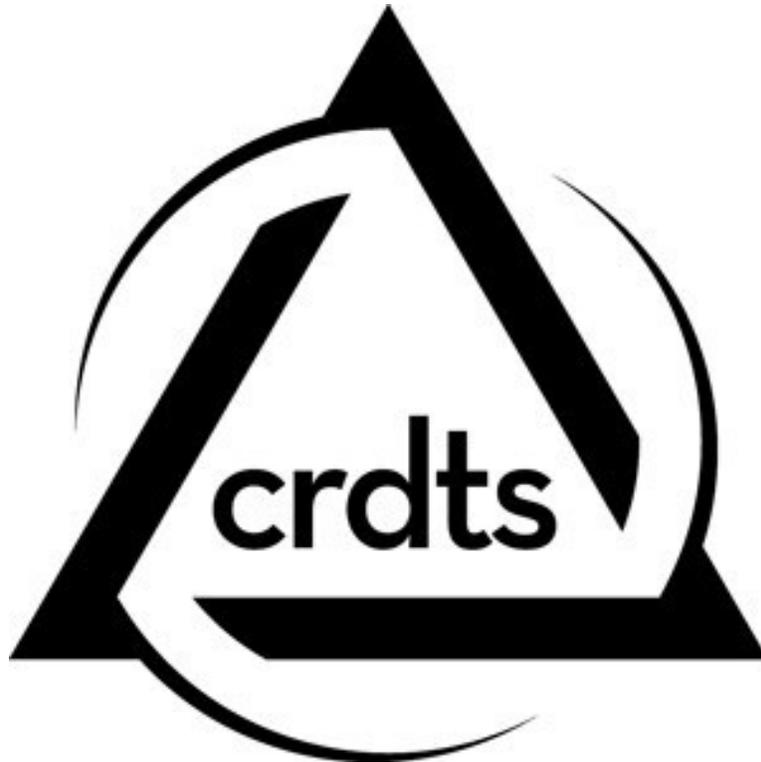


# DENTAL EXAMINATION FIXED PROSTHODONTIC CANDIDATE MANUAL

**Class of 2027**



**A National Dental Examination**

As administered by:

**Central Regional Dental Testing Service, Inc.**

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**Please read this candidate manual prior to attending the candidate orientation and bring it with you to the orientation and the examination.**

# Fixed Prosthodontic Examination

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# CONTENT, CRITERIA & SCORING SYSTEM - OVERVIEW

## PART III: FIXED PROSTHODONTICS EXAMINATION

CONTENT	FORMAT
<ol style="list-style-type: none"><li>1. Preparation of tooth #5, a single-layered artificial tooth, for a porcelain fused to zirconia crown as one abutment for a 3-unit bridge. (The bridge is not fabricated for this examination.)</li><li>2. Preparation of tooth #3, a single-layered artificial tooth, for a Monolithic Zirconia Ceramic Crown as the other abutment for the same 3-unit bridge. Both preparations must be parallel to each other.</li><li>3. Bridge Factor evaluates the line of draw for the bridge abutment preparations</li><li>4. Preparation of tooth #9, a single-layered artificial tooth for an Anterior Lithium Disilicate Ceramic Crown.</li></ol>	<ul style="list-style-type: none"><li>- Performed on a Simulated Patient</li><li>- Time: 4.0 hours</li></ul>

### **SCORING SYSTEM**

The examination scoring system was developed in consultation with three different measurement specialists; the scoring system is criterion-based and was developed using an analytical model.

Only State Boards of Dentistry are legally authorized to determine standards of competence for licensure in their respective jurisdictions. However, in developing the examination, CRDTS has recommended a score of 75 to be a demonstration of sufficient competence; and participating State Boards of Dentistry have agreed to accept that standard. In order to achieve “CRDTS status” and be eligible for licensure in a participating state, candidates must achieve a score of 75 or more in each procedure within each Part of the examination.

Each examination score is based on 100 points. If all sections of an examination are not taken, a score of “0” will be recorded for that specific examination.

### **PART III: SCORING SYSTEM FOR FIXED PROSTHODONTIC SIMULATED PATIENT PROCEDURES**

CRDTS and other testing agencies have worked together on a national level to draft and refine the performance criteria for each procedure in this examination. For the majority of those criteria, gradations of competence are described across a 4-level rating scale. Those criteria appear in this manual and are the basis of the scoring system. Those four rating levels may be generally described as follows:

#### **SATISFACTORY**

The treatment is of good to excellent quality, demonstrating competence in clinical judgment, knowledge and skill. The treatment adheres to accepted mechanical and physiological principles permitting the restoration of the tooth to normal health, form and function.

