

CENTRAL REGIONAL DENTAL TESTING SERVICE

DENTAL CANDIDATE'S MANUAL

MANIKIN PROCEDURES – INTEGRATED FORMAT

This manual has been designed to assist in your preparation to be a participant in a clinical examination. Outlined below are general directives and information for the conduct of the examination.

Purpose: The purpose of this examination is to assess the candidate's professional knowledge, skills, abilities and judgment (KSAJ's) as applied in clinical treatment procedures that are a representative sample of the services that are provided in the practice of general dentistry, based on the criticality of the procedure to the patient's systemic and oral health and the frequency with which that service is provided in general practice.

CRDTS: The Central Regional Dental Testing Service, Inc. (hereinafter abbreviated as CRDTS) is an independent testing agency which administers clinical competency examinations in dentistry and dental hygiene in behalf of its member and participating states. Regional testing agencies contract with individual state boards of dentistry to administer the clinical examination required for licensure in those states. Regional testing agencies do not have the authority to license individuals or to implement policy that goes beyond the laws of its member states. Regional testing agencies should not be confused with state boards of dentistry.

CRDTS Member States: The States of Colorado, Georgia, Hawaii, Illinois, Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Carolina, South Dakota, Washington, Wisconsin and Wyoming have joined in the formation of CRDTS as member states.

Jurisdictional Authority: State Boards of Dentistry are each established by state law as the regulatory agencies of the dental profession, accountable to the state legislature and charged with protection of the public. Although all state laws are somewhat different, there are commonalities in their responsibilities to regulate the profession through licensure requirements, to interpret and enforce the dental practice act, to discipline those licensees who practice unethically or illegally, and to assess the competence of applicants for licensure in their jurisdictions through theoretical and clinical examinations. In order to fulfill their mandate to evaluate competence, the CRDTS' member State Boards have joined together to develop and administer fair, valid and reliable clinical examinations in dentistry and dental hygiene.

CRDTS Recognizing Jurisdictions: In addition to the member states listed above, several non-member states also recognize the results of the CRDTS examination. Candidates are encouraged to confirm with the State Board where they wish to seek licensure that the following information is accurate at the time of their application, because licensing requirements and recognizing jurisdictions may have changed. However, current information indicates approximately 40 states recognize CRDTS examination results for licensure.

Results from the CRDTS examination are automatically distributed to the secretaries of all the member State Boards which are listed above, as well as those non-member states which recognize CRDTS' results and have requested routine receipt of examination results. As the testing agency responsible for administering the examination, CRDTS has provided to the Boards of the recognizing states information sufficient to establish that a score of 75 or more on each part of the examination may represent an acceptable demonstration of competence to practice dentistry. However, each State Board of Dentistry is responsible for determining whether a candidate has fulfilled its standards and requirements for licensure. The State Boards' determinations are controlled by state law; the requirements may not be

uniform. Each licensing jurisdiction may use the examination results to the extent authorized by its statutes.

Mission Statement: To provide the dental examination community with test construction and administrative standardization for national uniform dental and dental hygiene clinical licensure examinations. The schedule of these examinations, when delivered in the Curriculum Integrated Format, allows for early identification of deficiencies or weaknesses within clinical skill sets and provides opportunities for remediation in an educational environment. These examinations will demonstrate integrity and fairness in order to assist State Boards with their mission to protect the health, safety and welfare of the public by assuring that only competent and qualified individuals are allowed to practice dentistry and dental hygiene.

Ethical Responsibilities: Licensure as a dental health professional, and the public trust, respect and status that accompanies it, is both a privilege and a responsibility. Implicit in a State Board's charge to protect the public is the responsibility to ensure that practitioners are not only competent, but also ethical. In addition to the American Dental Association's *Code of Ethics*, there are codes of professional conduct within state laws, and the requirements of many State Boards for periodic continuing education courses in ethics for maintenance and renewal of licenses.

During the examination process, there are policies, rules and standards of conduct that are part of the candidate's responsibility; the candidate is expected to read the entire Candidate's Manual, and comply with all those rules and requirements.

The dental practitioner is entrusted with the oral health and welfare of a patient, and it is imperative that such trust be respected by candidates and that service to the patient's needs and well-being are always put first. In every step of the examination process, CRDTS has established policy and examination protocol to ensure that the welfare of patients is safeguarded.

1. CRDTS will provide a consent form that documents the treatment the patient will receive, the fact that the candidate is not a licensed dentist, and a statement that the services provided during the exam may not complete their treatment plan or totally fulfill their oral health needs. The consent form must be executed before the patient can be accepted.
2. CRDTS will provide a health history that screens for systemic conditions or medical considerations that might put the patient at risk during the examination or require premedication in order for them to participate. The health history must be completely filled out and appropriate precautions taken before the patient can be accepted.
3. Once a preparation has been cut to "ideal" dimensions, any modifications that are necessary must be properly documented, and reviewed by an examiner before being carried out.
4. If an exposure should occur, or treatment is suspended or terminated for any reason, CRDTS will complete a Follow-Up Form to document what additional treatment is necessary, who will provide it, and who will be financially responsible. The patient is provided a copy of this form; and the candidate must come to the exam with a "follow-up" plan about how the patient will be provided a continuum of care after the exam, if such care should be needed.
5. In the event of a treatable exposure when the candidate can place a pulp cap and continue the exam, the patient will be given a form that advises them of what has happened and what additional treatment may be required in the future.
6. When patients are checked-in, examiners will review the health history, consent form and treatment selection to see if it is appropriate, meets the criteria and is justified radiographically and clinically. Throughout the examination, examiners will be monitoring patients to see that they suffer no unnecessary discomfort.

The Curriculum Integrated Format (CIF) addresses many of the ethical concerns that have been raised in recent years about the use of patients in clinical examinations. CIF is designed to ensure that candidates have time and opportunity to recruit patients of record who are part of a continuum of care with an appropriately sequenced treatment plan. It is the responsibility of candidates to solicit patient participation in an ethical manner. The candidate should fully inform a prospective patient about the purpose, the process and the importance of a board

examination, including the time involved, and the number of individuals who will be examining them. Copies of health histories and treatment consent forms should be downloaded from the internet at www.crdts.org and used to screen a patient's health condition and plan an appropriate response to any medical issues that may impact the patient's well-being during and after the examination. The patient should be fully informed about their entire treatment plan, advised of alternative options or courses of treatment that might be advantageous to them, and how the procedure(s) to be completed during the examination are sequenced in a plan "with due consideration given to the needs, desires and values of the patient." The patients should also be advised of any benefits that may reasonably be expected as a result of participation. In the process of soliciting and screening patients, candidates should remain in compliance with the ethical considerations promulgated by the ADA Council on Ethics, Bylaws and Judicial Affairs and refrain from the following:

1. Reimbursements between candidates and patients in excess of that which would be considered reasonable for remuneration for travel, lodging, meals or loss of hourly wages.
2. Remuneration between licensure applicants or dental practitioners for acquiring patients.
3. Utilizing patient brokering companies.
4. Delaying treatment beyond that which would be considered acceptable in a typical treatment plan (e.g. delaying treatment of a carious lesion for 24 months).
5. Allowing themselves to be "extorted" by individuals who agree to participate in the examination and then refuse to come at the appointed time unless they are paid a fee.

Board examinations are conducted for the sole purpose of protecting the public by assessing the competence of those who seek to practice dentistry. It is hoped that the professional and ethical management of patients by both CRDTS and the candidates throughout the examination process will leave the volunteer patients in better oral health with an increased respect for the dental profession's diligence in maintaining high standards of competence.

CRDTS Status: "CRDTS Status" is achieved when a candidate has successfully completed all parts to this examination with a score of 75 or more. Candidates achieving "CRDTS Status" enjoy the privilege of being considered eligible for licensure in any of the CRDTS recognizing jurisdictions listed in this manual.

Examination Completion and Obtaining Licensure: There are three agencies with which applicants are involved in the process of completing their CRDTS' examination and obtaining licensure.

1. Central Regional Dental Testing Service, Inc. (CRDTS) - a testing service as described above; the results of a CRDTS examination can be submitted to any recognizing state when applying for licensure. **COMPLETION OF THE CRDTS' EXAMINATION ALONE WILL NOT QUALIFY ANY CANDIDATE FOR LICENSURE. OTHER REQUIREMENTS WITHIN EACH OF THE STATES MUST BE MET.**
2. Testing Site - a school which makes its clinical facility available for a CRDTS examination. The site may have its own forms or specific procedures which may be required of the candidate in order to participate in an examination at that site. In addition, the candidate must have cash or check as required by the respective institution, payable to that testing center (not CRDTS) for materials and equipment used during the examination. Payment must be made before the examination; and proof of payment must be provided at the conclusion of the exam. No scores will be released without satisfactory payment.
3. State Board of Dentistry - the agency to which a candidate must individually apply for licensure in a jurisdiction. Candidates must inform themselves of the requirements of the state(s) in which they wish to be licensed and complete an application with the individual jurisdiction(s).

The candidate should address questions to the appropriate agency.

The CRDTS Administrative Office will provide all information relevant to the examination requirements and procedures.

The testing site can respond to questions regarding facilities, equipment and testing site fees. (The testing site is not responsible for recruiting board patients or making their facilities available on any days other than examination dates.)

Questions regarding licensure or state requirements should be addressed to the appropriate State Board of Dentistry.

Test Development: The examination is developed and revised by the CRDTS Examination Review Committees. These committees are comprised of representatives from various member states, dental educators and special consultants, as required. With both practitioners and educators involved, the Committees have considerable content expertise on which to draw; the Committees also rely on practice surveys, current curricula, standards of competency and the *AADE's Guidance for Clinical Licensure Examinations in Dentistry* to assure that the content and protocol of the examination is current and relevant to practice. Determining the examination content is also guided by such considerations as patient availability, logistical restraints, and the potential to ensure that a skill can be evaluated reliably. The examination content and evaluation methodologies are reviewed annually.

Examination Overview: The examination consists of individual, skill-specific parts. Each examination part is listed below:

- Part I: National Dental Board Examination – Parts I & II
Manikin-Based Examination
- Part II: Endodontics
- Part III: Prosthodontics
- Patient-Based Examination
- Part IV: Periodontics
- Part V: Restorative

Examiners: Candidates will be evaluated by examiners from the jurisdictions which comprise CRDTS. These examiners may be members of their State Board of Dentistry, or may have been selected by their Board to serve as examiners. There may also be examiners from other states. In addition, there are frequently observers at CRDTS' exams who may be faculty members from other schools, new CRDTS' examiners or examiners from other states. Such observers are authorized to participate in calibration and monitor all portions of the examination and may evaluate patients from time to time; however, they do not assign grades or participate in the grading process.

Curriculum Integrated Format (CIF): This format is the pre-graduation licensure examination offered to senior dental students and graduate students of record. The Curriculum Integrated Format affords candidates the opportunity to successfully demonstrate critical clinical competence in basic clinical procedures required by CRDTS' recognizing jurisdictions for licensure. The progressive sequencing of this format provides the opportunity, when necessary, for students to have easy access to remediation within the dental school curriculum as well as for timely issuance of licenses upon graduation.

Curriculum Integrated Format versus Traditional Format: Both of these examination formats are identical in content, criteria and scoring. The major difference between the two formats is in the time-sequencing of how the examination is administered. The Traditional Format examination is administered in its entirety over the course of three days to all eligible candidates near the end of the academic year. The Curriculum Integrated Format examination is administered in segments over the course of several months to eligible dental students during their senior year or graduate program in dental school. If you are a dental student of record (Seniors, Juniors – limited basis, graduate student) and have verified that your dental school is participating in the Curriculum Integrated Format, then you are considered an Integrated Candidate. Dental students of record from other schools or from schools choosing not to participate in the Curriculum Integrated Format as well as practitioners seeking licensure are considered Traditional Candidates. There are separate application policies and deadlines for each format so please review those portions carefully to be sure you've received the correct information and documents.

Examination Dates: Specific examination and deadline dates for participating dental schools can be found on the CRDTS website (www.crdts.org) and are also available through the Site Coordinator at each school.

Administrative/Application Policies and Rules are located at the end of this Manual.

CONTENT, CRITERIA & SCORING SYSTEM - OVERVIEW

CONTENT: PARTS I, II, III

PART I: NATIONAL DENTAL BOARD EXAMINATION – PARTS I & II

PART II: ENDODONTICS EXAMINATION – 100 POINTS

CONTENT	FORMAT
1. Endodontic access opening only on tooth #14, a multi-rooted artificial tooth. 2. Endodontic access, canal instrumentation and obturation on tooth #8, a single-canal artificial tooth.	- Performed on a Manikin - Time: 3.0 hours

PART III: FIXED PROSTHODONTICS EXAMINATION – 100 POINTS

CONTENT	FORMAT
1. Preparation of tooth #5, a single-layered artificial tooth, for a porcelain fused to metal 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 cast gold metal crown as the other abutment for the same 3-unit bridge. Both preparations must be parallel to each other. 3. Preparation of tooth #9, a single-layered artificial tooth for a full ceramic crown.	- Performed on a Manikin - Time: 4.0 hours

SCORING SYSTEM

The examination scoring system was developed in consultation with three different measurement specialists; the scoring system is criterion-referenced and is based on an analytical model. The examination is conjunctive in that its content is divided into separate Parts containing related skill sets and competence must be demonstrated in each one of the Parts. A compensatory scoring system is used within each Part to compute the final score for each Part, as explained below.

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 Part of the examination.

PARTS II – III: SCORING SYSTEM FOR MANIKIN RESTORATIVE 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 tooth must be temporized, or the treatment plan must be altered and additional care provided in order to sustain the function of the tooth and the patient's oral health and well-being.

In Parts II and 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 Parts II and III and the number of criteria that are evaluated for the procedures in each of those Parts appears below:

Part II: ENDODONTICS EXAMINATION – 100 Points

The Endodontics Examination is a manikin-based examination which consists of two procedures: an access opening on an artificial posterior tooth and an access opening, canal instrumentation and obturation on an artificial anterior tooth.

Anterior Endodontics	12 Criteria
Posterior Endodontics	4 Criteria

Part III: FIXED PROSTHODONTICS – 100 Points

The Prosthodontics Examination is a manikin-based examination which consists of three procedures completed on laminated artificial teeth: a cast gold crown preparation as a terminal abutment for a 3-unit bridge, a porcelain-fused-to-metal crown preparation as an abutment for a bridge, plus an evaluation of the line of draw for the bridge abutment preparations, and an all ceramic crown preparation on an anterior central incisor.

