis as assigned on patient with periodontitis.  
Upper and lower alginate impressions on same patient.

**11:00 a.m. – 11:30 a.m.: BREAK**

5. 11:30 a.m.: – 1:30 p.m.: DOR and Jurisprudence Exams (written)