#### **MINIMALLY ACCEPTABLE**

The treatment is of acceptable quality, demonstrating competence in clinical judgment, knowledge and skill to be acceptable; however, slight deviations from the mechanical and physiological principles of the satisfactory level exist which do not damage the patient nor significantly shorten the expected life of the restoration.

**MARGINALLY SUBSTANDARD**

The treatment is of poor quality, demonstrating a significant degree of incompetence in clinical judgment, knowledge or skill of the mechanical and physiological principles of restorative dentistry, which if left unmodified, will cause damage to the patient or substantially shorten the life of the restoration.

**CRITICALLY DEFICIENT**

The treatment is of unacceptable quality, demonstrating critical areas of incompetence in clinical judgment, knowledge or skill of the mechanical and physiological principles of restorative dentistry. The treatment plan must be altered and additional care provided, possibly temporization in order to sustain the function of the tooth and the patient’s oral health and well-being.

In Part III, a rating is assigned for each criterion in every procedure by three different examiners evaluating independently. Based on the level at which a criterion is rated by at least two of the three examiners, points may be awarded to the candidate. In any instance that none of the three examiners’ ratings are in agreement, the median score is assigned. However, if any criterion is assigned a rating of *critically deficient* by two or more of the examiners, **no points are awarded for that procedure or for the Examination Part**, even though other criteria within that procedure may have been rated as satisfactory. A description of Part III and the number of criteria that are evaluated for the procedures in Part III appears below:

**Part III: FIXED PROSTHODONTICS**

The Prosthodontics Examination is a simulated patient examination which consists of four procedures completed on artificial teeth: a Monolithic Zirconia Ceramic Crown Preparation as a terminal abutment for a 3-unit bridge, a porcelain-fused-to-zirconia crown preparation as an abutment for a bridge, the bridge factor which evaluates the line of draw for the bridge abutment preparations, and an Anterior Lithium Disilicate Ceramic Crown Preparation on an anterior central incisor.

Monolithic Zirconia Ceramic	9 Criteria
Porcelain-Fused-to-Zirconia	10 Criteria
Bridge Factor	2 Criteria
Anterior Lithium Disilicate Ceramic	11 Criteria

To compute the score for each individual procedure, the number of points the candidate has earned for each criterion is totaled, divided by the maximum number of possible points for that procedure and the results are multiplied by 100. This computation converts scores for each procedure to a basis of 100 points. Any penalties that may have been assessed during the treatment process are deducted **after** the total score for the Examination procedure has been converted to a basis of 100 points.

If no critical deficiency has been confirmed by the examiners, the total score for each of the procedures within Parts II, III and V are computed by adding the number of points that the candidate has earned across the procedures in that Part, and that sum is divided by the number of possible points for the procedures in that Part. If a critical/ deficiency has been confirmed by the examiners, an automatic failure is recorded for the procedure within the Examination Part. An example of computing scores that include a less than 75% and critical deficiency is shown below for Part III:

PROCEDURE	# CRITERIA	POINTS EARNED	POINTS POSSIBLE	COMPUTED SCORE
Monolithic Zirconia Ceramic	9 Criteria	33	36	91.66
Porcelain-Fused-to-Zirconia	10 Criteria	0	40	0.00
Bridge Factor	2 Criteria	6	8	75.00
Anterior Lithium Disilicate Ceramic	11 Criteria	32	44	72.72

For Parts II, III and V, the computed score for each procedure is *not averaged*, but instead is numerically weighted by the ratio of its number of scorable criteria to the total number of scorable criteria in the Procedure. If any penalties were assessed, the points would be deducted as percentage points from the procedure score within-Part III.

### **PENALTY DEDUCTIONS**

Throughout the examination, not only clinical performance will be evaluated, but also the candidate's professional demeanor will be evaluated by Clinic Floor Examiners. A number of considerations will weigh in determining the candidate's final grades and penalties may be assessed for violation of examination standards, as defined within this manual, or for certain procedural errors as described below:

Any of the following may result in a deduction of points from the score of the examination procedure or dismissal from the exam in any of the clinical procedures:

1. Violation of universal precautions (1 point) or infection control; gross asepsis; operating area is grossly unclean, unsanitary or offensive in appearance; failure to dispose of potentially infectious material and clean the operatory after individual examinations (10 points)
2. Poor Professional Demeanor – unkept, unclean, or unprofessional appearance (1 point); inconsiderate or uncooperative with other candidates, examiners or testing site personnel (10 points)
3. Improper Operator/Manikin position (1 point)
4. Pencil marks on teeth (1 point)
5. Uncleanliness of models when turned in that would impede visual assessment of the procedure (1 point)

The following infractions will result in a loss of **all** points for the entire examination Part:

1. Violation of Examination Standards, Rules or Guidelines
2. Treatment of teeth or surfaces other than those approved or assigned by examiners.
3. Damage to an adjacent tooth requiring a restoration (see criteria).
4. Gross iatrogenic damage to the simulated gingiva and/or typodont located anywhere within or near the treatment selection.
5. Use of canned compressed air
6. Critical Lack of Diagnostic/Clinical Judgment Skills – This penalty would be applied when the prognosis of the treatment and/or the simulated patient's well-being is seriously jeopardized. Examples include but are not limited to:
  - Damage to the typodont outside of the assigned work area

The penalties or deficiencies listed above do not imply limitations, since obviously some procedures will be classified as unsatisfactory for other reasons, or for a **combination** of several deficiencies.