Cast Gold Crown	11 Criteria
Porcelain-Fused-to-Metal Crown Preparation	10 Criteria
Ceramic Crown Preparation	10 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. For instance, if the candidate accumulated 30 out of 40 possible points on the ceramic crown preparation, the score for that procedure would be computed as $[100(30/40)=75.00]$. Any penalties that may have been assessed during the treatment process are deducted *after* the total score for the Examination Part 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 Parts II, III is computed by adding the number of points that the candidate has earned *across all procedures in that Part*, and that sum is divided by the number of possible points for all procedures in that Part. If a *critical deficiency* has been confirmed by the examiners, an automatic failure is recorded for both the procedure and the Examination Part. An example for computing scores that include no critical deficiency is shown below for Part III:

PROCEDURE	# CRITERIA	POINTS EARNED	POINTS POSSIBLE	COMPUTED SCORE
Cast Gold Crown Preparation	11 Criteria	34	44	77.27
Porcelain-Fused-to-Metal Crown	10 Criteria	38	40	95.00
Ceramic Crown Preparation	10 Criteria	30	40	75.00
TOTALS for PART III	31 Criteria	102	124	82.25

Although there are three Parts that are scored separately for restorative clinical skills, *within each Part a compensatory system* is used to compute the final score for that Part, as long as there is no *critical deficiency*. 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 Part. For example, the Cast Gold Crown Preparation has a total of 11 scorable criteria which represents 44 possible points out of the total of 124 possible points for Part III. As shown in the example above, the candidate earned 102 out of 124 possible points for the three procedures in Part III for a final score of 82.25 points. If any penalties were assessed, the points would be deducted from the final score of 82.25 for 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:

1. Any of the following may result in a deduction of points from the score of the entire examination Part or dismissal from the exam in any of the clinical procedures:
 - (a) Violation of universal precautions 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.
 - (b) Poor Professional Demeanor--unkempt, unclean, or unprofessional appearance; inconsiderate or uncooperative with other candidates, examiners or testing site personnel;
 - (c) Poor Patient Management--disregard for patient welfare or comfort; inadequate anesthesia
 - (d) Improper management of significant history or pathosis;
 - (e) Inappropriate request for extension or modification;
 - (f) Unsatisfactory completion of required modifications;
 - (g) Improper Operator/Patient/Manikin position;
 - (h) Improper record keeping;

- (i) Improper treatment selection;
 - (j) Improper liner placement;
 - (k) Inadequate isolation - The isolation dam is inappropriately applied, torn and/or leaking, resulting in debris, saliva and/or hemorrhagic leakage in the preparation, rendering the preparation unsuitable for evaluation or the subsequent manipulation of the restorative material.
 - (l) Administration of anesthesia before approval of tooth selection by examiners;
2. The following infractions will result in a loss of **all** points for the entire examination Part:
- (a) Temporization or failure to complete a finished restoration;
 - (b) Violation of Examination Standards, Rules or Guidelines;
 - (c) Treatment of teeth or surfaces other than those approved or assigned by examiners;
 - (d) Gross damage to an adjacent tooth;
 - (e) Failure to recognize exposure;
 - (f) Unavoidable mechanical exposure which is poorly managed or irreparable;
 - (g) Unjustified or irreparable mechanical exposure;
 - (h) Critical Lack of Diagnostic/Clinical Judgment Skills – This penalty would be applied when the prognosis of the treatment and/or the patient’s well-being is seriously jeopardized. Examples include but are not limited to:
 - Inability to differentiate between caries and a pulpal exposure.
 - Inability to carry out instructions for modifications that any competent practitioner should be able to complete.
 - Failure to recognize the need for a critical alteration of the preparation beyond the assigned surfaces, such as a fracture or defect that must be eliminated by the extension of the preparation

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. Corroborated errors for the treatment management criteria for each Manikin procedure will be deducted as penalty points. If any restorative procedure is unacceptable for completion during the examination, the tooth must be temporized, the patient must be adequately informed, and a "Follow-up Form" must be completed.

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:

- ◆ Falsification or intentional misrepresentation of application requirements
- ◆ Cheating (Candidate will be dismissed immediately);
- ◆ Any candidate demonstrating complete disregard for the oral structures, welfare of the patient and/or complete lack of skill and dexterity to perform the required clinical procedures.
- ◆ Misappropriation of equipment (theft);
- ◆ Receiving unwarranted assistance;
- ◆ Alteration of examination records and/or radiographs

SCHEDULE & DATES —CURRICULUM INTEGRATED FORMAT EXAM

Parts II & III: Manikin-based Endodontics & Fixed Prosthodontics Exams – 1

Day Initial Offering: September/November: (Initial offering of the Endodontics and Fixed Prosthodontics Examinations are at the candidate’s school of attendance on a specified date(s) agreed to by CRDTS and the Dean of the testing dental school)

Retest opportunities allowed: Two

1st Retest Date: December/January

2nd Retest Date: May/June

(See complete examination/deadline dates on the cover of this manual and at www.crdts.org)

Candidates will be informed as to the date on which they are to complete the Endodontics Examination and the Fixed Prosthodontics Examination. In the event that these examinations are administered on a number of different days at a specific examination site, candidates may be assigned to groups to indicate which day they are to perform these examinations. Should this be the case, candidates will be informed of their group assignment in advance of the examination date. The examination schedule follows:

Candidate Question & Answer Session

Candidates are expected to review the appropriate Candidate Orientation online at www.crdts.org. There will be a question and answer session at 1:00 PM. the day before the examination begins. Candidates must bring a government-issued photo ID, this Candidate’s Manual, any application requirements that have not been previously submitted and a black ballpoint pen. Check-in will begin at 12:45 PM.

Parts II - III: Curriculum Integrated Format Schedule

FIRST PHASE PARTS II & III	
TIME	MANIKIN
8:00	Group A (B) Setup
8:30	8:30 – 12:30 Prosthodontics
1:00	1:00 – 4:00 Endodontics
4:00	EXAM STOPS
5:00	EXAM COMPLETED

FIRST PHASE

CANDIDATES	TIME	ASSIGNMENT
Group A	8:00 A.M. to 8:30 A.M. 8:30 A.M. to 12:30 P.M. 12:30 P.M. to 12:45 P.M.	Part III: Fixed Prosthodontic Examination Set-Up and Starting Checks Fixed Prosthodontic Procedures (4.0 hours) Dismantle and turn in fixed prosthodontic modules
	12:45 P.M. to 1:00 P.M.	Break – Candidates must leave the clinic floor
	1:00 P.M. to 4:00 P.M. 4:00 P.M. to 4:15 P.M.	Part II: Endodontic Examination Endodontic Examination Procedures (3.0 hours) Dismantle and turn in endodontic modules

SECOND DAY (if necessary)

To accommodate additional candidates, it may be necessary to add a second day to the schedule. Candidates assigned to this day will be assigned to Group B and will follow the same time schedule as Group A listed above. Candidates are informed of their group assignment in advance of the examination date.

FLEX-TIME SCHEDULE: Time blocks have been designated for each portion of the manikin procedures. Every candidate is allowed a maximum of 4 hours for the Prosthodontic Exam and 3 hours for the Endodontic Exam. Should candidates complete their prosthodontic procedures early, prior to 12:30 pm, they can take a short break and then begin their endodontic procedures by checking in with the Clinic Floor Examiner who will assign a three-hour start and finish time. This Flex-time schedule will only be available prior to 12:30 pm. Beginning endodontic procedures early does NOT increase the maximum time allowed as indicated above.

When utilizing the Flex-Time Schedule, candidates will adhere to the required procedures as outlined in this manual regarding completion of the Part III – Prosthodontic Exam and initiating Part II – Endodontic Exam.

Daily Time Schedule

Each candidate must adhere to the published time schedule.

1. **Q & A and Admission.** All candidates **must** be present for Admission and a Q & A session the day before the examination at 1:00 PM for specific instruction and distribution of examination materials by the Chief Examiner. The candidate's identification must be recorded on all examination forms during this time.

In order to receive an examination packet and be admitted to the orientation, the candidate **must** present a government-issued **photo ID** (ex: driver's license or student ID). Candidates who are retaking one or more examination(s) on one specific day must attend the orientation and present all the proper credentials. Candidates who do not have the required identification will **not** be admitted to the examination.

2. **The Fixed Prosthodontics Examination** begins at 8:00 A.M. on the assigned day. Between 8:00 to 8:30 A.M. the Clinic Floor Examiner (CFE) must verify that the manikin head is

properly assembled, and any defective equipment or materials identified and corrected or replaced. At 8:30 A.M. treatment begins for all candidates. There is no extension of time due to starting treatment after 8:30 A.M. Candidates will have until 12:30 P.M. (4.0 hours) to complete the required prosthodontic procedures, at which time they must dismantle and turn in their prosthodontic modules and examination forms.

3. **The Endodontics Examination** begins at 1:00 PM on the assigned day. There is no extension of time due to starting treatment after 1:00 P.M. The Clinic Floor Examiner must verify that the tooth for the endodontic fill has been measured and secured in the typodont, the manikin head is properly assembled. Candidates will have until 4:00 P.M. (3.0 hours) to complete the required endodontic procedures, at which time they must dismantle and turn in their endodontic modules and examination forms.

STANDARDS FOR THE CONDUCT OF THE EXAMINATION

As a participant in an examination to assess professional competency, each candidate is expected to maintain professional standards. The candidate's conduct and treatment standards will be observed during the examination and failure to maintain appropriate conduct and/or standards may result in point penalties and/or dismissal from the exam.

Each candidate will be expected to conduct himself/herself in an ethical, professional manner and maintain a professional appearance at all times. Candidates are prohibited from using any study or reference materials during the examination. Any substantiated evidence of dishonesty; such as collusion, use of unauthorized assistance or intentional misrepresentation during registration, pre-examination or during the course of the examinations shall automatically result in dismissal from and failure of the entire examination and forfeiture of all examination fees for the current examination.

DISHONESTY CLAUSE: Candidates failed for dishonesty shall be denied re-examination for one full year from the time of the infraction. Additionally, all State Boards will be notified of the situation. In some states, candidates failed for dishonesty may be permanently ineligible for licensure. Therefore, candidates should address these matters with the state(s) where they desire licensure prior to retaking the examination.

The standards itemized below apply to all relevant portions of the examination. Failure to adhere to these standards will result in failure of the procedure in progress and/or the entire examination.

Standards for Parts II – III: Manikin Examinations

1. **Anonymity.** The anonymous testing procedures for the examination shall exclude the possibility that any person who is involved with the grading of the examination may know, learn of, or establish the identity of a candidate, or relate or connect the patient or work-product graded or to be graded to a particular candidate. The candidate's name and school information should not appear on any examination forms, materials, or instruments. Grading examiners will be physically isolated from the candidates in a separate area of the clinic and the movement of patients from the clinical area to the grading area shall be controlled by the use of testing agency messengers/assistants. All examination forms and materials are identified by the candidates' identification number which is assigned prior to the examination.
2. **Approved Communication.** All approved communication must be in English. Candidates may communicate with their patient in another language but communication between candidates and Examination Officials must be in English.
3. **Assigned Operatories.** The candidate shall work only in the assigned clinic, operatory or laboratory spaces.

4. **Assigned Procedures.** The candidate must perform only the treatment and/or procedures assigned. Performing other treatment or procedures is strictly prohibited.
5. **Auxiliary Personnel: Use of Assistants.** *Auxiliary personnel are not permitted to assist at chairside during the manikin examinations. Auxiliary personnel are permitted to assist at chairside during periodontal and restorative examinations.* Dentists and dental hygienists (licensed or unlicensed), third or fourth year dental students, final year dental hygiene students, dental technicians and expanded duty auxiliaries (if providing services normally done by a dentist) may not act as chairside assistants during the restorative and periodontal examinations. For each clinical procedure the candidate must list the name of his/her assistant on the Progress Form. Candidates are responsible for the conduct of their auxiliaries during the examination. Auxiliaries are not permitted to function as expanded duty assistants.
6. **Check-Out Procedures.** The items specified below should be enclosed in the original Candidate packet envelope and provided to the examination representative at the completion of the examination:
 - Identification badge
 - Legal Consent/Medical History forms for all patients
 - Progress Forms
 - Radiographs
 - Any unused Evaluation Forms. If any procedures were not completed and/or evaluated during the examination, the unused Evaluation Form(s) must be submitted with the candidate's ID number filled out.
7. **Clinic Attire.** Clinic attire that meets CDC and OSHA standards must be worn in clinic areas. No bare arms or legs, or open-toed shoes are allowed in the clinic areas. Lab coats, lab jackets, and/or long-sleeved protective garments are all acceptable. Color and style are not restricted. There must be no personal or school identification on clinic attire other than the candidate identification badge.
8. **Electronic Equipment.** The use of cellular telephones, pagers, CD's, radios (with or without earphones) and other electronic equipment by candidates, patients and assistants is prohibited within the clinic and scoring areas. All cellular telephones must be off and stored with personal belongings. In addition, the use of electronic recording devices by the candidate, an auxiliary, or a patient during any part of the examination; or the taking of photographs during the evaluation or treatment procedures is prohibited.
9. **Equipment Failure.** In case of equipment failure, the Chief Examiner must be notified immediately so the malfunction may be corrected.
10. **Equipment: Use/Misappropriation/Damage.** No equipment, instruments, or materials shall be removed from the examination site without written permission of the owner. Nonpayment of fees for rental of space or equipment will be treated as misappropriation of equipment. Willful or careless damage of typodonts, manikins or shrouds may result in failure and any repair or replacement costs must be paid by the candidate before examination results will be released.
11. **Evaluation Procedures.** Candidate performance will be evaluated by three independent examiners. Candidates are not assigned specific examiners.
12. **Examination Completion and Start/Finish Times.** All procedures of the examination shall be completed within the specified time frame in order for the examination to be considered complete. Any examination procedures performed outside the assigned time schedule will be cause for the examination to be considered incomplete and will result in failure. Treatment procedures may not be initiated prior to the established starting time(s) and must be completed by the established finish time(s). Violation of this Standard will result in failure of the examination.
13. **Examination Guidelines.** Violation of the published standards, guidelines and requirements for the examination will result in failure.

14. **Examination Materials.** CRDTS examination materials distributed by the testing agency may NOT be removed from the examining area, nor may the forms be reviewed by unauthorized personnel.
15. **Extraneous materials.** Only those materials distributed or authorized by CRDTS may be brought to the examining area. Authorized materials include only your Candidate's Manual which may include hand written notes on the pages provided; additional pages, texts or documents are prohibited. Impressions, registrations, overlays, stents, or clear plastic shells of any kind as well as models or pre-preparations are not permitted to be brought to the examination site. Use of unauthorized materials will result in failure of the entire examination.
16. **Failure to Follow Directions.** Failure to follow directions and instructions from examiners will be considered unprofessional conduct. Unprofessional conduct and improper behavior is cause for dismissal from the examination and will result in failure of the examination. Additionally, the candidate shall be denied re-examination by CRDTS for one full year from the time of the infraction.
17. **Feedback Forms: Patient/Candidate.** Candidates and their patients have an opportunity to provide input about the examination. In an effort to continually improve our examination, feedback from the perspective of both the candidates and patients is one of the best ways to gather this information. The Feedback Forms for candidates and patients will be included in the candidate's packet. They are not required but will be collected separately from the candidate's packet to ensure that the candidate's examination results will in no way be affected by any feedback the candidate or the candidate's patients might have. Candidates and patients are encouraged to complete the forms honestly and thoughtfully before checking out.
18. **Identification Badges.** During the examinations, candidate ID badges must be worn at all times.
19. **Infection Control Standards.** During all patient treatment procedures *and during manikin clinical procedures*, the candidate, as well as the assisting auxiliary, must follow the most current recommended infection control procedures as published by the CDC. The operatory and/or operating field must remain clean and sanitary in appearance. (www.cdc.gov/oralhealth/infectioncontrol/guidelines)
20. **Instruments and Equipment.** All necessary materials and instruments for the clinical procedures, other than the operating chair, light and dental unit must be provided by the candidate. All equipment must be compatible with the testing site attachments. Arrangements for rental handpieces and/or other equipment may be made through the testing site. Sonic/ultrasonic instruments are permissible, but they must be furnished by the candidate along with the appropriate connection mechanisms. Air-abrasive polishers are NOT permissible. It is the responsibility of the candidate to arrange for his/her own handpiece, sonic/ultrasonic and all other equipment necessary to complete the clinical examination. It is suggested that all candidates check well in advance with the Site Coordinator of the school selected for the equipment requirements at the testing site.

The following instruments and equipment are specifically required and must be provided by the candidate for this examination:

- Unscratched, untinted front-surface, non-disposable, #4 or #5 mouth mirror (Mouth mirrors that are clouded, tinted, or unclear will be rejected)
- Metal periodontal probe – 1mm marks
- #11/12 explorer for the Periodontal Examination
- a sharp #23 explorer OR other similar Shepherd's Hook-type explorer
- Acidental ModuPRO™ (Integrated Modular Typodont and Modules)
- Patient eye protection (personal eyewear is acceptable)
- Patient napkin holder (chain, self-adhesives, clips, etc.)
- Blood pressure measuring device
- Two (2) black pens
- Instrument tray for transporting instruments

21. **Interpreters.** Candidates can employ the services of an interpreter when their patient does not speak English or is hearing impaired and their hearing loss cannot be corrected. (This is particularly important when the patient has a history of medical problems or is on medications.) Faculty members, dentists and dental hygienists (licensed or unlicensed), third or fourth year dental students, and final year dental hygiene students may not act as interpreters during the periodontal and restorative examinations. Candidates are responsible for the conduct of their interpreter during the examination.
22. **New Technology.** New and innovative technologies are constantly being developed and marketed in dentistry. However, until such time as these innovations become the standard of care and are readily available to all candidates at all testing sites, the use of such innovative technologies will not be allowed in this examination unless expressly written as allowed elsewhere in this manual.
23. **Radiographs.** Appropriate radiographs must meet the requirements as published in the examination guidelines. Any alteration of radiographs will result in failure of the examination.
24. **Submission of Examination Records.** All required records must be turned in at the Examiner Desk before the examination is considered complete.
25. **Test Site Fees.** Schools may charge a rental fee for use of instruments, clinic facilities, supplies and disposables. This fee is independent of the examination fee and is not collected by the testing agency. Testing site fees vary from school to school. If not paid in advance, candidates should have cash or a check, as may be required by the respective testing site, for materials and equipment used during the examination. Specific information regarding site fees will be included in the candidate's Confirmation Packet.
26. **Tissue Management.** There shall be no unwarranted damage to either hard or soft tissue during patient-based procedures or to simulated hard or soft tissues during manikin-based procedures. Incompetent or careless management of tissue will result in a score reduction.
27. **Tooth Identification.** The tooth numbering system 1-32 will be used throughout the examination. In this system, the maxillary right third molar is number 1 and mandibular left third molar is number 17.
28. **Treatment Consent.** In order for a patient to be acceptable for the clinical portions of the examination, the candidate must complete a "Treatment Consent Form" for each patient. The forms are included in the candidate's application packet and may be completed prior to the examination date; however, they must be presented to the examiners at the time of patient check-in. Patients under the age of legal consent for the state in which the examination is being given must have the Consent Form signed by the parent or guardian. This form must be completed for each clinical patient.
29. **Treatment Selection.** Candidates must make treatment selection decisions independently (without the help of faculty and/or colleagues). The candidate must provide a treatment selection that fulfills examination requirements for each procedure. Treatment selections must be presented during the time allotted in the examination schedule, with sufficient time available to complete the treatment by the examination deadlines.

Standards that are specific to each examination (Parts II – III) are listed under each of the appropriate examination sections listed below.

GENERAL GUIDELINES FOR CLINICAL EXERCISES

1. **Progress Forms:** At the examination, color-coded Progress Forms will be issued which will contain a record of the treatment, examiner signatures for all completed portions of the examination, and progress notes from the candidate to examiner as appropriate to the course of treatment. A **black ball-point pen** should be used for all notations on the Progress Forms. Pre-

operative radiographs must also be mounted and the mount taped to the appropriate Progress Form for the Amalgam and Composite procedures.

2. **Evaluation Forms:** Evaluation forms for each section will be provided in the candidate's packet. The appropriate evaluation form must be presented to the examiners at the time of each starting check; once the treatment selection has been approved for a Restorative procedure, the Evaluation Form for the Amalgam/Composite preparation will be turned in to the desk at the Evaluation Station. All other forms will remain with the candidate and must be sent to the Evaluation Station when the procedure is submitted for evaluation.
3. **Unauthorized Personnel:** Only authorized personnel will be allowed in the examining and clinic areas. Only the patient, the candidate, the chairside assistant and the interpreter (if necessary) are allowed in the operatory during patient treatment sections. No visitors are allowed.
4. **Performance Standards:** The candidate's clinical performance on all sections will be rated according to specific criteria. The performance criteria and the standards by which the examination is conducted are provided to the candidate within this manual.
5. **Penalty Deductions:** Throughout the examination, the candidate's professional conduct and clinical performance will be evaluated. A number of considerations will weigh in determining the candidate's final grades and penalties may be assessed for violation of examination standards and/or for certain procedural errors, as defined and described within this manual.
6. **Reasons for Dismissal:** In addition to the standards of conduct expectations, the following list is provided as a quick reference guide for candidates. While the following is not an all-inclusive listing, it does provide examples of behaviors that may result in dismissal/failure of the examination:
 - Using unauthorized equipment at any time during the examination process.
 - Altering patient records or radiographs.
 - Performing required examination procedures outside the allotted examination time.
 - Failure to follow the published time limits and/or complete the examination within the allotted time.
 - Receiving assistance from another practitioner including but not limited to; another candidate, dentist, University/School representative(s), etc.
 - Exhibiting dishonesty.
 - Failure to recognize or respond to systemic conditions that potentially jeopardize the health of the patient and/or total disregard for patient welfare, comfort and safety.
 - Unprofessional, rude, abusive, uncooperative, or disruptive behavior to other candidates, patients and/or exam personnel.
 - Misappropriation or thievery during the examination.
 - Noncompliance with anonymity requirements.
 - Noncompliance with established guidelines for asepsis and/or infection control.
 - For the purpose of the board licensure examination, candidates found charging patients for services performed.
 - Use of unauthorized documents or materials in patient care or evaluation areas.
 - Use of cellular telephones, pagers or other electronic equipment in patient care areas.
 - Use of electronic recording devices by the candidate, an auxiliary, or a patient during any part of the examination; or the taking of photographs during the evaluation or treatment procedures.
7. **Authorized Photography:** At some selected test sites, oral photographs may be taken randomly during the examination by an authorized photographer retained by CRDTS. The purpose is to capture a broad representation of actual procedures which can be used for examiner calibration exercises. The photographs will include no identification of either the patients or candidates. An

announcement will be made or a notice will be distributed to inform patients and candidates when photographs are authorized at a site.

PART II: ENDODONTICS EXAM – 100 Points

PART III: FIXED PROSTHODONTICS EXAM – 100 Points

The Endodontics Examination and Fixed Prosthodontics Examination are each stand alone examinations that will be administered on the same day. The Endodontics Examination consists of two procedures and the Fixed Prosthodontics Examination consists of three procedures, as follows:

PART II: ENDODONTICS EXAMINATION

1. Endodontic access opening only on tooth #14, a multi-rooted artificial tooth.
2. Endodontic access, canal instrumentation and obturation on tooth #8, a single-canal artificial tooth.

PART III: FIXED PROSTHODONTICS EXAMINATION

1. Preparation of tooth #5, a single-layered artificial tooth, for a porcelain fused to metal 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 cast gold metal crown as the other abutment for the same 3-unit bridge. Both preparations must be parallel to each other.
3. Preparation of tooth #9, a single-layered artificial tooth for a full ceramic crown.

SCHEDULE

TIME	ASSIGNMENT
8:00 A.M. to 8:30 A.M. 8:30 A.M. to 12:30 P.M. 12:30 P.M. to 12:45 P.M.	<p>Part III: Fixed Prosthodontic Examination Set-Up and Starting Checks Fixed Prosthodontic Procedures (4.0 hours) Dismantle and turn in fixed prosthodontic modules</p>
12:45 P.M. to 1:00 P.M.	Break – Candidates must leave the clinic floor
1:00 P.M. to 4:00 P.M. 4:00 P.M. to 4:15 P.M.	<p>Part II: Endodontic Examination Endodontic Examination Procedures (3.0 hours) Dismantle and turn in endodontic modules</p>

SECOND DAY (IF NECESSARY)

To accommodate additional candidates, it may be necessary to add a second day to the schedule. Candidates assigned to this day will be assigned accordingly and will follow the same time schedule as listed above. Candidates are informed of their group assignment two to three weeks in advance of the examination date.

Schedule for candidates who are retesting is subject to change at the discretion of CRDTS.

Time blocks will remain the same for each manikin procedure as outlined above.

FLEX-TIME SCHEDULE: Time blocks have been designated for each portion of the manikin procedures. Every candidate is allowed a maximum of 4 hours for the Prosthodontic Exam and 3 hours for the Endodontic Exam. Should candidates complete their prosthodontic procedures early, prior to 12:30 pm, they can take a short break and then begin their endodontic procedures by checking in with the Clinic Floor Examiner who will assign a three-hour start and finish time. This Flex-time schedule will

only be available prior to 12:30 pm. Beginning endodontic procedures early does NOT increase the maximum time allowed as indicated above.

When utilizing the Flex-Time Schedule, candidates will adhere to the required procedures as outlined in this manual regarding completion of the Part III – Prosthodontic Exam and initiating Part II – Endodontic Exam.

SCORING

CRDTS uses a largely conjunctive scoring system with some compensatory features. A score of 75 or better is required to pass each individual examination and each of the examinations (Parts II –V) must be passed with a score of 75 or better to achieve CRDTS Status. 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.**

GENERAL REQUIREMENTS

Part II: Endodontic Examination

Part III: Fixed Prosthodontic Examination

1. **Typodont Requirements:** The manikin examination may be completed *only* on an Acadental ModuPRO™ (Integrated Modular Typodont), using both endodontic modules and prosthodontic modules. It is the candidate’s responsibility to provide the required ModuPRO™ items (listed below) for the manikin section of the examination. This includes the articulating hinge if the typodont is going to be chair-mounted, Carrier Trays, modules for endodontic procedures and modules for the fixed prosthodontics procedures.

The ModuPRO™ typodont and other required ModuPRO™ supplies may be purchased by the candidate at any time prior to the examination through the school or through Acadental directly at www.acadental.com.

In order to have the modules properly interlocked and stabilized, it is required that six modules—three mandibular and three maxillary—be mounted in the carrier trays at all times the candidate is operating. For the endodontic procedures, the four modules that do **NOT** contain the endodontic teeth (#8 and #14) may be either endodontic or prosthodontic modules. For the prosthodontic procedures, *all six modules must be* prosthodontic modules in order to ensure consistent contact.

2. **Manikin Requirements and Mounting:** A mounted manikin with full facial shroud will be provided by the testing site for insertion of the typodont. The manikin heads must accommodate the Acadental ModuPRO™ which can be adapted to a chair-mounted post or a high-tech simulation lab unit with either screw or magnetic connectors. 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 screw or magnetic connectors.
3. **Occlusal Index:** Candidates will fabricate a polyvinyl siloxane (PVS) putty occlusal index during the exam, prior to the crown preparations. The index should extend gingivally to cover the gingival shroud on both buccal and lingual surfaces and include one complete tooth (2nd molar) posterior to the complete cast gold molar preparation and one complete tooth (cuspid) anterior to the PFM preparation. The matrix should be sectioned bucco-lingually over the center of each prepared tooth which will yield 3 separate pieces. These indexes will be used to establish appropriate occlusal reduction, and must be submitted with your examination modules for evaluation. Examiners will use *only* this guide when evaluating occlusal reduction. ***When the index is completed, it must be checked by the CFE prior to beginning the crown preparations.*** No occlusal matrix is fabricated for the ceramic anterior crown.
4. **Patient Simulation:** The correct patient/operator position must be maintained while operating. Throughout the manikin procedures, the treatment process will be observed by Clinic Floor

Examiners and evaluated as if the manikin were a live patient. With the exception of 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. For example, since the tooth length on #8 is directly measured prior to the procedure, no radiographs are utilized before or after treatment.

The Candidate should use only air, but may use both air and water spray when preparing teeth #9, #14, #3 and #5. For tooth #8, when performing the complete endodontic procedure, the use of water irrigation is preferred when cleaning and filing the canal. 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.

5. **Security Requirements:** No written materials may be in the operating area other than this Candidate Manual and CRDTS forms.
6. **Infection Control:** The candidate must follow the most current recommended infection control procedures as published by the CDC during all manikin 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 manikin procedures. Infection control will be monitored by Clinic Floor Examiners. (www.cdc.gov/oralhealth/infectioncontrol/guidelines)
7. **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 Endodontic Examination or the Fixed Prosthodontic Examination will result in failure of the specific examination.
8. **Assistants:** Auxiliary personnel are not permitted to assist at chairside or in a laboratory during the manikin examination. Candidates may not assist each other, critique or discuss one another's work.
9. **Adjacent Damage:** The candidate's score will be penalized for any unwarranted damage to adjacent teeth or to the simulated gingival area during manikin-based procedures.
10. **Examination Sequence:** The candidate must set up the manikin for the prosthodontic procedures and obtain the approval of a Clinic Floor Examiner between 8:00 and 8:30 A.M. The prosthodontic procedures must be completed between 8:30 and 12:30 P.M. No later than 12:30 P.M., the typodonts must be dismantled and the prosthodontic modules turned in to the examiner; candidates who utilize the maximum time allowed must then leave the clinic area for a brief period of time. At 1:00 P.M. candidates must mount their endodontic modules and the Clinic Floor Examiner must check the mounting of the endodontic typodont and authorize the candidate to proceed. The endodontic procedures must be completed between 1:00 and 4:00 P.M. During all manikin procedures, the typodont may *not be disassembled* without the permission of a Clinic Floor Examiner. Between 4:00 and 4:15, the candidate will dismantle the typodont and submit the endodontic modules to the examiners.

Requirements Specific to the Endodontic Examination

1. **Endodontic Typodont Modules:** Endodontic treatment must be completed on two artificial endodontic teeth, one multi-rooted endodontic first maxillary molar (#14) and one single-canal endodontic incisor (#8). Both #8 and #14 will be mounted in ModuPRO™ endodontic modules. The endodontic modules need to be inserted in Carrier Trays and must be attached to a typodont. The typodont may be mounted on a post and strapped to an operator chair or mounted in a simulation laboratory. Post-mounted typodonts will require an *articulating hinge*.

CRDTS will provide the following:

- a. Module AE13-15 WP for the #14 posterior endodontic insert
- b. #14 endodontic insert AE401 14 WI which includes tooth #14 already mounted
- c. Module AE 7-12 for the anterior endodontic procedure

- d. The #8 artificial tooth which will be mounted in the AE7-12 module at the exam.

The candidate must provide the following modules:

- a. A2-6 or N2-6
- b. A18-20 or N18-20
- c. A21-27 or N21-27
- d. A28-31 or N28-31

2. **Required Materials:**

Accessories:

- a. Articulating Hinge for chair mounted typodonts
- b. Carrier Trays *Note: Carrier Trays and articulators are interchangeable between the endodontic modules and the prosthodontic modules.*

3. **Preparation of Teeth:** Tooth #8 must be used to complete the access opening, canal instrumentation and obturation. Tooth #8 is considered to have a normal size pulp chamber for a 21 year old. The size, shape and extent of the prepared access opening should reflect such anatomy and will be graded accordingly. The #14 artificial endodontic tooth must be used to complete access opening to the canals.

- a. Use a bur to *inscribe your 3-digit candidate number on the lingual surface of each modular section* so it is visible when the modules are inserted in the carrier tray.
- b. Your manikin modules will be delivered to your cubicle in a module storage box prior to your scheduled time block. A CFE must be notified prior to disassembly of the typodont. The modules will be returned to the module storage box until they are graded and all grade forms/Progress Forms will be collected by the Clinic Floor Examiners.

4. **Endodontic Module:** The endodontic modules (module AE7-12 to accommodate the #8 endodontic tooth and the module AE13-15 WP for #14) will be inserted in an Acidental ModuPRO™ and mounted in a manikin with a shroud to be provided by the testing site. The typodont may be mounted on a post and strapped to an operator chair or mounted in a simulation laboratory. Post-mounted typodonts will require an *articulating hinge*. Once the typodont is mounted in the manikin, request a Start Check from a Clinic Floor Examiner.

5. **Dismantling Manikin:** During both the endodontic and the prosthodontic procedures, **the candidate may not disassemble the manikin without permission of the Clinic Floor Examiner.** Removal of the manikin, typodont or teeth during the examination without permission of the Clinic Floor Examiner will result in failure.

6. **Isolation dam:** Both the endodontic procedures must be performed under two separate isolation dams. In order to avoid evulsion, *no clamps should be placed on the teeth to be treated;* clamps should be placed on nearby artificial teeth. All work must be done with the isolation dam in place. The dams must be removed at the completion of the procedures.

7. **Instruments:** Other than the instruments and materials provided by the testing site, the candidates are responsible for providing the instruments, files and materials of their choice. Rotary instruments are permissible during the endodontic procedure.

8. **Treatment:** On the anterior tooth, any form of gutta-percha filling technique may be used, including any warm gutta-percha or carrier-based, thermoplasticized gutta-percha techniques. Instrumentation technique, either mechanical or manual is at the candidate's discretion.

- a. On the posterior tooth, access opening to all canals must be completed.
- b. If either of the teeth fractures during treatment, the procedure should be completed. If a crown fractures during treatment, place the fractured pieces in a sealable plastic bag and turn them in with the treated tooth.
- c. No occlusal reduction of clinical crowns may be done, other than the normal access preparation. Any other alteration will result in a deduction of points.

9. **Reference Point:** The cemento-enamel junction (CEJ) on the facial surface should be used as the reference point to determine the fill depth.

10. **No Temporaries:** No temporary material may be placed over the obturation material.