**Professional Conduct** – All substantiated evidence of falsification or intentional misrepresentation of application requirements, collusion, dishonesty, or use of unwarranted assistance during the course of the examination shall automatically result in failure of the entire examination by any candidate.

In addition, there will be no refund of examination fees and that candidate cannot apply for re-examination for one full year from the time of the infraction. Any of the following will result in failure of the entire examination:

- b. Falsification or intentional misrepresentation of application requirements
- c. Cheating (Candidate will be dismissed immediately)
- d. Any candidate demonstrating complete disregard for the oral structures, welfare of the simulated patient and/or complete lack of skill and dexterity to perform the required clinical procedures

- e. Misappropriation of equipment (theft)
- f. Receiving unwarranted assistance
- g. Alteration of examination records

## PART III: FIXED PROSTHODONTICS EXAM

The Fixed Prosthodontics Examination is a stand-alone examination. The Fixed Prosthodontics Examination consists of four procedures, as follows:

### PART III: FIXED PROSTHODONTICS EXAMINATION

1. Preparation of tooth #5, a single-layered artificial tooth, for a porcelain fused to zirconia crown as one abutment for a 3-unit bridge. (The bridge is not fabricated for this examination)
2. Preparation of tooth #3, a single-layered artificial tooth, for a monolithic zirconia ceramic crown as the other abutment for the same 3-unit bridge.
3. The bridge factor which evaluates the line of draw for the bridge abutment preparations
4. Preparation of tooth #9, a single-layered artificial tooth for an anterior lithium disilicate ceramic crown.

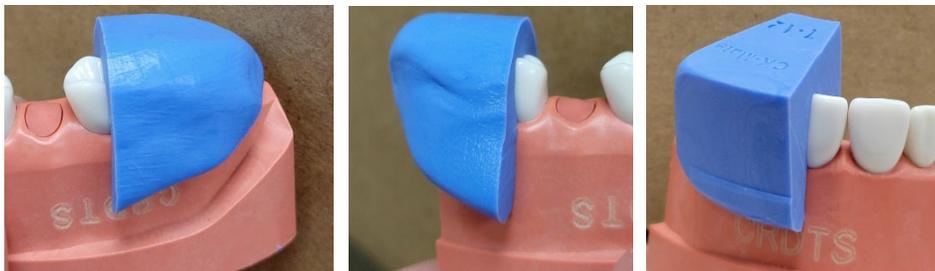


## GENERAL REQUIREMENTS

1. **Manikin Requirements and Mounting:** A mounted manikin with full facial shroud should be provided by the testing site for insertion of the typodont. The manikin heads must accommodate the examination typodont which can be adapted to a chair-mounted post or a high-tech simulation lab unit. If the typodonts are to be chair-mounted, they must have an articulating hinge attached. If a simulation lab is being used, the typodonts must be adapted with appropriate connectors. Please check with the site regarding equipment provided.

2. **Putty Matrix:** Since working and scoring articulators could cause a variance in occlusion, standardized reduction matrices are supplied by CRDTS to be used by both the candidate and examiner for evaluating occlusal, facial and palatal reduction.

Matrices are sectioned from the facial to the lingual at the midpoint of teeth #3,5 and #9 along the long axis of the tooth.



3. **Patient Simulation:** The correct patient/operator position must be maintained while operating. Throughout the simulated patient procedures, the treatment process will be observed by Clinic Floor

Examiners and evaluated as if the manikin were a live patient. Except for having the manikin wear protective eyewear, the manikin is subject to the same treatment standards as any patient. The facial shroud may not be displaced other than with those retraction methods which would be reasonable for a patient's facial tissue. Some modifications in the treatment procedure are imposed due to the mechanical simulation conditions.

The Candidate should use only air but may use both air and water spray when preparing teeth #9, #3 and #5. If water spray is utilized, a mechanism to collect and remove the water must be in place during the use of the water spray. Models or pre-preparations are not permitted to be brought to the examination site.

4. **Security Requirements:** No written materials may be in the operating area other than this Candidate Manual and CRDTS forms.
5. **Infection Control:** The candidate must follow the most current recommended infection control procedures as published by the CDC during all simulated patient clinical procedures. The only exception to standard infection control precautions is that the candidate is not required to maintain protective eyewear on the manikin during simulated patient procedures. Infection control will be monitored by Clinic Floor Examiners. ([www.cdc.gov/oralhealth/infectioncontrol/guidelines](http://www.cdc.gov/oralhealth/infectioncontrol/guidelines))
6. **Assigned Teeth:** Once a procedure has been started, the procedure must be carried to completion on the assigned tooth/teeth with no substitutions permitted. Substitution of teeth or preparation of the wrong tooth/teeth during the Fixed Prosthodontic Examination will result in failure of the specific examination.
7. **Assistants:** Auxiliary personnel are not permitted to assist at chairside or in a laboratory during the simulated patient examination. Candidates may not assist each other, critique, or discuss one another's work.
8. **Adjacent Damage:** The candidate's score will be penalized for any unwarranted damage to adjacent teeth or to the simulated gingival area during simulated patient procedures.
9. **Examination Sequence:** Candidates must mount their prosthodontic modules, and the Clinic Floor Examiner must check the mounting of the endodontic typodont and authorize the candidate to proceed. During all simulated patient procedures, the typodont may *not be disassembled* without the permission of a Clinic Floor Examiner.

### **Requirements Specific to the Fixed Prosthodontics Examination**

#### **1. Required Materials: Fixed Prosthodontic Typodont and Modules:**

CRDTS will provide all necessary modules for the candidate, which include the following: CRDTS model with all modules. This includes mandibular arch and prost upper segments.

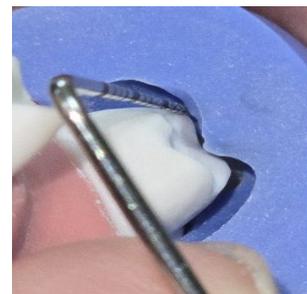
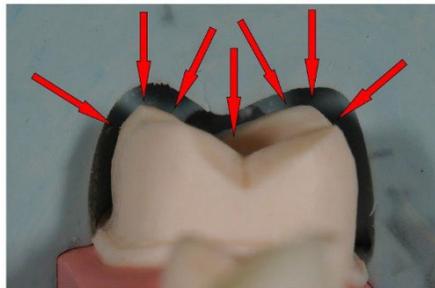
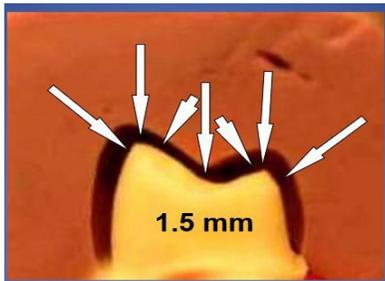
These modules will be distributed to the candidate before the Fixed Prosthodontic Examination begins.

Testing modules will have the candidate number pre-entered, candidates must verify the number before working on the modules.

#### **2. Mounting Check-In:** When the fixed prosthodontic modules are mounted in the typodont carrier trays and the typodont is mounted in the manikin, a Clinic Floor Examiner must check the mounting, and identification numbers and authorize the candidate to begin. Each module is number coded to indicate correct placement in the carrier trays.

A CFE will verify the correct placement of an occlusal opening limiting rod prior to examination start time.

3. **Crown Preparations:** The preparation for a monolithic zirconia ceramic (MZC) crown is completed on tooth #3; the preparation for a porcelain-fused-to-zirconia (PFZ) crown is completed on tooth #5; and the preparation for an anterior lithium disilicate ceramic (ALDC) is completed on tooth #9. The crown preparations on teeth #3 and #5 must be prepared as abutments for a 3-unit bridge. The teeth must be prepared for full crowns with supragingival margins. The assigned teeth will be single layer teeth. The teeth should be prepared in the appropriate proportions, taper and depths as defined in the criteria. No isolation dam is required for the crown preparations.
4. **Margins:** Prepare the margins to within 0.5 mm of the gingival shroud. For the anterior lithium disilicate crown preparation because margins are placed 0.5 mm above the simulated gingival, the criteria have been adjusted accordingly. The lingual margin for the porcelain-fused-to-zirconia crown should be prepared for a ceramic margin, 0.5 mm.
5. **Occlusal Reduction:** The tooth for the PFZ crown should be prepared for a porcelain occlusal surface with an optimal occlusal reduction of 1.5 mm. For the MZC crown preparation, the occlusal reduction is optimally 1.5 mm.  
Only the matrix will be used to evaluate occlusal reduction, so it is recommended that candidates utilize a periodontal probe at the locations illustrated by these arrows to accurately determine the correct occlusal reduction, including two plane reduction.



Examiners will use all sections of the matrices to determine accurate reduction measurements across the entire occlusal table, including those views beyond the matrices sectioned lines.