11. **Evaluation:** As soon as the endodontic procedure is complete, a Clinic Floor Examiner must authorize dismantling the typodont. If candidates have completed the endodontic portion of the examination before time is called, they may contact a Clinic Floor Examiner and request permission to dismantle the typodont, submit their procedures and leave the clinic area.
 - a. The endodontic modules must be removed from the carrier trays and must be inserted into the module storage box. The candidate's Progress Form and two evaluation forms must accompany the module box when turned in to the examiners.
 - b. The treated endodontic modular sections will be maintained by CRDTS as part of the candidate's examination record.
12. **Security Check:** A random selection of teeth will be sectioned at the end of each exam. Any alteration of a tooth will result in failure of the entire clinical examination.

Requirements Specific to the Fixed Prosthodontics Examination

1. **Fixed Prosthodontic Typodont Modules:** The typodont must be articulated by being attached to either an articulator in a simulation laboratory, or fitted with an articulating hinge and post-mounted to an operatory chair. No endodontic modules are allowed in the Fixed Prosthodontic examination.

CRDTS will provide the following prosthodontic modules:

- a. Module A7-12
- b. Module A2-6

These modules will be distributed to the candidate in a box before the Fixed Prosthodontic Examination begins. Inside the box, there will also be an extra label with the candidate's number on it; this label will be attached to the typodont when it is submitted for evaluation. Use a bur to *inscribe your candidate number in the lingual area of each modular section* so that when the ModuPRO™ is disassembled, your modules can be readily identified.

The candidate must provide the following prosthodontic modules:

- a. A28-31
- b. A13-15
- c. A18-20
- d. A21-27

2. **Required Materials:**

Accessories:

- a. Articulating Hinge for chaired mounted typodonts
- b. Carrier Trays

Note: Carrier Trays and articulators are interchangeable between the endodontic modules and the prosthodontic modules.

3. **Mounting Check-In:** When the six prosthodontic modules are mounted in the typodont carrier trays in proper occlusion and the typodont is mounted in the manikin, a Clinic Floor Examiner must check the mounting, occlusion and identification numbers and authorize the candidate to begin. The tooth preparations will require all six prosthodontic modules mounted on the Carrier Trays. Each module is number coded to indicate correct placement in the Carrier Trays.
4. **Crown Preparations:** The preparation for a full-cast (CGC) crown is completed on tooth #3; the preparation for a porcelain-fused-to-metal (PFM) crown is completed on tooth #5; and the preparation for a full-ceramic crown 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 are bi-layered, with a white layer simulating enamel and a darker layer simulating dentin. The thickness of the enamel may vary; therefore, it is not always necessary to remove all of the simulated enamel when preparing the tooth, if doing so would result in overcutting the tooth. The teeth should be prepared in the appropriate proportions, taper and depths as defined in the criteria. Having some simulated enamel left does not necessarily *indicate insufficient tissue removal*, and candidates will not be penalized for remaining enamel if the preparation meets the criteria. No isolation dam is required for the crown preparations.

5. **Margins:** Cut the margins to within 0.5 mm of the gingival shroud. The lingual margin for the porcelain-fused-to-metal crown should be prepared for a metal margin, 0.5 mm. The transition from the facial shoulder to the lingual margin should begin to occur at the interproximal-buccal line angles.
6. **Occlusal Reduction:** The tooth for the porcelain-fused-to-metal (PFM) crown should be prepared for a porcelain occlusal surface with an optimal occlusal reduction of 2 mm. For the full-cast gold crown preparation, the occlusal reduction is optimally 1.5 mm. Only the matrix will be used to evaluate occlusal reduction.
7. **Equilibration Prohibited:** No equilibration will be permitted on the typodont prior to or subsequent to either crown preparation.
8. **Dismantling the Manikin:** During the prosthodontic procedures, **the candidate may *not* disassemble the manikin without permission of the Clinic Floor Examiner.** Removal of the manikin, typodont or teeth during the prosthodontic examination without permission of the Clinic Floor Examiner will result in failure.
9. **Evaluation:** When the crown preparations are complete, the candidate must request permission from the Clinic Floor Examiner to dismantle the manikin and remove the prosthodontic modules from the carrier trays. Put the two modules with the crown preparations and occlusal index in the labeled box provided by CRDTS and be sure the Prosthodontic Progress Form and three evaluation forms for the crown preparations are collected by the Clinic Floor Examiner. The Prosthodontic Progress Form and three Prosthodontic Evaluation Forms must be submitted with the modules.
10. **Returning the Typodont:** The prosthodontic modules (A7-12 and A2-6) containing the crown preparations will be maintained by CRDTS as part of the candidate's examination record. The other four modules, along with the articulator and carrier trays, may be retained by the candidate or returned to the school, depending upon to whom they belong.

ANTERIOR ENDODONTIC PROCEDURE

Access Opening – Artificial Anterior #8

SATISFACTORY

1. The size and placement of the access opening reflects the position of the pulp chamber and allows for complete debridement of the pulp chamber and straight-line access to the root canal system.
2. The access opening incorporates the middle one-third of the lingual surface mesiodistally and inciso-gingivally.
3. From the lingual surface to the cervical portion, the internal form tapers to the canal opening with no ledges.
4. All pulp horns are removed through the access opening.
5. There is no reduction of the crown.

MINIMALLY ACCEPTABLE

1. The size and placement of the access opening is not directly over the pulp chamber, but allows for debridement of the pulp chamber and straight-line access to the root canal system.
2. The size and placement of the access opening is not consistent with the criteria for *Satisfactory*; but it is not less than one-fourth or greater than one-half of the lingual surface, and does not weaken the marginal ridges or incisal edge.
3. From the lingual surface to the cervical portion, the internal form tapers to the canal opening with slight ledges.
4. Pulp horns are not fully removed through the access opening.

MARGINALLY SUBSTANDARD

1. The size and placement of the access opening is not over the pulp chamber, and hinders complete debridement of the pulp chamber or does not allow straight-line access to the root canal system.
2. The access opening is less than one-fourth or greater than one-half the width of the lingual surface, or the access opening weakens the marginal ridge(s). The access encroaches on, but does not include, the incisal edge.
3. The internal form lacks taper to the canal orifice(s), gouges are present that do not affect access to the canal orifice.
4. Pulp horns are not entered.

CRITICAL DEFICIENCY

1. The size and placement of the access opening is not over the pulp chamber, and does not allow complete debridement of the pulp chamber or access to the root canal system.
2. The access opening includes the marginal ridge(s) and/or the incisal edge. The access opening is so small that debridement of the pulp chamber is impossible. The canal orifice is not accessed. The anterior crown is fractured due to excessive access preparation. (*For fractures or separation of crowns due to manufacturer's defect, refer to Manual*)
3. The internal form exhibits excessive ledging or gouges that do not allow access to the canal orifices.
4. There is a perforation of the crown or the floor of the pulp chamber.
5. Reduction of the crown has been performed.

ANTERIOR ENDODONTIC PROCEDURE

Canal Instrumentation – Artificial Anterior #8

SATISFACTORY

1. The cervical portion of the canal is enlarged facial-lingually and mesio-distally to allow access to the apical portion of the canal.
2. The mid-root portion of the canal blends with the cervical portion and no ledges or shoulders are present.
3. The apical portion is instrumented to within 0.5 to 1.0mm of the anatomical apex.

MINIMALLY ACCEPTABLE

1. The cervical portion of the canal is too small and makes access to the apical portion of the canal difficult.
2. The mid-root portion of the canal does not blend smoothly with the cervical portion, but no ledges or shoulders exist.
3. The apical portion of the canal is prepared to the anatomical apex, or the apical portion of the canal is prepared more than 1.0mm but less than 2.0mm short of the anatomical apex.

MARGINALLY SUBSTANDARD

1. In the cervical portion, the canal is over or under prepared.
2. The mid-root portion of the canal does not blend with the cervical region of the canal and/or ledging or shoulders are present that will inhibit canal obturation.
3. The apical portion of the canal is under prepared 2mm to 3mm short of the anatomical apex.
4. The mid-root or apical portion of the canal is transported, but the apical portion still blends with the anatomical apex.

CRITICAL DEFICIENCY

1. The cervical portion of the canal is grossly over prepared and/or perforated.
2. The mid-root portion of the canal is perforated and/or has gross shoulders or ledges that will prevent canal obturation.
3. The apical portion of the canal is over prepared and instrumented beyond the anatomical apex or is under prepared more than 3mm from the anatomical apex.
4. The apical portion of the canal is transported and/or there is a perforation of the root.
5. The root is fractured during root canal instrumentation. *(For fractures or separation of crowns due to manufacturer's defect, refer to Manual)*

ANTERIOR ENDODONTIC PROCEDURE

Root Canal Obturation – Artificial Anterior #8

SATISFACTORY

1. The root canal is obturated with gutta percha 1.0 mm or less from the apical foramen.
2. There is less than 1.0 mm of sealer extruded beyond the apical foramen.
3. There are no voids in the gutta percha from the CEJ to the apical foramen.
4. There is no gutta percha, restorative material, or sealer in the pulp chamber.
5. There is no evidence of a separated file.

MINIMALLY ACCEPTABLE

1. The root canal is obturated with gutta percha 1.5 mm from the apical foramen or up to 0.5 mm beyond the apical foramen.
2. There is more than 1.0 mm of sealer extruded beyond the apical foramen.
3. The apical 1/3 of the gutta percha in the root canal is dense and without voids.
4. The gutta percha in the root canal is 1.0 mm to 2.0 mm short of the CEJ.
5. Gutta percha and/or sealer is evident in the pulp chamber extending up to 1 mm above the CEJ.
6. A file is separated in the root canal, but does not prevent the obturation of the root canal.

MARGINALLY SUBSTANDARD

1. The root canal is obturated with gutta percha more than 1.5 mm but no more than 3.0 mm short of the apical foramen. The root canal is obturated with gutta percha greater than 0.5mm but no more than 1.5 mm beyond the apical foramen.
2. There are significant voids throughout the obturation of the root canal.
3. The gutta percha in the root canal is more than 2.0 mm but less than 3.0 mm short of the CEJ.
4. Gutta percha and/or sealer is evident in the pulp chamber extending greater than 1 mm, but no more than 2 mm above the CEJ.
5. A file is separated in the root canal, but allows obturation of the root canal which is marginally substandard.

CRITICAL DEFICIENCY

1. The root canal is obturated with gutta percha more than 3.0mm short of the apical foramen. The root canal is obturated with gutta percha greater than 1.5mm beyond the apical foramen.
2. There are large voids throughout the obturation of the root canal, there is no gutta percha present in the root canal, or a material other than gutta percha was used to obturate the canal.
3. The gutta percha in the root canal is more than 3.0mm short of the CEJ.
4. Gutta percha and/or sealer is evident in the pulp chamber extending more than 2 mm above the CEJ.
5. A file is separated in the root canal, and prevents the obturation of the root canal which is critically deficient.
6. There is restorative material present in the pulp chamber.
7. The root is fractured during root canal obturation. *(For fractures or separation of crowns due to manufacturer's defect, refer to Manual)*

POSTERIOR ENDODONTIC PROCEDURE

Access Opening ONLY – Artificial Posterior #14

SATISFACTORY

1. The placement of the access opening reflects the position of the pulp chamber and allows for complete debridement of the pulp chamber or straight-line access to the root canal system.
2. The access opening is of optimal size (confined to the mesial triangular pit and central fossa of the tooth, up to but not including the mesial buccal cusp tip so that the marginal ridge, oblique ridge and all other cusps are supported by dentin) and allows for complete debridement of the pulp chamber without ledges remaining.
3. The internal form tapers to the canal opening with no ledges.
4. All pulp horns are removed through the access opening.
5. There is no reduction of the crown.

MINIMALLY ACCEPTABLE

1. The placement of the access opening is not directly over the pulp chamber, but allows for debridement of the pulp chamber and straight-line access to the root canal system.
2. The access opening is in the mesial triangular pit and central fossa of the tooth but infringes on the mesial marginal ridge leaving less than 3mm but not less than 2mm; infringes on the oblique ridge leaving not less than 1mm thickness. The access opening is overextended up to 1mm short of the mesial lingual and/or distal buccal cusp tips. The access opening allows for complete debridement of the pulp chamber and the cusps and/or marginal ridges have dentinal support.
3. The internal form tapers to the canal opening with slight ledges.
4. Pulp horns are not fully removed through the access opening.

MARGINALLY SUBSTANDARD

1. The placement of the access opening is not over the pulp chamber, and hinders complete debridement of the pulp chamber or does not allow straight-line access to the root canal system.
2. The access opening is in the mesial triangular pit and central fossa of the tooth but infringes on the mesial marginal ridge leaving less than 2mm but not less than 1mm; infringes on the oblique ridge leaving less than 1mm thickness without complete obliteration of the ridge. The access opening is overextended to include the cusp tips of the mesial lingual and/or distal buccal cusps but does not extend beyond the occlusal table. The access opening is overextended including the mesial buccal cusp tip and extends up to 1mm beyond the occlusal table. The access is too small preventing complete debridement of the pulp chamber.
3. The internal form lacks taper to the canal orifice(s), gouges are present that do not affect access to the canal orifices.
4. Pulp horns are not entered.

CRITICAL DEFICIENCY

1. The placement of the access opening is not over the pulp chamber, and does not allow complete debridement of the pulp chamber or straight-line access to the root canal system.
2. The access opening extends beyond the mesial triangular pit and central fossa of the tooth and undermines the mesial marginal ridge leaving less than 1mm thickness; undermines and/or completely obliterates the oblique ridge. The access opening is overextended to include the cusp tips of the mesial lingual and/or distal buccal cusps and extends beyond the occlusal table. The access opening is overextended including the mesial buccal cusp tip and extends greater than 1mm beyond the occlusal table. The access opening is underextended so that debridement of the pulp chamber is impossible or one or more canal orifices are not accessed.
3. The internal form exhibits excessive ledging or gouges that do not allow access to the canal orifices and/or the pulp chamber is not entered.
4. There is a perforation of the crown or the floor of the pulp chamber.
5. Reduction of the crown has been performed.

POSTERIOR ENDODONTIC PROCEDURE
Treatment Management
Penalty Points ONLY

SATISFACTORY

1. The adjacent teeth and/or restorations are free from damage.
2. The simulated gingiva and/or typodont is/are free from damage..

MINIMALLY ACCEPTABLE

1. Damage to adjacent tooth/teeth can be removed with polishing without adversely altering the shape of the contour and/or contact.
2. There is slight damage to simulated gingiva and/or typodont consistent with the procedure..

MARGINALLY SUBSTANDARD

1. Damage to adjacent tooth/teeth requires recontouring which changes the shape and/or position of the contact.
2. There is iatrogenic damage to the simulated gingiva and/or typodont inconsistent with the procedure.

CRITICAL DEFICIENCY

1. There is gross damage to adjacent tooth/teeth which requires a restoration.
2. There is gross iatrogenic damage to the simulated gingiva and/or typodont inconsistent with the procedure.

PORCELAIN-FUSED-TO-METAL CROWN PREPARATION

Tooth #5 - Cervical Margin and Draw

SATISFACTORY

1. The margins should be 0.5 mm occlusal to the simulated free gingival margin.
2. The cervical margin is smooth, continuous, well defined.
3. The cervical bevel, when used, is 0.5 to 1 mm in width and is well-defined.
4. 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.

MINIMALLY ACCEPTABLE

1. The cervical margin is at the level of or no more than 1mm occlusal to the simulated free gingival margin.
2. The cervical margin is continuous but slightly rough and lacks some definition.
3. The cervical bevel, when used, is greater than 1 mm but does not exceed 1.5 mm, and lacks some definition.
4. The path of insertion/line of draw deviates 10° to less than 20° from the long axis of the tooth.

MARGINALLY SUBSTANDARD

1. The cervical margin is overextended 0.5 mm below the crest of the simulated free gingival margin.
2. The cervical margin is underextended, more than 1 mm but no more than 1.5 mm occlusal to the crest of the simulated free gingival margin.
3. The cervical margin has some continuity, is significantly rough and is poorly defined.
4. The cervical bevel, when used, is less than 0.5 mm or greater than 1.5 mm, but does not exceed 2 mm, and has very poor definition.
5. The path of insertion/line of draw deviates 20° to less than 30° from the long axis of the tooth.