6. **Equilibration Prohibited:** No equilibration will be permitted on the typodont prior to or subsequent to either crown preparation.
7. **Dismantling the Manikin:** The typodont should be as clean as it was when you received it. During both the endodontic and the prosthodontic procedures, **the candidate may not disassemble the manikin without permission of the Clinic Floor Examiner.** A CFE must be notified prior to disassembly of the typodont. The modules will be returned to the module storage bag until they are graded and all grade forms/Progress Forms will be collected by the Clinic Floor Examiners. Removal of the manikin, typodont or teeth during the examination without permission of the Clinic Floor Examiner will result in failure.
8. **Evaluation:** When the crown preparations are complete, the candidate must request permission from the Clinic Floor Examiner to dismantle the manikin and remove the fixed prosthodontic modules from the carrier trays. At that time, the modules and all parts of the reduction matrices are to be placed in the bag labeled with the candidate's number and collected, along with the completed progress form, by the Clinic Floor Examiner.  
The fixed prosthodontic modules containing the crown preparations will be maintained by CRDTS as part of the candidate's examination record.

**\*Retake Policy: Please see Dental Examination Overview, Policy and Procedures Manual**

## PORCELAIN-FUSED-TO-ZIRCONIA CROWN PREPARATION

### Tooth #5 - Cervical Margin and Draw

#### MARGIN/EXTENSION

SAT	The margins should be 0.5 mm occlusal to the simulated free gingival margin.
ACC	The cervical margin is at the level of or no more than 1.0 mm occlusal to the simulated free gingival margin.
SUB	The cervical margin is overextended 0.5 mm apical to the CEJ or the crest of the simulated free gingival margin, whichever is most occlusal. The cervical margin is underextended, more than 1.0 mm but no more than 1.5 mm occlusal to the crest of the simulated free gingival margin.
DEF	The cervical margin is overextended more than 0.5 mm apical to the simulated free gingival margin causing visual damage to the typodont. The cervical margin is underextended more than 1.5 mm occlusal to the simulated free gingival margin, thereby compromising esthetics, resistance and retention form.

#### MARGIN/DEFINITION

SAT	The cervical margin is a smooth, continuous, well defined, 360 degree chamfer or rounded shoulder.
ACC	The cervical margin is continuous but slightly rough and lacks some definition. The cervical bevel, when used, is greater than 1.0 mm but does not exceed 1.5 mm, and lacks some definition.
SUB	The cervical margin has some continuity, is significantly rough and is poorly defined.
DEF	The cervical margin has no continuity and/or definition or exhibits an indication of a lip or "J" design.

#### LINE OF DRAW

SAT	The appropriate path of insertion varies less than 10° from parallel to the long axis of the tooth on all axial surfaces and a line of draw is established.
ACC	The path of insertion / line of draw deviates 10° to less than 20° from the long axis of the tooth.
SUB	The path of insertion / line of draw deviates 20° to less than 30° from the long axis of the tooth.
DEF	The path of insertion / line of draw is grossly unacceptable, deviating 30° or more from the long axis of the tooth.

# PORCELAIN-FUSED-TO-ZIRCONIA CROWN PREPARATION

## Tooth #5 - Walls, Taper and Finish Line

### AXIAL WALLS – SMOOTHNESS/UNDERCUT

SAT	Walls are smooth and well-defined, no undercuts.
ACC	The walls are slightly rough and lack some definition.
SUB	The axial walls are rough.
DEF	There is an undercut.

### TAPER

SAT	There is full visual taper (6° - 16°).
ACC	Taper is present, but nearly parallel (less than 6°) or slightly excessive (greater than 16°, but less than 24°).
SUB	There is no taper or excessive taper (greater than 24°).
DEF	The taper is grossly over-reduced (greater than 30°).

### CERVICAL MARGIN WIDTH

SAT	The cervical margin is 0.5 mm but no greater than 1.0 mm wide.
ACC	The cervical margin is greater than 1.0 mm, but is no greater than 1.5 mm in width.
SUB	The cervical margin is [ ] greater than 1.5 mm. not to exceed 2.0 mm in width.
DEF	The cervical margin is [ ] less than 0.5 mm or beveled or [ ] greater than 2.0 mm in width.

### AXIAL REDUCTION

SAT	The facial and palatal wall reduction follows the facial planes of contour and is optimally 1.5 mm when measured at any point between the original height of contour and the facial-occlusal line angle.
ACC	The facial and palatal wall reduction follows the facial planes of contour and is no less than 1.0 mm and no greater than 2 mm.
SUB	The facial and palatal wall reduction no longer follows the facial/ planes of contour and is no less than 0.5 mm and no greater than 3.0 mm.
DEF	The facial and palatal wall axial reduction is less than 0.5 mm or greater than 3 mm.

### OCCLUSAL REDUCTION

SAT	Reduction of the occlusal table, which includes secondary planes, is optimally 1.5 mm.
ACC	Reduction of the occlusal table, which includes secondary planes, is greater than 1.5 mm up to 2.0 mm.
SUB	Reduction of the occlusal table, which includes secondary planes, is [ ] 1.0 mm to less than 1.5 mm or [ ] greater than 2.0 mm up to 2.5 mm.
DEF	Reduction of the occlusal table, which includes secondary planes, is grossly [ ] over-reduced, greater than 2.5 mm, encroaching on the pulp and impacting resistance and retention form; or grossly [ ] under-reduced, less than 1.0mm, resulting in insufficient occlusal clearance for adequate restorative material.

### INTERNAL LINE ANGLES

SAT	Internal line angles and cusp tips are rounded.
ACC	Internal line angles and cusp tip areas not completely rounded and show a slight tendency of being sharp.
SUB	The internal line angles and cusp tip areas show only minimal evidence of rounding with a greater tendency of being sharp.
DEF	The internal line angles or cusp tip areas are excessively sharp with no evidence of rounding.

### OCCLUSAL ANATOMY

SAT	The general occlusal anatomy is maintained.
SUB	The occlusal anatomy is flat.

## MONOLITHIC ZIRCONIA CERAMIC CROWN PREPARATION

### Tooth #3 - Cervical Margin and Draw

#### MARGIN/EXTENSION

SAT	The margins should be 0.5 mm occlusal to the simulated free gingival margin.
ACC	The cervical margin is at the level of or no more than 1.0 mm occlusal to the simulated free gingival margin.
SUB	The cervical margin is overextended 0.5 mm apical to the crest of the simulated free gingival margin. The cervical margin is under-extended, more than 1.0 mm but no more than 1.5 mm occlusal to the crest of the simulated free gingival margin.
DEF	The cervical margin is overextended more than 0.5 mm apical to the simulated free gingival margin causing visual damage to the tyodont. The cervical margin is under-extended more than 1.5 mm occlusal to the simulated free gingival margin, thereby compromising esthetics, resistance and retention form.

#### MARGIN DEFINITION

SAT	The cervical margin is a smooth, continuous, well defined, 360 degree chamfer or rounded shoulder.
ACC	The cervical margin is continuous but slightly rough and lacks some definition.
SUB	The cervical margin has some continuity, is significantly rough and is poorly defined.
DEF	The cervical margin has no continuity and/or definition or exhibits an indication of a lip or "J" design.

#### LINE OF DRAW

SAT	The appropriate path of insertion varies less than 10° from parallel to the long axis of the tooth on all axial surfaces and a line of draw is established.
ACC	The path of insertion/line of draw deviates 10° to less than 20° from the long axis of the tooth.
SUB	The path of insertion/line of draw deviates 20° to less than 30° from the long axis of the tooth.
DEF	The path of insertion/line of draw deviates 30° or more from the long axis of the tooth.

# MONOLITHIC ZIRCONIA CERAMIC CROWN PREPARATION

## Tooth #3 - Walls, Taper and Finish Line

### AXIAL WALL-SMOOTHNESS/UNDERCUT

SAT	Walls are smooth and well-defined, no undercuts.
ACC	The walls are slightly rough and lack some definition.
SUB	The axial walls are rough.
DEF	There is an undercut.

### TAPER

SAT	There is full visual taper (6°- 16°).
ACC	Taper is present, but nearly parallel (less than 6°) or slightly excessive (greater than 16°, but less than 24°).
SUB	There is no taper or excessive taper (greater than 24°).
DEF	The taper is grossly over-reduced (greater than 30°).

### CERVICAL MARGIN WIDTH

SAT	The cervical margin is 0.5 mm but no greater than 1.0 mm in width.
ACC	The cervical margin is greater than 1.0 mm, but is no greater than 1.5 mm in width.
SUB	The cervical margin is [ ] less than 0.5 mm or [ ] greater than 1.5 mm, not to exceed 2.0 mm in width.
DEF	The cervical margin is [ ] knife-edge/beveled or [ ] greater than 2.0 mm in width.

### OCCLUSAL/AXIAL REDUCTION

SAT	Reduction of the occlusal table, buccal, and palatal walls, which includes secondary planes, is optimally 1.5 mm.
ACC	Reduction of the occlusal table, buccal, and palatal walls, which includes secondary planes, is greater than 1.5 mm up to 2 mm.
SUB	Reduction of the occlusal table, buccal, and palatal walls, which includes secondary planes, is [ ] 1.0 mm to less than 1.5mm or [ ] greater than 2.0mm up to 2.5 mm.
DEF	Reduction of the occlusal table, buccal, and palatal walls, which includes secondary planes, is grossly [ ] over- reduced, greater than 2.5 mm; or grossly [ ] under-reduced, less than 1.0 mm, resulting in insufficient occlusal clearance for adequate restorative material and/or [ ] any axial surface on the preparation is in contact with the matrix.