CRITICAL DEFICIENCY

1. The cervical margin is overextended more than 0.5mm below the simulated free gingival margin causing visual damage to the typodont.
2. The cervical margin is underextended more than 1.5mm above the simulated free gingival margin and thereby compromises esthetics, resistance and retention form.
3. The cervical margin has no continuity and/or definition.
4. The cervical bevel, when used, has no continuity or is greater than 2.0 mm. and has no definition.
5. The path of insertion/line of draw is grossly unacceptable, deviating 30° or more from the long axis of the tooth.

PORCELAIN-FUSED-TO-METAL CROWN PREPARATION

Tooth #5 - Walls, Taper and Shoulder

SATISFACTORY

1. Axial tissue removal is optimally 1.5 mm to be sufficient for convenience, retention and resistance form.
2. Walls are smooth and well-defined, no undercuts.
3. There is full visual taper (6° – 16°).
4. The facial shoulder is optimally 1.0 mm wide.
5. Reduction of the occlusal wall is optimally 2.0 mm.
6. Internal line angles and cusp tips are rounded.
7. The general occlusal anatomy is maintained.

MINIMALLY ACCEPTABLE

1. The axial tissue removal deviates no more than ± 0.5 mm from optimal.
2. The walls are slightly rough and lack some definition.
3. Taper is present, but nearly parallel ($<6^{\circ}$) or slightly excessive ($>16^{\circ}$, but $<24^{\circ}$).
4. The facial shoulder varies slightly in width, but deviates no more than ± 0.5 mm from optimal.
5. Occlusal reduction deviates no more than ± 0.5 mm from optimal.
6. Internal line angles and cusp tip areas are not completely rounded and show a slight tendency of being sharp.

MARGINALLY SUBSTANDARD

1. The axial tissue removal is over-reduced or under-reduced, and deviates more than 0.5 mm but no more than ± 1 mm from optimal.
2. The axial walls are rough.
3. There is no taper or excessive taper ($>24^{\circ}$).
4. Occlusal reduction deviates no more than ± 1 mm from optimal.
5. The internal line angles and cusp tip areas show only minimal evidence of rounding with a greater tendency of being sharp.
6. The occlusal anatomy is flat.

CRITICAL DEFICIENCY

1. The axial tissue removal is grossly over-reduced or under-reduced. The reduction is less than 0.5 mm or greater than 2.5 mm.
2. The taper is grossly over-reduced ($>30^{\circ}$).
3. There is an undercut.
4. The facial shoulder is wider than 1.5 mm or less than 0.5 mm.
5. The occlusal wall is grossly over-reduced, greater than 3 mm, encroaching on the pulp and impacting resistance and retention form; or grossly under-reduced, less than 0.5 mm, resulting in insufficient occlusal clearance for adequate porcelain restorative material.
6. The internal line angles or cusp tip areas are excessively sharp with no evidence of rounding.

CAST GOLD CROWN PREPARATION

Tooth #3 - Cervical Margin and Draw

SATISFACTORY

1. The margins should be 0.5 mm occlusal to the simulated free gingival margin.
2. The cervical margin is smooth, continuous, well defined.
3. The cervical bevel, when used, is 0.5 to 1 mm in width and is well-defined.
4. 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.

MINIMALLY ACCEPTABLE

1. The cervical margin is at the level of or no more than 1mm occlusal to the simulated free gingival margin.
2. The cervical margin is continuous but slightly rough and lacks some definition.
3. The cervical bevel, when used, is greater than 1 mm but does not exceed 1.5 mm, and lacks some definition.
4. The path of insertion/line of draw deviates 10° to less than 20° from the long axis of the tooth.

MARGINALLY SUBSTANDARD

1. The cervical margin is overextended 0.5 mm below the crest of the simulated free gingival margin.
2. The cervical margin is underextended, more than 1 mm but no more than 1.5 mm occlusal to the crest of the simulated free gingival margin.
3. The cervical margin has some continuity, is significantly rough and is poorly defined.
4. The cervical bevel, when used, is less than 0.5 mm or greater than 1.5 mm, but does not exceed 2 mm, and has very poor definition.
5. The path of insertion/line of draw deviates 20° to less than 30° from the long axis of the tooth.

CRITICAL DEFICIENCY

1. The cervical margin is overextended more than 0.5mm below the simulated free gingival margin causing visual damage to the typodont.
2. The cervical margin is underextended more than 1.5mm above the simulated free gingival margin, thereby compromising esthetics, resistance and retention form.
3. The cervical margin has no continuity and/or definition.
4. The cervical bevel, when used, has no continuity or is greater than 2.0 mm. and has no definition.
5. The path of insertion/line of draw is grossly unacceptable, deviating 30° or more from the long axis of the tooth.

CAST GOLD CROWN PREPARATION

Tooth #3 - Walls, Taper and Marginal Width

SATISFACTORY

1. Axial tissue removal is optimally 1.5 mm to be sufficient for convenience, retention and resistance form.
2. Walls are smooth and well-defined, no undercuts.
3. There is full visual taper (6° – 16°).
4. The margin (*includes knife-edge, chamfer, and bevel*) is optimally 0.5 mm or less.
5. Reduction of the occlusal wall is optimally 1.5 mm.
6. Internal line angles and cusp tips are rounded.
7. The general occlusal anatomy is maintained.

MINIMALLY ACCEPTABLE

1. The axial tissue removal deviates no more than ± 0.5 mm from optimal.
2. The walls are slightly rough and lack some definition.
3. Taper is present, but nearly parallel ($<6^{\circ}$) or slightly excessive ($>16^{\circ}$, but $<24^{\circ}$).
4. The margin varies slightly in width, but is no greater than 1.0 mm.
5. Occlusal reduction deviates no more than ± 0.5 mm from optimal.
6. Internal line angles and cusp tip areas are not completely rounded and show a slight tendency of being sharp.

MARGINALLY SUBSTANDARD

1. The axial tissue removal is over-reduced or under-reduced, and deviates more than 0.5 mm but no more than ± 1 mm from optimal.
2. The axial walls are rough.
3. There is no taper or excessive taper ($>24^{\circ}$).
4. The margin varies significantly in width and deviates no more than 1.5 mm or exhibits an inappropriate design.
5. Occlusal reduction deviates no more than ± 1 mm from optimal.
6. The internal line angles and cusp tip areas show only minimal evidence of rounding with a greater tendency of being sharp.
7. The occlusal anatomy is flat.

CRITICAL DEFICIENCY

1. The axial tissue removal is grossly over-reduced or under-reduced. The reduction is less than 0.5 mm or greater than 2.5 mm.
2. There is an undercut.
3. The taper is grossly over-reduced ($>30^{\circ}$).
4. The margin is greater than 1.5 mm.
5. The occlusal wall is grossly over-reduced, greater than 2.5 mm; or grossly under-reduced, less than 0.5 mm, resulting in insufficient occlusal clearance for adequate restorative material.
6. The internal line angles or cusp tip areas are excessively sharp with no evidence of rounding.

BRIDGE FACTOR

SATISFACTORY

1. 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.

MINIMALLY ACCEPTABLE

1. 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.

MARGINALLY SUBSTANDARD

1. A line of draw or path of insertion that, due to angulations of the surface of the preparations, would not allow seating of a fixed prosthesis, regardless of the rotation through all available planes, without removal of tooth structure from the coronal 1/3 of either/both of the preparations.

CRITICAL DEFICIENCY

1. No line of draw or path of insertion exists through any plane of rotation without the removal of additional tooth structure in the apical 2/3 of either/both of the preparations.

CERAMIC CROWN PREPARATION

Tooth #9 - Cervical Margin and Draw

SATISFACTORY

1. The cervical margin is placed 0.5 mm incisal to the simulated free gingival margin.
2. The cervical margin is smooth, continuous, and well defined on all axial surfaces and exhibits no bevel.
3. 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.

MINIMALLY ACCEPTABLE

1. The cervical margin is at the level of or no more than 1mm incisal to the simulated free gingival margin.
2. The cervical margin is continuous but slightly rough and lacks some definition.
3. The path of insertion/line of draw deviates 10° to less than 20° from the long axis of the tooth.

MARGINALLY SUBSTANDARD

1. The cervical margin is overextended 0.5 mm below the crest of the simulated free gingival margin.
2. The cervical margin is underextended, more than 1 mm but no more than 1.5 mm incisal to the crest of the simulated free gingival margin.
3. The cervical margin has some continuity, is significantly rough and is poorly defined.
4. The path of insertion/line of draw deviates 20° to less than 30° from the long axis of the tooth.

CRITICAL DEFICIENCY

1. The cervical margin is overextended more than 0.5mm below the simulated free gingival margin causing visual damage to the typodont.
2. The cervical margin is underextended more than 1.5mm above the simulated free gingival margin, thereby compromising esthetics, resistance and retention form.
3. The cervical margin has no continuity and/or definition.
4. The cervical margin is beveled.
5. The path of insertion/line of draw is grossly unacceptable, deviating 30° or more from the long axis of the tooth.

CERAMIC CROWN PREPARATION

Tooth #9 - Walls, Taper and Marginal Width

SATISFACTORY

1. Axial tissue removal is optimally 1.5 mm to be sufficient for convenience, retention and resistance form.
2. Walls are smooth and well-defined, no undercuts.
3. There is full visual taper (6° – 16°).
4. The cervical margin is optimally 1.0mm in width.
5. The optimal incisal reduction is 2.0 mm.
6. The lingual wall height is optimally 2 mm.
7. Internal and external line angles are rounded and smooth.

MINIMALLY ACCEPTABLE

1. The axial tissue removal deviates no more than ± 0.5 mm from optimal.
2. The walls are slightly rough and lack some definition.
3. Taper is present, but nearly parallel ($<6^{\circ}$) or slightly excessive ($>16^{\circ}$, but $<24^{\circ}$).
4. The cervical margin is more than 1.0 mm, but does not exceed 1.5mm in width.
5. The incisal reduction is not less than 1.5mm or not more than 2.5mm.
6. External and/or internal line angles are rounded, but irregular.

MARGINALLY SUBSTANDARD

1. The axial tissue removal is over-reduced or under-reduced, but deviates no more than ± 1 mm from optimal.
2. The axial walls are rough.
3. There is no taper or excessive taper ($>24^{\circ}$).
4. The cervical margin is 0.5mm to less than 1.0mm or overextended to more than 1.5mm not to exceed 2.0mm in width.
5. The incisal reduction is less than 1.5mm or up to 3.0mm.
6. The lingual wall height is less than 1.5 mm.
7. External and internal line angles are sharp.

CRITICAL DEFICIENCY

1. The axial tissue removal is grossly over-reduced or under-reduced. The reduction is less than 0.5 mm or greater than 2.5 mm.
2. There is an undercut.
3. The taper is grossly over-reduced ($>30^{\circ}$).
4. The cervical margin is less than 0.5mm or more than 2.0mm in width.
5. The incisal reduction is less than 1.0mm or more than 3.0mm.
6. The lingual wall height is less than 1 mm.
7. The external and/or internal line angles are excessively sharp with no evidence of rounding.

PROSTHODONTIC MANIKIN PROCEDURES
Treatment Management
Penalty Points ONLY

SATISFACTORY

1. The adjacent and/or opposing teeth and/or restorations are free from damage.
2. The simulated gingiva and/or tyodont is/are free from damage.

MINIMALLY ACCEPTABLE

1. Damage to adjacent tooth/teeth can be removed with polishing without adversely altering the shape of the contour and/or contact.
2. There is slight damage to simulated gingiva and/or tyodont consistent with the procedure.

MARGINALLY SUBSTANDARD

1. Damage to adjacent tooth/teeth requires recontouring which changes the shape and/or position of the contact. Opposing hard tissue shows evidence of damage and/or alteration inconsistent with the procedure.
2. There is iatrogenic damage to the simulated gingiva and/or tyodont inconsistent with the procedure.

CRITICAL DEFICIENCY

1. There is gross damage to adjacent tooth/teeth which requires a restoration. There is evidence of gross damage and/or alteration to opposing hard tissue inconsistent with the procedure.
2. There is gross iatrogenic damage to the simulated gingiva and/or tyodont inconsistent with the procedure.

EXAMINATION CHECK-OUT

Patient/Candidate Feedback Forms

Candidates and their patients have an opportunity to provide input to CRDTS about the examination. CRDTS wishes to continually improve its examination program, and feedback from the perspective of both candidates and patients is one of the best ways for CRDTS to gather ideas on how to do this. The Feedback Forms for candidates and patients have been included in the candidate's packets. They are not required, and will be collected separately from the candidate's packet to ensure that the candidate's examination results will in no way be affected by any feedback the candidate or the candidate's patients might have. Therefore, CRDTS encourages candidates and patients to complete the forms honestly and thoughtfully before checking out.

Check-Out Procedure

When the candidates are ready to check out, they must go to the examiners' desk and get a clearance check that all procedures are completed or accounted for. The packets may be collected at the desk. The following items must be enclosed **in the candidate's packet envelope**:

1. Pre-operative and post-operative radiographs (if any were requested and returned to the candidate) of teeth restored during the examination must be submitted, clearly marked for identification; the complete mouth series for the periodontal patient need not be submitted. (If the testing site requires that radiographs be returned with board patient records, the candidates must submit duplicates of the required radiographs).
2. Completed Progress Forms (with mounted amalgam and composite pre-op radiographs attached).
3. Identification badge.
4. Consent Forms for each clinical patient
5. Medical History forms for each clinical patient.
5. Testing Site Fee Receipt.

ADMINISTRATIVE & APPLICATION POLICIES

Application Requirements

Candidates are permitted to apply for only one examination at a time and may not submit another application until after the results of the prior examination have been distributed. Qualified candidates may apply to take the examination by submitting an application **online** at www.crdts.org. Certain portions of the application must be submitted **by mail**. Detailed information regarding required documents/fees, test sites and examination dates/deadlines are outlined online and in this Manual. Applications can be completed on the CRDTS website: www.crdts.org.

A fully executed application complete with the appropriate documentation and fee is required to take the examination and for the retest of any examination. The candidate will not be allowed to start any Part of the examination unless all required materials have been submitted.

Read the entire application form before recording any information. Be accurate and complete. If you do not follow directions, your application may be returned to you.

REGISTRATION DEADLINES

In order to be processed, a completed application together with the appropriate fee and documentation must be received on or before the published application deadline dates for each examination: (See www.crdts.org or inside cover of Manual for exam/deadline dates.)

1. **PARTS II-V: Clinical Exams:** Specific, published deadlines for each examination are available online and in the cover of this manual.

Applications and required documentation received after the published deadline dates will not be accepted for processing and will be returned to the applicant. It should be noted that for **both** applications **and** required documentation, the testing agency uses the **date of receipt** and not the postmark and does not assume responsibility for insufficient postage or delays due to the post office or other delivery agencies.

EXAMINATION/APPLICATION FEES

1. **Initial Examination Fee:** The examination fee is \$1,900 and must be paid at the time of application. ***Payment submitted must be for the exact amount and be paid by cashier's check or money order with the applicant's social security number or candidate ID number (received after submitting an online application) written in the lower left-hand corner.*** This fee includes registration for one attempt at Parts II through V of the examination. Specifically, the initial offering of the manikin-based examinations- Part II Endodontic & Part III Prosthodontics, and the initial offering of patient-based examinations Part IV – Periodontal & Part V - Restorative.

An administrative fee of \$200 is included in all fees described herein. This administrative fee is non-refundable and deducted from all returned application fees. Re-submissions of applications which were returned for any reason must contain an **additional** administrative fee of \$200.

Under certain circumstances, such as moving a candidate to an alternative examination site to accommodate a candidate's request or conflicts, an additional \$200 administrative fee will be imposed. In such cases the candidate will be notified accordingly.

2. **Retest Examination Fee:** Candidates who are unsuccessful with any part of the examination must submit a new application. The retake fees are outlined below:

Manikin-based Exams – 1 or both

\$950

Part II – Endodontics	
Part III - Prosthodontics	
Patient-based Exam – 1 or both	\$950
Part IV – Periodontics	
Part V - Restorative	

Maximum *initial retest* fee, regardless of the number of Parts candidate is retaking: \$1,900. Subsequent failures will require appropriate retest fees as specified above. *Payment submitted must be for the exact amount and be paid by cashier's check or money order with the applicant's social security number or candidate ID number (received after submitting an online application) written in the lower left-hand corner.* PERSONAL CHECKS WILL NOT BE ACCEPTED AND WILL BE RETURNED TOGETHER WITH THE APPLICATION TO THE APPLICANT. The testing agency is not responsible for a missed deadline date if an application is returned.