### INTERNAL LINE ANGLES

SAT	Internal line angles and cusp tips are rounded.
ACC	Internal line angles and cusp tip areas are not completely rounded and show a slight tendency of being sharp.
SUB	The internal line angles and cusp tip areas show only minimal evidence of rounding with a greater tendency of being sharp.
DEF	The internal line angles or cusp tip areas are excessively sharp with no evidence of rounding.

### OCCLUSAL ANATOMY

SAT	The general occlusal anatomy is maintained.
SUB	The occlusal anatomy is flat.

## BRIDGE FACTOR

### PATH OF INSERTION/LINE OF DRAW

SAT	A line of draw or path of insertion that would allow for the full seating of a fixed prosthesis in a direct vertical plane without rotation either mesio-distally or bucco-lingually.
ACC	A line of draw or path of insertion that, due to angulations of the surface of the preparations, would require altering the path of insertion both mesio-distally and/or bucco-lingually from a direct vertical axis to allow full seating.
DEF	No line of draw or path of insertion exists through any plane of rotation without the removal of additional tooth structure of either/both of the preparations.

### CONDITION OF SOFT TISSUE IN THE PONTIC AREA

SAT	The simulated gingiva and/or typodont is/are free from damage.
ACC	There is slight damage to simulated gingiva and/or typodont consistent with the procedure.
DEF	There is gross iatrogenic damage to the simulated gingiva and/or typodont inconsistent with the procedure.

## ANTERIOR LITHIUM DISILICATE CERAMIC CROWN

### PREPARATION

#### Tooth #9 - Cervical Margin and Draw

#### MARGIN/EXTENSION

SAT	The cervical margin is placed 0.5 mm incisal to the simulated free gingival margin.
ACC	The cervical margin is at the level of or no more than 1.0 mm incisal to the simulated free gingival margin.
SUB	The cervical margin is overextended 0.5 mm apical to the crest of the simulated free gingival margin. The cervical margin is under-extended, more than 1.0 mm but no more than 1.5 mm incisal to the crest of the simulated free gingival margin.
DEF	The cervical margin is overextended more than 0.5 mm apical to the simulated free gingival margin causing visual damage to the typodont. The cervical margin is under-extended more than 1.5 mm incisal to the simulated free gingival margin, thereby compromising esthetics, resistance and retention form.

#### MARGIN/DEFINITION

SAT	The cervical margin is a smooth, continuous, 360 degree chamfer or rounded shoulder, well-defined on all axial surfaces. The cervical margin exhibits no bevel.
ACC	The cervical margin is continuous but slightly rough and lacks some definition.
SUB	The cervical margin has some continuity, is significantly rough and is poorly defined.
DEF	The cervical margin is beveled, or exhibits an indication of a lip or "J" design or exhibits an external axial surface of 135° or greater (sloping shoulder).

#### LINE OF DRAW

SAT	The appropriate path of insertion varies less than 10° from parallel to the long axis of the tooth on all axial surfaces and a line of draw is established.
ACC	The path of insertion / line of draw deviates 10° to less than 20° from the long axis of the tooth.
SUB	The path of insertion / line of draw deviates 20° to less than 30° from the long axis of the tooth.
DEF	The path of insertion / line of draw is grossly unacceptable, deviating 30° or more from the long axis of the tooth.

# ANTERIOR LITHIUM DISILICATE CERAMIC CROWN PREPARATION

## Tooth #9 - Walls, Taper and Finish Line

### AXIAL WALLS – SMOOTHNESS/UNDERCUT

SAT	Walls are smooth and well-defined, no undercuts.
ACC	The walls are slightly rough and lack some definition.
SUB	The axial walls are rough.
DEF	There is an undercut.

### TAPER

SAT	There is full visual taper (6° - 16°).
ACC	Taper is present, but nearly parallel (less than 6°) or slightly excessive (greater than 16°, but less than 24°).
SUB	There is no taper or excessive taper (greater than 24°).
DEF	The taper is grossly over-reduced (greater than 30°).

### CERVICAL MARGIN WIDTH

SAT	The cervical margin is optimally 1.0 mm in width.
ACC	The cervical margin is greater than 1.0 mm, but not more than 1.5 mm in width.
SUB	The cervical margin is [ ] 0.5 mm to less than 1.0 mm or [ ] greater than 1.5 mm, not to exceed 2.0 mm in width.
DEF	The cervical margin is less than 0.5 mm or more than 2.0 mm in width.

### INCISAL REDUCTION

SAT	The optimal incisal reduction is 3.0 mm.
ACC	The incisal reduction is not less than 2.5 mm or not more than 3.5 mm.
SUB	The incisal reduction is less than 2.5 mm or up to 4.0 mm.
DEF	The incisal reduction is less than 2.0 mm or more than 4.0 mm.