3. **Fee Deferral:** Under extenuating circumstances a request for the examination fee to be deferred to a later examination will be considered on an individual basis when **RECEIVED BEFORE THE SCHEDULED EXAMINATION DATE**. Original documentation in support of the request must be provided to CRDTS for a fee deferral. Should a fee deferral be granted, the candidate will be informed of the terms and conditions for future examination. Requests for fee deferral on or after the date of the scheduled examination will not be honored and the fee will be forfeited. A non-refundable administrative processing fee of \$200 is applicable at all times and under all circumstances.
4. **Fee Refunds:** Refunds will be made, minus a \$200 administrative fee, if notification of cancellation is received in the CRDTS Central Office 30 days prior to the *first* day of the examination, no matter which Part of the examination is taken first. A 50% refund will be made if notification is made at least 6 business days prior to the first day of the examination. After that time, any cancellations will result in forfeiture of the entire examination fee. Once a candidate has paid the entire examination fee and has taken any Part of the examination, there will be no refund of fees for the Parts that have not yet been taken, should the candidate decide to cancel or withdraw from other Parts of the examination. In addition, failure to appear for the exam will result in a forfeiture of the entire examination fee. This policy applies to all cancellations, regardless of reason. Failure to appear for any examination results in forfeiture of the examination fee and a refund or partial refund is not granted for any reason.

REQUIRED APPLICATION DOCUMENTATION

1. **Eligibility:** If candidates are taking the examination for the first time, they must present proof of enrollment in or graduation from an accredited dental school. Candidates applying for the Curriculum Integrated Format must furnish proof of enrollment as a student of record from an accredited Dental School. Candidates applying for the Traditional Format must furnish proof of graduation from an accredited dental school or provide a Letter of Certification (a form provided by CRDTS). The Letter of Certification must be completed by the Dean of the school to verify that the candidate has demonstrated sufficient clinical competence, is in good standing, and it is anticipated that all school requirements will have been completed and the student will be recommended for graduation within that academic year. Alterations to this letter or misrepresentation of any application requirements may result in elimination of the candidate's application.
2. **Non-accredited graduates:** applying for examination must be authorized to take the examination by at least one state which accepts the results of the CRDTS' examination. The results of examination for graduates of non-accredited dental colleges are received and recognized only by states which allow licensure of such non-accredited graduates. Therefore, non-accredited graduates will only be examined by CRDTS when they can show that such results will be received and recognized by one of the states which participate in the CRDTS examination.

3. **Professional Liability Insurance:** Insurance in the amount of \$1,000,000 / \$3,000,000 is required. CNA, through the Professional Protector Plan, administered by Brown and Brown, Inc., Tampa, Florida, in cooperation with CRDTS, will provide complimentary professional liability coverage required for the examination for all candidates and their dental assistants taking the patient based portions of this examination during the current academic school year. The limit amount of \$1,000,000 / \$3,000,000 will apply.
4. **Social Security Number:** The social security number must be recorded accurately and legibly on the application form. Applications which do not include the social security number will be returned as incomplete. Once the candidate's application is complete, the social security number will be encoded for security purposes, and a new 10-digit number will be generated that will appear on all the candidate's examination forms. When the candidate's examination results are processed, the 10-digit computer number will connect the results back to the candidate's permanent record.
5. **2" x 2" Photographs:** Candidates applying for the Traditional Format must submit and attach two (2) 2"x2" photographs to their application sheet. Candidates applying for the Curriculum Integrated Format must submit and attach three (3) 2"x2" photographs to their application sheet. Candidates applying to retest in either format must submit and attach (2) 2"x2" photographs to their application sheet. The photographs MUST BE RECENT and may be in black & white or color.
6. **Signature of Candidate and Notary:** When candidates apply online, they will have the opportunity to download and print an Applicant Certification Sheet. **The Applicant Certification Sheet must be signed by the candidate and dated; a Notary Public must sign, stamp and date the form. Applicant Certification Sheets which are not signed or notarized will be returned to the candidate. This form must be mailed and must be received by CRDTS by the application deadline.**

Administrative Requirements

Once an application has been received or accepted for examination, the policies described in this section become effective.

Candidates for Curriculum Integrated Format

1. **Examination Completion – CIF Candidates:** All parts of the examination must be successfully completed by June 30th of the graduation year. If the parts to this examination are not successfully completed within this timeframe, regardless of the reason, all parts to this examination must be taken following the Spring graduation from dental school, utilizing the Traditional Format or in a subsequent academic year in which the candidate is recertified by the Dean as a senior student of record. A new application must be filed together with appropriate documentation and applicable fees. This constitutes a new examination series and the rules for the respective format of that series shall apply.
2. **Clinical Exam Schedule/Sequence:** The initial offering of the two *manikin-based* examinations for endodontic and fixed prosthodontic procedures will take place at the candidate's school of attendance on a specified date(s) in the Fall. A maximum of two retest opportunities for unsuccessful candidates will be available, the first on a specified date(s) in December or January, and the second on a specified date(s) from late February through early April. The second and third retest opportunities will be administered at select dental schools that may or may not be the candidate's school of attendance.

The initial offering of the two *patient-based* examinations for restorative and periodontic procedures will take place at the candidate's school of attendance on a specified date(s) in February – early April. One retest opportunity for unsuccessful candidates will be available on a specified date(s) in May/June. The retest opportunity will be administered at select dental schools that may or may not be the candidate's school of attendance.

All candidates must take the initial offering of the manikin-based examinations in September-November and the initial offering of the patient-based examinations in February-April.

This requirement may be waived or accommodated due to extenuating circumstances not under the control of the candidate and subject to the full discretion of the testing agency. A request for waiver from this requirement will be considered on an individual basis when received by the testing agency no less than 30 days before the scheduled examination date for foreseeable circumstances and no later than 14 days after the scheduled examination date in instances of unforeseeable situations. Requests must be made in writing to the testing agency and must include original documentation in support of the request. Notification will be sent immediately after determination is made. Should the waiver or accommodation be granted, the terms and conditions for future examinations will be included.

Candidates who do not complete the initial offering of the manikin-based examinations or the initial offering of the patient-based examinations, or an accommodation recommended by the testing agency in lieu of a waiver, may be disqualified for the remainder of the Curriculum Integrated Format examination and will forfeit their fee.

3. **Site Selection:** .

Initial Curriculum Integrated Format Offerings of Parts II, III, IV & V: Manikin and Patient-Based Examinations: The initial offering of the manikin-based examinations administered during the Fall testing period, as well as the initial offering of the patient-based examinations administered during the Spring testing period will be at the dental school at which the applicant is enrolled as a senior dental student. One of the objectives of the Curriculum Integrated Format is for candidates to take the initial offerings of the manikin-based examinations and the patient-based examinations at their own school. However, in extenuating circumstances, the testing agency may authorize a candidate to take these examinations at an alternate school.

Site selection for retests of Parts II, III, IV & V: Manikin and Patient-Based Examinations: Retest opportunities will be administered at select dental schools that may or may not be the candidate's school of attendance. Candidates will be assigned to a site at the discretion of the testing agency. Applicants from the school where the examination is administered receive priority for assignment to that site.

Candidates taking the examination at a dental school other than their own are encouraged to visit the site prior to the time of the examination. It is the responsibility of the candidate to make arrangements with the school for the provision of instruments if required and to ascertain whether the Acidental ModuPRO™ Typodont will be mounted in a lab or at the operatory chair so that the appropriate equipment for mounting can be available. The school may charge a site fee/rental fee for use of instruments, clinic facilities, manikin heads, supplies, and disposables. Some sites require that all instruments be supplied by the school. A rental charge or deposit imposed by the testing site must be remitted directly to the school.

General

1. **Incomplete Applications:** All applications with incorrect or missing information (e.g., signature, social security number, Dean's certification of status as a senior student of record, etc.) will be returned to the applicant. If an application is returned for any reason it will not be accepted after the filing deadline. Therefore, it is suggested that the application process be completed well in advance of the deadline date to assure adequate time to submit a returned application or submit incomplete documentation by the deadline date.

The following items must be mailed in to CRDTS in order to complete your application:

- \$1,900.00 Examination Fee payable to CRDTS (Cashier's Check or Money Order)
Retake Fee: See fees outlined above

- Certified copy of diploma or Certification letter for 1st time applicants
- Non-accredited Graduates – Photocopy of diploma and letter from State board
- Applicant Certification sheet
- Online Application Confirmation Page

2. **Disqualification:** A candidate may be disqualified by the Dean of the dental school that the candidate attends at any time after application is made in the event the candidate ceases to be a senior student of record or for any other reason within the discretion of the Dean after acceptance of application. Notification of disqualification by the Dean (or designated school official) must be received by the testing agency, in writing or by facsimile, 14 CALENDAR DAYS OR MORE IN ADVANCE OF THE START DATE OF A SCHEDULED EXAMINATION. Notification by any other source or in any other manner is not recognized or accepted. Facsimiles must be immediately followed by a letter to the testing agency with the required signature of the Dean (or designated school official). Acceptance of disqualification is considered final. Once disqualified, a candidate will not be reinstated for the Traditional Format examination during that academic year.

Fees paid by candidates who are disqualified shall be forfeited. Candidates who are disqualified during the Curriculum Integrated Format examination schedule shall have access to the Traditional Format of the examination upon graduation and presentation of a diploma or in a subsequent academic year in which the candidate has been appropriately certified by the Dean (or designated school official) as a senior student of record. A new application must be submitted together with all required documentation and appropriate fee. All applicants will be notified by the testing agency when official notification of disqualification has been received and recorded.

3. **Schedule Changes:** The examination assignment schedule (Day 1 and Day 2 assignments) is considered final when issued and mailed to the candidate. Request for change will not be considered or made once the schedule has been distributed. School personnel do not have the authority to accept a candidate for examination at their site or to make assignment changes within an examination series. Such arrangements concluded between school personnel and candidate may preclude the candidate from being admitted to the examination as well as forfeiture of fee. The CRDTS Chief Examiner is the only authorized individual who may consider a request for schedule change. If unusual circumstances warrant such change and space is available, it is the decision of the CRDTS Chief Examiner to approve such a request. This decision is made on site, on the day of examination. Prior requests are not accepted or considered.

4. **Confirmation Packet:** Candidates will receive a notice confirming their examination schedule; this notice will be distributed or posted by the school. Candidates taking an examination at a site other than their own school will receive individual mailings of confirmation packets within 10 days after the application deadline has expired. These packets will contain:

1. A letter confirming the exam site to which you have been assigned, the date and the exam schedule.
2. A letter from the clinical facility serving as a testing site providing general information about the site, its facilities, policies and usage fees. This letter may also contain information related to nearby hotels.
3. Other information and/or forms which will be needed to take the examination.

For candidates who are *not* attending the dental school where the examination is being administered, it will be necessary to make arrangements with the school for the provision of instruments, type of manikins, etc. Most schools charge a fee for the use of the clinic facilities, manikin heads, supplies and disposables. Any deposit or fee for the use of the testing site must be remitted to the school, NOT to the testing agency. Candidates who are not current graduates of the testing site of their choice are strongly advised to visit the school prior to the time of the examination to become familiar with the school. No candidate should come to the examination unless confirmation containing the above information has been received.

8. **Release of Scores:** Scores are not released at any time other than to the candidate, the candidate's dental school and the CRDTS recognizing jurisdictions, unless written authorization is received from the candidate.

Release of Scores to Candidates and Dental Schools: Scores will be reported to candidates both online and via mail to the candidate's permanent address. For online access to scores, current year candidates may enter the requested information under the Candidate Information link at www.crds.org. Scores will also be reported to the dental school of graduation if the candidate is a current graduate. For Parts II – V, candidates whose total score on any part is less than 75 will receive an individual printout with an itemization of their deficiencies. The manikin-based examinations and the patient-based examinations are reported within three to four weeks after the date of the candidate's examination. No actual examination papers or clinical evaluation forms will be released in order to maintain security of those portions of the examination which are administered multiple times at multiple sites.

Release of Scores to Recognizing Jurisdictions: Scores will be automatically reported to all CRDTS recognizing jurisdictions AFTER candidates have attempted all parts in either format of the examination.

For non-recognizing jurisdictions and for duplicate scores: Scores will be reported upon receipt of a written request signed by the candidate. Such request must include the following:

1. Candidate's name, mailing address and telephone number
2. Candidate's name at time of examination
3. Candidate's social security number
4. Year in which the CRDTS clinical examination was completed
5. Address to which the results are to be sent
6. \$35 per each address to where the scores are to be forwarded

If the candidate wishes to have the Candidate's Manual sent along with the scores to provide an explanation of scores, the fee is an additional \$25. An additional fee of \$4 is charged to have the scores notarized. All fees must be remitted in the form of a cashier's check or money order. **A credit card must be used when requesting a duplicate score report online.** No personal checks will be accepted. Please access the CRDTS' website (www.crds.org) or contact the CRDTS Administrative Office for more information.

It is the candidates' responsibility to provide a copy of their examination score report to any state in which they are seeking licensure so that State Board can verify the candidates' scores against their master grade sheet received from CRDTS.

No scores will be released by telephone and calling the Administrative Office will only delay the release of scores. Any address changes since the time of original application should be provided to the CRDTS' Administrative Office.

REVIEW PETITION / APPEALS PROCESS

CRDTS maintains a complaint review process whereby a candidate may request a review of his/her individual examination results. This is a formalized process conducted by a special committee whose charge is to review the facts to determine if the examiners' findings substantiate the results. Any request for such a review **MUST BE FILED** and received at CRDTS Central Office **no later than 14 days** following the official date on which the scores were mailed to the candidate or the candidate's dental school. The Committee is required to complete its review within 60 days from the time of receiving a formal request; during that time, the candidate may apply for re-examination. If the candidate files a formal complaint, then retests and passes the examination before the complaint has been fully processed, the complaint review will be terminated. Upon request from a candidate, CRDTS' Administrative Office will provide complete details of this review process. Once the process has been explained to the candidate, if they wish to pursue a complaint, a form must be obtained from CRDTS' Administrative Office and information about the complaint must be typed or written on this form.

In determining whether to file a petition, the candidate should be advised that all reviews are based on a reassessment of documentation of the candidate's performance on the examination. The review *does*

not include a regrading of that performance; it is limited to a determination of whether or not there exists substantial evidence to support the judgment of the examiners at the time of the examination. The review will not take into consideration other documentation that is not part of the examination process, such as; post-treatment photographs, models, character references or testimonials, dental school grades, faculty recommendations or the opinions of other "experts" solicited by the candidate. In addition, the review will be limited to consideration of the results of only one examination at a specific test site. If a candidate has completed more than one CRDTS' examination, the results of two or more examinations may not be selectively combined to achieve an acceptable final score.

Candidates who contact the Administrative Office regarding their examination results must clearly indicate whether they simply wish to express a concern relating to the examination or are interested in initiating a formal petition for review. A \$250 filing fee will be charged by CRDTS to file and process a formal review petition.

POLICY FOR RE-EXAMINATION AND REMEDIATION

A score is reported for each of the conjunctive Parts of the CRDTS dental examination. Information has been presented to the participating State Boards sufficient to support their determination that a total score of at least 75 points represents an acceptable demonstration of competence. The candidate for the Curriculum Integrated Format must successfully complete all Parts of the examination by June 30 of their graduation year. Candidates who are taking the Traditional Format must successfully complete all Parts of the Examination within 12 months of the date of their initial examination. If all Parts are not successfully completed by these designated times, the candidate must retake the entire examination in the Traditional Format. If one or more Parts are failed, all procedures in that Part must be retaken, *not* just the procedures with deficient performance. Traditional candidates applying for re-examination must provide documentation that all school requirements have been completed and the candidate has graduated.

It is the responsibility of each state or licensing jurisdiction to enforce its own remediation policy. There is no state which requires remediation after only one failure; some states may require remediation after two failures. Any candidate intending to seek licensure in one of the states that accepts the results of the CRDTS examination should check with the appropriate State Board regarding its remediation and re-examination requirements. It is the responsibility of the candidate to obtain and complete all requirements for remedial education in accordance with the requirements of the licensing jurisdictions in which they seek to obtain licensure. CRDTS does not assume any responsibility in providing this information or in monitoring the completion of such requirements prior to examination. After three or more failures, CRDTS requires that the candidate submit documentation from a state participating in the CRDTS examination verifying that the candidate has completed the remediation requirements of the state and that the state will accept the results of the re-examination.

Candidates who are *retaking* the examination must fulfill *current examination requirements* since the examination format is periodically redesigned. In every instance of re-examination, the candidate must complete a new application and remit the current examination fee.

Examination Retests

A candidate must reapply for each failed and/or incomplete part of the examination. A *new application, new photos and the appropriate fee for each part*, must be filed for any retest of a failed or incomplete part. Candidates must retake any failed parts of the examination with the same testing agency to which they originally applied.

RETEST FOR PARTS II-V:

Retest opportunities for unsuccessful candidates will be available at select dental schools that may or may not be the candidate's school of attendance. Specific, detailed schedules and corresponding deadlines are published and updated regularly at www.crdts.org.

CIF Candidates

There are a maximum number of retest opportunities for each section which are outlined below; candidates exceeding those maximum limits for any section will be required to re-take all parts in the Traditional Format according to appropriate Application and Exam Fee Policies.

Manikin-based Examinations – Parts II-III: A maximum of two retest opportunities for unsuccessful candidates will be available.

Patient-based Examinations – Parts IV-V: One retest opportunity for unsuccessful candidates will be available.

CIF Candidate Retest Schedule:

Initial Manikin retests for Parts II-III will be on a specified date(s) in December or January, and the second on a specified date(s) from late February through early April.

Patient-based retests for Parts IV-V will be on a specified date(s) in May/June.

POLICY FOR TESTING OF DISABLED CANDIDATES

Any candidate with a documented physical and/or learning disability that impairs sensory, manual or speaking skills which require a reasonable deviation from the normal administration of the examination may be accommodated. All reasonable efforts will be used to administer the examination in a place and manner accessible to persons with disabilities or an attempt will be made to offer alternative accessible arrangements for such individuals. Efforts will be made to ensure that the examination results accurately reflect the individual's impaired sensory, manual or speaking skills, except where those skills are factors the examination purports to measure. Also, attempts will be made to provide appropriate auxiliary aids for such persons with impaired sensory, manual or speaking skills unless providing such auxiliary aids would fundamentally alter the measurement of the skills or knowledge the examination is intended to test or would result in an undue burden.

To ensure that an auxiliary aid or other requested modification exists and can be provided, it is a requirement that any candidate with a disability requesting such modification or auxiliary aid must:

1. Timing of request: Submit, in writing together with the application, a request and all documentation for the auxiliary aid or modification. Requests received after the application date or retroactive requests will not be considered.
2. Documentation verifying disability: Provide documentation of the need for the auxiliary aid or modification. If the candidate is a student in an accredited school, a letter from a school official fulfills this requirement. Otherwise, a letter from the appropriate health care professional is required.
3. Modification(s) needed: Request in writing the exact auxiliary aids or modifications needed and indicate the exact portion(s) of the examination for which such auxiliary aid or modification will be needed.

In providing such auxiliary aids or modifications, the testing agency reserves the ultimate discretion to choose between effective auxiliary aids or modifications and reserves the right to maintain the security of the examination. All information obtained regarding any physical and/or learning disability of a candidate will be kept confidential with the following exceptions:

1. Authorized individuals administering the examination may be informed regarding any auxiliary aid or modification; and
2. First aid and safety personnel at the test site may be informed if the disability might require emergency treatment.

LOCATION OF TESTING SITES

Listed below are the names and addresses of the testing sites within the Central Region and the names and telephone numbers of the examination coordinators at each testing site.

COLORADO

Ms. Fabian Walker (303-724-7110)
University of Colorado
Lazzara Center for Oral-Facial Health
School of Dentistry
MailstopF834, Ste. 104
13065 E 17th Avenue
Aurora, Colorado 80010
fabian.walker@uchsc.edu

GEORGIA

Dr. Frank Caughman (706-721-0211)
Medical College of Georgia
School of Dentistry
1459 Laney Walker Blvd, Rm #AD 1111
Augusta, Georgia 30912
fcaughma@mcg.edu

HAWAII

Contact CRDTS Central Office
785-273-0380
800-370-0380

ILLINOIS

Dr. Debra Schwenk (618-474-7080)
Southern Illinois University
School of Dental Medicine
2800 College Avenue, Bldg 263
Alton, Illinois 62002-4742
dschwen@siue.edu

Ms. Blanca Sanchez (312-355-4666)
University of Illinois
College of Dentistry
801 South Paulina Street
Rm. 103-B2 MC 621
Chicago, IL 60612-7210
blanca@uic.edu

IOWA

Ms MaryJo Mohr (319-335-7438)
University of Iowa
College of Dentistry
N308 Dental Science Bldg, Rm S257
Iowa City, Iowa 52242-1010
Maryjo-mohr@uiowa.edu

MINNESOTA

Ms. Judi Vaughn (612-626-5278)
University of Minnesota
School of Dentistry
8-440 Moos Health Sciences Tower
515 Delaware Street, SE
Minneapolis, Minnesota 55455
Vaugh005@umn.edu

MISSOURI

Ms. Mary Helen Schooley (816-235-2137)
University of Missouri – KC
School of Dentistry
650 East 25th Street
Kansas City, Missouri 64108-2716
schooleym@umkc.edu

NEBRASKA

Dr. W. Thomas Cavel (402-280-5078)
Creighton University
School of Dentistry
2500 California Plaza
Omaha, Nebraska 68178-0001
wtcavel@creighton.edu

Dr. Joan Sivers (402-472-1272)
University of Nebraska
College of Dentistry
40th & Holdredge Streets
Lincoln, Nebraska 68583-0740
jsivers@unmc.edu

SOUTH CAROLINA

Ms. Linda Conrad (843)792-2255
Medical University of South Carolina
College of Dental Medicine
173 Ashley Ave., BSB 246
Charleston, SC 29425
conradl@musc.edu

WISCONSIN

Ms. Jeanne Hoppe (414)288-1622
Marquette University
School of Dentistry
1801 W. Wisconsin Avenue, Rm 249
Milwaukee, Wisconsin 53233
jeanne.hoppe@marquette.edu

LICENSURE INFORMATION

CRDTS IS NOT A LICENSING AGENCY. In order to obtain licensure in any of the eleven member states, the candidate must apply to the state(s), pay its fees and meet any additional requirements. For more information on licensure requirements, please write to the following:

COLORADO STATE BOARD OF DENTAL EXAMINERS

1560 Broadway - Suite 1310 # (303) 894-7761
Denver, Colorado 80202-5146 Fax: (303) 894-7764

Ms. Jessica Lehew
jessica.lehew@dora.state.co.us
<http://www.dora.state.co.us/Dental>

GEORGIA BOARD OF DENTISTRY .

237 Coliseum Drive # (478) 207-2440
Macon, GA 31217-3858 Fax: (478) 207-1699

Ms. Anita Martin, Executive Director
aomartin@sos.state.ga.us
www.sos.state.ga.us/plb

HAWAII STATE BOARD OF DENTAL EXAMINERS

Department of Commerce and Consumer Affairs
P.O. Box 3469 # (808) 586-2702
Honolulu, HI 96801 Fax: (808) 586-2689

Dr. James Kobashigawa
Ms. Jodi Leandro, Licensing Examiner
www.hawaii.gov/dcca
dental@dcca.hawaii.gov

ILLINOIS BOARD OF DENTISTRY ..

320 W. Washington - 3rd Floor # (217) 557-2053
Springfield, Illinois 62786-0001 Fax: (217) 782-7645

Ms. Alicia Purchase, Board Administrator
alicia.purchase@illinois.gov
www.dpr.state.il.us

IOWA BOARD OF DENTAL EXAMINERS

400 SW 8th Street, Suite D # (515) 281-5157
Des Moines, Iowa 50309-4687 Fax: (515) 281-7969

Ms. Constance Price, Executive Director
ibde@iowa.gov
www.state.ia.us

KANSAS DENTAL BOARD

#... (785) 296-4690
900 SW Jackson, Room 564-S
Topeka, Kansas 66612-1572. Fax: (785) 296-3116

Ms. Betty Wright, Executive Director
betty.wright@dental.state.ks.us

MINNESOTA BOARD OF DENTISTRY

2829 University Avenue SE, Suite 450 ... # (612) 617-2257
Minneapolis, MN. 55414-4201 Fax: (612) 617-2260

Mr. Marshall Shragg, Exec. Dir.
Marshall.Shragg@state.mn.us
www.dentalboard.mn.us

MISSOURI DENTAL BOARD

.....
3605 Missouri Blvd. # (573) 751-0040
Jefferson City, MO. 65109-7111 Fax: (573) 751-8216

Mr. Brian Barnett, Executive Director
www.pr.mo.gov/dentla.asp
dental@pr.mo.gov

NEBRASKA BOARD OF DENTISTRY

301 Centennial Mall South # (402) 471-2118
P.O. Box 94986 Fax: (402) 471-3577
Lincoln, Nebraska 68509-4986.....

Ms. Vonda Apking, Credentialing Coordinator
vonda.apking@nebraska.gov
www.hhs.state.ne.us

NORTH DAKOTA BOARD OF DENTAL EXAMINERS

P.O. Box 7246, 1714 N. 9th St. # (701) 258-8600
Bismarck, ND 58507-7246 Fax: (701) 224-9824

Ms. Rita Sommers, Executive Director
<http://www.nddentalboard.org>
ndsbd@aptnd.com

SOUTH CAROLINA BOARD OF DENTISTRY

110 Centerview Dr # (803) 896-5795
P.O. Box 11329 Fax: (803) 896-4596
Columbia, SC 29211-1329

Ms. Veronica Reynolds, Administrator
reynoldsv@llr.sc.gov
www.ilr.state.sc.us

SOUTH DAKOTA STATE BOARD OF DENTISTRY

106 West Capitol, P. O. Box 1037 # (605) 224-1282
Pierre, SD 57501 Fax: (605) 224-7426

Ms. Brittany Novotny, Executive Director
www.state.sd.us/dohr/dentistry
pat@sdboardofdentistry.com

WASHINGTON STATE DENTAL HEALTH CARE QUALITY ASSURANCE COMMISSION
PO BOX 47867 # (360) 236-4700 Ms. Jennifer Bressi, Program Mgr
Olympia, WA 98504-7867 Fax: (360) 664-9077 www.doh.wa.gov
.. jennifer.bressi@doh.wa.gov

WASHINGTON STATE DEPARTMENT OF HEALTH – DENTAL HYGIENE EXAMINING COMMITTEE
PO BOX 47867 # (360) 236-4865 Ms. Vicki Brown
Olympia, WA 98504-7867 Fax: (360) 664-9077 vicki.btown@doh.wa.gov

WISCONSIN: DENTISTRY EXAMINING BOARD
P.O. Box 8935 # (608) 266-8098 Mr. Tom Ryan, Bureau Director
Madison, Wisconsin 53708 Fax: (608) 267-3816 <http://www.dri.state.wi.us>
thomas.ryan@drl.state.wi.us

WYOMING BOARD OF DENTAL EXAMINERS
2020 Carey Avenue # (307) 777-6529 Ms. Debra Bridges, Executive Director
Suite 201.....Fax: (307) 777-3508 dbridg@state.wy.us
Cheyenne, Wyoming 82002

STATE HEALTH DEPARTMENTS

STATE OF COLORADO

Department of Health & Environment
AIDS Section
4300 Cherry Creek Drive South
Denver, Colorado 80222
(303) 692-2000

STATE OF GEORGIA

Division of Public Health
Two Peachtree Street, NW
Atlanta, Georgia 30303-3186

STATE OF HAWAII

Department of Health
P.O. Box 3378
Honolulu, HI 96801

STATE OF ILLINOIS

Department of Health
515 W. Jefferson
Springfield, Illinois 62761
(217) 782-4977

STATE OF IOWA

Department of Public Health
321 East 12th Street
Des Moines, Iowa 50319-0075
(515) 281-7689

STATE OF KANSAS

Department of Health & Environment
AIDS Section
Curtis State Office Bldg.
Topeka, Kansas 66612
(913) 296-1500

STATE OF MINNESOTA

Department of Health
Division of Disease Prevention &
Control
717 Delaware Street S.E.
P. O. Box 64975
Minneapolis, MN. 55440
(651) 201-5000

STATE OF MISSOURI

Department of Health
P. O. Box 570
Jefferson City, MO. 65102
(314) 751-6001

STATE OF NEBRASKA

Department of Health
301 Centennial Mall South
P.O. Box 95007
Lincoln, Nebraska 68509-5007
(402) 471-2957

STATE OF NORTH DAKOTA

Department of Health
Division of Disease Control
HIV/AIDS Program
600 E. Boulevard Ave.
Bismark, ND 58505-0200
(701) 328-2372

STATE of SOUTH CAROLINA

Dept. of Health & Environmental
Control
2600 Bull Street
Columbia, SC 29201
(803) 898-3432

STATE OF SOUTH DAKOTA

Department of Health
600 E. Capitol Avenue
Pierre, SD 57501-2536
(603) 773-3361

STATE OF WASHINGTON

Department of Health
P.O. Box 47840
Olympia, Washington 98504-7840
(800) 272-2437 or (306) 236-4501

STATE OF WISCONSIN

Department of Health and Faculty
Services
1 West Wilson Street
Madison, Wisconsin 53703-3044
(608) 266-1865 or (608) 267-7371

STATE OF WYOMING

Administrator of the Division of
Preventive Medicine
Department of Health
401 Hathaway Building
Cheyenne, Wyoming 82002
(307) 777-7656

CHECKLIST OF REQUIRED MATERIALS AND INSTRUMENTS

ORIENTATION:

- Picture ID for admission to orientation
- Any missing application requirements (diploma, etc.)
- This Candidate Manual
- Black Ball Point Pens

CLINICAL EXAMINATION:

- This Candidate Manual
- Ball Point Pens (black)
- Sphygmomanometer
- Pre-op Restorative Radiographs and Periodontal Radiographic Survey
- Completed Medical Histories and Consent Forms
- Completed Periodontal Treatment Selection Worksheet
- #11/12 explorer
- Metal periodontal probe with 1 mm markings
- Sonic/ultrasonic scaler (optional)
- Sharp traditional explorer for caries detection (such as a Shepherd's Hook)
- Dental mirror, clean unscratched
- Cotton Pliers
- Articulating paper and holder
- Waxed dental floss
- Handpiece compatible with testing site attachments
- Acidental ModuPRO™ Typodont — Endodontic and Prosthodontic Modules
- Operating instruments
- Instrument Tray

GLOSSARY

Glossary of Words, Terms and Phrases

Abfraction	The deep V-shaped groove usually noted at the CEJ which is caused by bruxism. This may be visible or below the gingival margin.
Abrasion	Abnormal wearing of tooth substance or restoration by mechanical factors other than tooth contact.
Abutment	A tooth used to provide support or anchorage for a fixed or removable prosthesis.
Acrylic Resin	Synthetic resin derived from acrylic acid used to manufacture dentures/denture teeth and provisional restorations.
Adjustment	Selective grinding of teeth or restorations to alter shape, contour, and establish stable occlusion.
Angle	A corner; cavosurface angle: angle formed between the cavity wall and surface of the tooth; line angle: angle formed between two cavity walls or tooth surfaces.
Apical	the tip, or apex, of a root of a tooth and its immediate surroundings.
Attached Gingiva	The portion of the gingiva that extends apically from the base of the sulcus to the mucogingival junction.
Attrition	loss of tooth substance or restoration caused by mastication or tooth contact.
Axial wall	An internal cavity surface parallel to the long axis of the tooth.
Base	A replacement material for missing dentinal tooth structure, used for bulk buildup and/or for blocking out undercuts. Examples include ZOIB&T, IRM and zinc-phosphate cement.
Bevel	A plane sloping from the horizontal or vertical that creates a cavosurface angle which is greater than 90°.
Bonding Agent	See Sealers.
Bridge	Permanently fixed restoration that replaces one or more missing natural teeth.