### LINGUAL FOSSA REDUCTION

SAT	The lingual reduction is ideally 1.0 mm.
ACC	The lingual reduction is greater than 1.00 mm up to 1.5 mm.
SUB	The lingual reduction is [ ] 0.5 mm or greater but less than 1.00 mm or [ ] greater than 1.5 mm but less than 2.0 mm.
DEF	The lingual reduction is less than .5 mm or 2.0 mm or greater.

### LINGUAL WALL HEIGHT

SAT	The lingual wall height is optimally 1.0 mm or more.
ACC	The lingual wall height is 0.5-1.0 mm.
SUB	The lingual wall height is less than .5mm
DEF	There is no lingual wall.

### FACIAL AXIAL REDUCTION

SAT	The facial reduction follows the facial planes of contour and is optimally 1.5 mm when measured at any point between the original height of contour and the incisal edge.
ACC	The facial reduction follows the facial planes of contour and is no less than 1.0 mm and no greater than 2 mm.
SUB	The facial reduction no longer follows the facial planes of contour and is no less than 0.5 mm and no greater than 3.0 mm.
DEF	The facial axial reduction is less than 0.5 mm or greater than 3 mm.

### EXTERNAL/INTERNAL LINE ANGLES

SAT	Internal line angles and external line angles are rounded and smooth.
ACC	External and/or internal line angles are rounded, but irregular.
SUB	External and internal line angles are sharp.
DEF	The external and/or internal line angles are excessively sharp with no evidence of rounding.

**FIXED PROSTHODONTIC SIMULATED PATIENT PROCEDURES**  
**Treatment Management**  
**Penalty Points ONLY**

**CONDITION OF ADJACENT TEETH**

SAT	The adjacent teeth and/or restorations are free from damage.
ACC	Damage to adjacent tooth/teeth can be removed with polishing without adversely altering the shape of the contour and/or contact.
SUB	Damage to adjacent tooth/teeth requires recontouring which changes the shape and/or position of the contact.
DEF	There is gross damage to adjacent tooth/teeth which requires a restoration.

**CONDITION OF SOFT TISSUE**

SAT	The simulated gingiva and/or typodont is/are free from damage.
ACC	There is slight damage to simulated gingiva and/or typodont consistent with the procedure.
SUB	There is iatrogenic damage to the simulated gingiva and/or typodont inconsistent with the procedure.
DEF	There is gross iatrogenic damage to the simulated gingiva and/or typodont inconsistent with the procedure.

**Typodont Condition**

1. Pencil marks on teeth
2. Uncleanliness of models when turned in

**CRITICAL ERRORS**

1. Wrong Tooth/Surface Treated
2. Critical Lack of Clinical Judgment/Diagnostic Skills

**CRDTS**

<b>START:</b>
<b>FINISH:</b>

**FIXED PROSTHODONTIC PROCEDURES**

***NOTE:** A single box must be signed by a Clinic Floor Examiner. A triple box must be signed by three examiners at the Evaluation Station.*

*CRDTS will provide the candidate two fixed prosthodontic testing modules and all other filler modules needed. These testing modules will contain artificial single-layered teeth on which the candidate must complete an Anterior Lithium Disilicate Ceramic Crown Preparation on tooth #9, a Porcelain-Fused-To Zirconia Crown Preparation on tooth #5 and a Monolithic Zirconia Ceramic Crown Preparation on tooth #3. Teeth #5 and #3 must also be prepared as abutment teeth for a 3-unit bridge. When the modules are received, the candidate must check the correct candidate number is on the testing modules and then insert it into the carrier tray. A Clinic Floor Examiner must approve the mounting of the typodont; the typodont may be dismantled only with the authorization of a Clinic Floor Examiner.*

<b>CFE</b>	<b>TYPODONT MOUNTING Modules Labeled with Cand #</b>
<b>CFE</b>	<b>MATRICES ACCEPTABLE</b>

*When the preparations are complete and ready for evaluation, the candidate must request permission from the Clinic Floor Examiner to dismantle the manikin and remove the fixed prosthodontic modules from the carrier trays. Put the modules with the crown preparations and matrices in the labeled bag provided by CRDTS and be sure the Fixed Prosthodontic Progress Form for the crown preparations is collected by the Clinic Floor Examiner.*

**CFE**

**CFE AUTHORIZES DISMANTLING TYPODONT  
CFE Collects Modules, Progress Form**

Examiner #1	Examiner #2	Examiner #3

**FINAL EVAL FIXED PROSTHODONTIC PROCEDURES**

**NOTES and COMMENTS:**

Candidates:	Examiners Only:

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***MUST BE COMPLETED IN BLACK OR BLUE INK***