Build Up	A restoration associated with a cast restoration, which replaces some, but not all, of the missing tooth structure coronal to the cemento-enamel junction. The buildup provides resistance and retention form for the subsequent cast restoration. Also called Pin Amalgam Build Up (PABU) or Foundation.
Calculus	A hard deposit attached to the teeth, usually consisting of mineralized bacterial plaque.
Caries	An infectious microbiological disease that results in localized dissolution and destruction of the calcified tissues of the teeth. The diagnosis of dentinal caries is made by tactile sensation with light pressure on an explorer, described as (1) a defect with a soft, sticky base, or (2) a defect that can be penetrated and exhibits definite resistance upon withdrawal of the explorer.
Cavity Preparation	Removal and shaping of diseased or weakened tooth tissue to allow placement of a restoration.
Cavosurface Margin	The line angle formed by the prepared cavity wall with the unprepared tooth surface. The margin is a continuous entity enclosing the entire external outline of the prepared cavity. Also called the cavosurface line angle.
Cemento-enamel Junction	Line formed by the junction of the enamel and cementum of a tooth.
Centric occlusion	That vertical and horizontal position of the jaws in which the cusps of the maxillary and mandibular teeth interdigitate maximally.
Centric relation	That operator guided position of the jaws in which the condyles are in a rearmost and uppermost position in the fossae of the temporomandibular joint.
Contact Area	The area where two adjacent teeth approximate.
Convenience Form	The shape or form of a cavity preparation that allows adequate observation, accessibility, and ease of operation in preparing and restoring the cavity.
Convergence	The angle of opposing cavity walls which, when projected in a gingival to occlusal direction, would meet at a point some distance occlusal to the occlusal or incisal surface.
Core	A restoration associated with a cast restoration which replaces <u>all</u> coronal tooth structure and is usually associated with a post of one type or another. The core provides resistance and retention form for the subsequent cast restoration.
Crown	Cast-metal restoration or porcelain restoration covering most of the surfaces of an anatomical crown.

Cusp (functional)	Those cusps of teeth which by their present occlusion, provide a centric stop which interdigitates with a fossa or marginal ridge of an opposing tooth/teeth.
Cusp (non-functional)	Those cusps of teeth which by their present occlusion, <u>do not</u> provide a centric stop which interdigitates with a fossa or marginal ridge of an opposing tooth/teeth.
Debris	Scattered or fragmented remains of the cavity preparation procedure. All debris should be thoroughly removed from the preparation before the restoration is placed.
Decalcification	Demineralized area of enamel that may appear white and chalky or may be discolored. It is not considered carious if it cannot be penetrated by an explorer and does not exceed ½ the thickness of the enamel.
Defective Restoration	Any dental restoration which is judged to be causing or is likely to cause damage to the remaining tooth structure if not modified or replaced.
Dentin	Calcified tissue surrounding the pulp and forming the bulk of the tooth.
Deposits - subgingival	Deposits which are apical to the gingival margin.
Deposits - supragingival	Deposits which are coronal to the gingival margin.
Divergence	The angle of opposing cavity walls which, when projected in an occlusal to gingival direction, would meet at a point some distance gingival to the crown of the tooth.
Embrasure	A “V” shaped space continuous with an interproximal space formed by the point of contact and the subsequent divergence of these contacting surfaces in an occlusal (incisal), gingival, facial or lingual direction.
Enameloplasty	The selected reshaping of the convolutions of the enamel surface (fissures and ridges) to form a more rounded or “saucer” shape to make these area more clean able, finish able, and allow more conservative cavity preparation external outline forms.
Erosion	Abnormal dissolution of tooth substance by chemical substances. Typically involves exposed cementum at the CEJ.
Exposure	<i>See “Pulp Exposure”</i>
Fissure	A developmental linear fault in the occlusal, buccal or lingual surface of a tooth, commonly the result of the imperfect fusion of adjoining enamel lobes.
Flash	Excess restorative material extruded from the cavity preparation extending onto the unprepared surface of the tooth.

Foundation	See Build Up
Gingival Recession	The visible apical migration of the gingival margin, which exposes the CE junction and root surface.
Gingival wall	An internal cavity surface perpendicular to the long axis of the tooth near the apical or cervical end of the crown of the tooth or cavity preparation.
Gingivitis	Inflammation of the gingiva
Glass Ionomer	Material containing polyacrylic acid and aluminosilicate glass that that can be used as restorative, lining or luting material.
Grainy	The rough, perhaps porous, poorly detailed surface of a material.
Ill-defined	A cavity preparation which, while demonstrating the fundamentals of proper design, lacks detail and refinement in that design.
Infra-occlusion	A tooth or restoration which lacks opposing tooth contact in centric when such contact should be present.
Interproximal contact	The area of contact between two adjacent teeth; also called proximal contact.
Isthmus	A narrow connection between two areas or parts of a cavity preparation.
Keratinized Gingiva	In healthy mouths, this includes both the free marginal and attached gingiva which are covered with a protective layer of keratin. It is the masticatory oral mucosa which withstands the frictional stresses of mastication and toothbrushing; and provides a solid base for the movable alveolar mucosa for the action of the cheeks, lips and tongue.
Line angle	The angle formed by the junction of two surfaces. In cavity preparations there can be internal and external line angles which are formed at the junction of two cavity walls.
Line of draw	The path or direction of withdrawal or seating of a removable or cast restoration.
Liner	Resin or cement coating of minimal thickness (usually less than 0.5 mm) to achieve a physical barrier and/or therapeutic effect (a chemical effect that in some way benefits the health of the tooth pulp). Examples include Dycal, Life, Cavitec, Hydroxylite, Vitrebond, and Fuji Lining LC.
Liner - treatment	An appropriate dental material placed in deep portions of a cavity preparation to produce desired effects on the pulp such as insulation, sedation, stimulation of odontoblasts, bacterial reduction, etc. Also called therapeutic liner.
Long axis	An imaginary straight line passing through the center of the whole tooth occlusoapically.

Marginal deficiencies	Failure of the restorative material to properly and completely meet the cut surface of the cavity preparation; the marginal discrepancy does not exceed .5 mm, and the margin is sealed. May be either voids or under-contour.
Marginal excess	Restorative material which extends beyond the cavosurface margin of the cavity walls. Marginal excess may or may not extend onto the unprepared surface(s) of the tooth. See also: over-contoured, flash, over-extension.
Mobility	The degree of looseness of a tooth.
Occluso-axial line angle	In a casting preparation, the angle formed by the junction of the prepared occlusal and axial (lingual, facial, mesial, distal) surfaces.
Open margin	A cavity margin or section of margin at which the restorative material is not tightly adapted to the cavity preparation wall(s). Margins are generally determined to be open when they can be penetrated by the tine of a sharp dental explorer.
Outline Form (external)	The external boundary or perimeter of the area of the tooth surface to be included within the outline or enamel margins of the finished cavity preparation
Outline Form (internal)	The internal details and dimensions of the finished cavity preparation.
Over-contoured	Excessive shaping of the surface of a restoration so as to cause it to extend beyond the normal physiologic contours of the tooth when in health.
Over-extension (preparation)	The placement of final cavity preparation walls beyond the position required to properly restore the tooth as determined by the factors which necessitated the treatment.
Over-extension (restoration)	Restorative material which extends beyond the cavosurface margin of the cavity walls. Marginal excess may or may not extend onto the unprepared surface(s) of the tooth. See also; Over-contoured, Flash, Marginal excess.
Overhang (restoration)	The projection of restorative material beyond the cavosurface margin of the cavity preparation but which does not extend on to the unprepared surface of the tooth; also, the projection of a restoration outward from the nominal tooth surface. See also Flash.
Path of insertion	The path or direction of withdrawal or seating of a removable or cast restoration. See Line of Draw.
Periapical	Area around the root end of a tooth.
Periodontitis	Inflammation of the supporting tissues of the teeth. Usually a progressively destructive change leading to loss of bone and periodontal ligament. An extension of inflammation from gingiva into the adjacent bone and ligament.

Pits (surface)	Small voids on the polished surface (but not at the margins) of a restoration.
Polishing (restoration)	The act or procedure of imparting a smooth, lustrous, and shiny character to the surface of the restoration
Pontic	The suspended portion of a fixed bridge that replaces the lost tooth or teeth.
Porous (restoration)	To have minute orifices or openings in the surface of a restoration which allows fluids or light to pass through.
Provisional restoration	Any restoration, which by its intent, is placed for a reduced period of time or until some event occurs. Any restorative material can be placed as a provisional restoration. It is only the intent or the restoration and not the material which determines the provisional status.
Pulp cap (direct)	The technique of placing a base over the exposed pulp to promote reparative dentin formation and the formation of a dentinal bridge across the exposure. The decision to perform a pulp cap or endodontics and the success of the procedure is determined by the conditions under which the pulp was exposed.
Pulp cap (indirect)	The technique of deliberate incomplete caries removal in deep excavation to prevent frank pulp exposure followed by basing of the area with an appropriate pulpal protection material to promote reparative dentin formation. The tooth may or may not be re-entered in 6-8 weeks to remove the remaining dentinal caries.
Pulp exposure (cariou)	The frank exposure of the pulp through clinically carious dentin.
Pulp exposure (general)	The exposure of the pulp chamber or former pulp chamber of a tooth with or without evidence of pulp hemorrhage.
Pulp exposure (irreparable)	Generally, a pulp exposure in which most or all of the following conditions apply: The exposure is greater than 0.5 mm; the tooth had been symptomatic; the hemorrhage is not easily controlled; the exposure occurred in a contaminated field; the exposure was relatively traumatic.
Pulp exposure (mechanical) (unwarranted)	The frank exposure of the pulp through non-cariou dentin caused by operator error, misjudgment, pulp chamber aberration, etc.
Pulp exposure (reparable)	Generally, a pulp exposure in which most or all of the following conditions apply: the exposure is less than 0.5 mm; the tooth had been asymptomatic; the pulp hemorrhage is easily controlled; the exposure occurred in a clean, uncontaminated field; the exposure was relatively atraumatic.

Pulpal wall	An internal cavity surface perpendicular to the long axis of the tooth. Also pulpal floor.
Pulpoaxial line angle	The line angle formed by the junction of the pulpal wall and axial wall of a prepared cavity.
Pulpotomy	The surgical amputation of the vital dental pulp coronal to the cementoamel junction in an effort to retain the radicular pulp in a healthy, vital state.
Resistance Form	The features of a tooth preparation that enhance the stability of a restoration and resist dislodgement along an axis other than the path of placement.
Retention Form	The feature of a tooth preparation that resists dislodgment of a crown in a vertical direction or along the path of placement.
Root planing	A definitive treatment procedure designed to remove cementum or surface dentin that is rough, impregnated with calculus, or contaminated with toxins or microorganisms.
Scaling	Instrumentation of the crown and root surfaces of the teeth to remove plaque, calculus, and stains from these surfaces.
Surface Sealant - composite resin restoration coating	After polishing, the application of the unfilled resin (bonding agent) of the composite resin system to the surface of the restoration to fill porosities or voids in the body of the restoration or at the margins or to provide a smooth surface to the restoration followed by curing.
Sealers	<p>Cavity sealers provide a protective coating for freshly cut tooth structure of the prepared cavity.</p> <ol style="list-style-type: none"> a. Varnish: A natural gum, such as copal rosin, or a synthetic resin dissolved in an organic solvent, such as acetone, chloroform, or ether. Examples include Copalite, Plastodent, Varnish, and Barrier. b. Resin Bonding Agents: Include the primers and adhesives of dentinal and all-purpose bonding agents. Examples include All-Bond 2, Scotchbond MP+, Optibond, ProBond, Amalgambond, etc.
Shade (restoration)	The color of a restoration as defined by hue, value, and chroma which is selected to match as closely as possible the natural color of the tooth being restored.
Shoulder Preparation	A shelf cut around the tooth as for a all ceramic crown.
Sonic scaler	An instrument tip attached to a transducer through which high frequency current causes sonic vibrations (approximately 6,000 cps). These vibrations, usually accompanied by the use of a stream of water, produce a turbulence which in turn removes adherent deposits from the teeth.

Sound Tooth Structure	Enamel that has not been demineralized or eroded; it may include proximal decalcification that does not exceed ½ the thickness of the enamel and cannot be penetrated by an explorer.
Stain - Extrinsic	Stain which forms on and can become incorporated into the surface of a tooth after development and eruption. These stains can be caused by a number of developmental and environmental factors.
Stain - Intrinsic	Stain which becomes incorporated into the internal surfaces of the developing tooth. These stains can be caused by a number of developmental and environmental factors.
Sterilization	A heat or chemical process to destroy microorganisms.
Supra-occlusion	A tooth or restoration which has excessive or singular opposing tooth contact in centric or excursions when such contact should not be present and should be balanced with the other contacts in the quadrant or arch.
Taper	To gradually become more narrow in one direction
Temporary restoration	See Provisional Restoration.
Tissue Trauma	Unwarranted iatrogenic damage to extra/intraoral tissues resulting in significant injury to the patient, such as lacerations greater than 3mm, burns, amputated papilla, or large tissue tags.
Ultrasonic scaler	An instrument tip attached to a transducer through which high frequency current causes ultrasonic vibrations (approximately 30,000 cps). These vibrations, usually accompanied by the use of a stream of water, produce a turbulence which in turn removes adherent deposits from the teeth.
Uncoalesced	The failure of surfaces to fuse or blend together such as the lobes of enamel resulting in a tooth fissure.
Under-contoured	Excessive removal of the surface of a restoration so as to cause it to be reduced beyond the normal physiologic contours of the tooth when in health.
Undercut	<ol style="list-style-type: none"> a. Feature of tooth preparation that retains the intra-coronal restorative material. b. An undesirable feature of tooth preparation for an extra-coronal restoration.
Under-extension (preparation)	Failure to place the final cavity preparation walls at the position required to properly restore the tooth as determined by the factors which necessitated the treatment.
Under-extension (restoration)	Restorative material which fails to extend to the cavosurface margin of the cavity walls thereby causing exposure of the prepared cavity wall.

Undermined enamel	During cavity preparation procedures; an enamel tooth surface (particularly enamel rods) which lacks dentinal support. Also called unsupported enamel.
Unsound Marginal Enamel	Loose or fragile cavosurface enamel that is usually discolored or demineralized, which can be easily removed with hand instruments when mild to moderate pressure is applied.
Varnish	See Sealers
Void(s)	An unfilled space within the <u>body</u> of a restoration or at the restoration margin which may or may not be present at the external surface and therefore may or may not be visible to the naked eye.

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DENTAL CANDIDATES' MANUAL FOR MANIKIN PROCEDURES INTEGRATED FORMAT

Class of 2010



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

As administered by the following testing agency:

**Central Regional Dental Testing Service, Inc.
1725 SW Gage Blvd.
Topeka, Kansas 66604
(785) 273-0380
www.crdts.org**

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

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CRDTS Curriculum Integrated Format Examination

Class of 2010 – AT A GLANCE

SCHEDULED EXAMINATION DATES

Manikin-Based (Total 1 day)	First Opportunity	September/November (at Candidate's School)
Part II: Endodontics Exam		
Part III: Fixed Prosthodontics Exam	Second Opportunity <i>(for Retest Only)</i>	December/January
	Third Opportunity <i>(for Retest Only)</i>	May/June (at select schools <u>only</u>)

Patient-Based (Total 1 day)	First Opportunity	February – April (at Candidate's School)
Part IV: Periodontal Exam		
Part V: Restorative Exam	Second Opportunity <i>(for Retest Only)</i>	May/June (at select schools <u>only</u>)

Visit our website: www.crdts.org for specific examination/deadline date(s)

Complete applications and fees must be **received** on or before deadline dates in order to be processed.

Requests for a refund or deferral of fees must be **received** on or before deadline dates.

A \$200 administrative fee will be deducted from the amount refunded or charged to the candidate for a deferral of fees.

FEES

Initial Examinations Package Parts I – IV: \$1,900

Individual Retest Examination(s): As outlined within this Manual

RELEASE OF SCORE REPORTS

Manikin: Scores will be reported within 3-4 weeks after the **candidate's respective examination is completed.**
Manikin exams scored off site will have additional delays.