STANDARDS FOR EDUCATION OF DENTAL TECHNICIANS - 2021

KINGDOM OF BHUTAN

BHUTAN MEDICAL AND HEALTH COUNCIL
ROYAL GOVERNMENT OF BHUTAN

STANDARDS FOR EDUCATION OF DENTAL TECHNICIANS

KINGDOM OF BHUTAN

Bhutan Medical and Health Council
Royal Government of Bhutan

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ACKNOWLEDGEMENT

This document was developed during a workshop in Thimphu from 16-20 March 2021. The following officials actively contributed in the development of this document:

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PREAMBLE

Under the power vested in the General Body by the Chapter VI Section (i) of the Medical and Health Council Act 2002, Kingdom of Bhutan, the General Body of the Council during its 14th General Body Meeting held on 25th August 2021 approved this document.

Short Title

Standard for Education of Dental Technicians (2021).

Commencement

This standard shall come into effect from 1st January 2022.

Supersession

This Standard shall supersede the provisions of existing standards, guidelines, notifications and circulars that are inconsistent with this Standard.

SCOPE AND APPLICATION

These standards shall apply to all institutes providing education and training in Diploma in Dental Technology programs. The checklist provided at the end of the standard is applicable only for a maximum of 50 students. Any increase from 50 will require adoption of a new checklist for all standards.

LEGAL CONTEXT

As per the powers granted under Chapter III Section 1a, 1b and 2 and Chapter VI (h) of the Medical and Health Council Act 2002, the Bhutan Medical and Health Council hereby frames the following standards:

Standard 1: Governance and Management
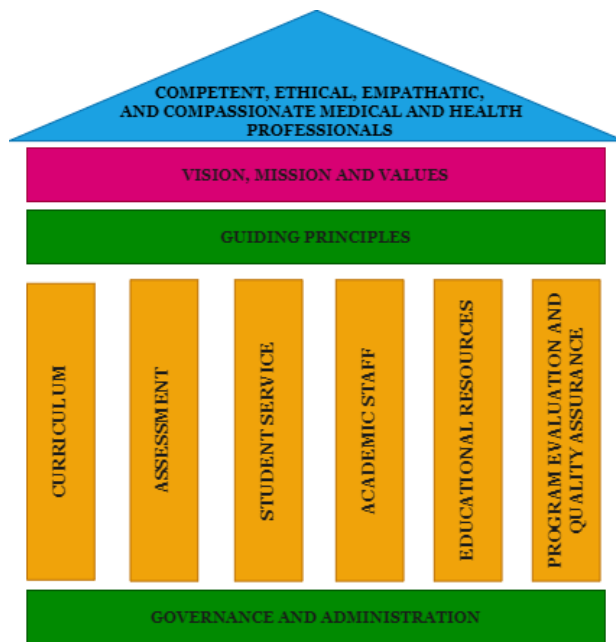
Standard 2: Curriculum

Standard 3: Assessment

Standard 4: Teaching Faculty

Standard 5: Student Service

Standard 6: Resources

Standard 7: Program Evaluation and Quality Assurance

PRINCIPLES

These standards for education of Dental Technician are based on the following principles:

1. Establishment of quality objectives provides a clear direction for the measurement of standards;

2. Identification of competencies provides a sound basis to build curricula that meet health needs of the population;

3. Provision of adequate resources is key towards ensuring availability of appropriate facilities for education and learning;

4. Interaction between the students and the clients is the primary focus of quality education and care;

5. An inter-professional approach to education and practice is critical in Dental Technicians education;

6. The standards will serve as benchmarks and promote uniformity in the teaching and learning systems.

EXPECTED OUTCOMES

1. Graduates demonstrate established competencies in Dental Technicians' practice with a sound understanding of dental sciences;

2. Graduates are awarded a Diploma in Dental Technology;

3. Meet the regulatory standards set by the Bhutan Medical and Health Council.

STANDARD I: GOVERNANCE AND MANAGEMENT

This standard is set to establish governance and management structures in the educational institute to provide effective leadership. The institute shall ensure a clear mechanism (policies and practices) of leadership and management. The area includes leadership; resource planning and allocation, and organizational structure. These must reflect professional standards and meet the needs and expectations of the community[1] of interest. Policies and practices shall be consistent with the requirements of Bhutan Medical and Health Council and service standards of the Ministry of Health.

1.1. Objective

To delineate the functional and structural governance in the institute with clear vision, mission, and expected outcomes.

1.2. Quality Indicators

1.2.1.   There is a clearly stated vision, mission, objectives and expected outcomes of the institute;

1.2.2.   There is defined governance and administrative structure including relevant boards, and committees with clear terms of reference (Annexure 1);

1.2.3.   There is an identified teaching hospitals for clinical training;

1.2.4.   There is a quality assurance unit/committee to ensure effective monitoring of academic programme;

1.2.5.   There is a defined mechanism to ensure adequate and regular financial resources to sustain the educational programs;

1.2.6.   There is dedicated allocation of the resources necessary for the implementation of the curriculum and educational needs;

1.2.7.   There is a clear organizational structure for administrative and professional staff with clearly defined responsibilities and functions;

1.2.8.   There is a process in place to get approval from the BMHC for introduction/ revision of the program;

1.2.9.   The organizational chart is clearly defined and displayed within the institute premises;

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[1] Community refers to the faculties, students and staff of the institute, and public.

1.2.10. The Head of the institute[2]/department[3] shall be bhutanese preferably professional background in dental science with relevant qualification and registered with Bhutan Medical and Health Council;

1.2.11. The management of the institute is monitored and evaluated by the relevant committees/boards;

1.2.12. The institute has at least one Academic Committee with clear Terms of Reference;

1.2.13. The administrative body holds regular meetings, keeps minutes, and communicates pertinent information to staff and students;

Annexure 1: SAMPLE OF THE GOVERNANCE STRUCTURE OF THE INSTITUTE

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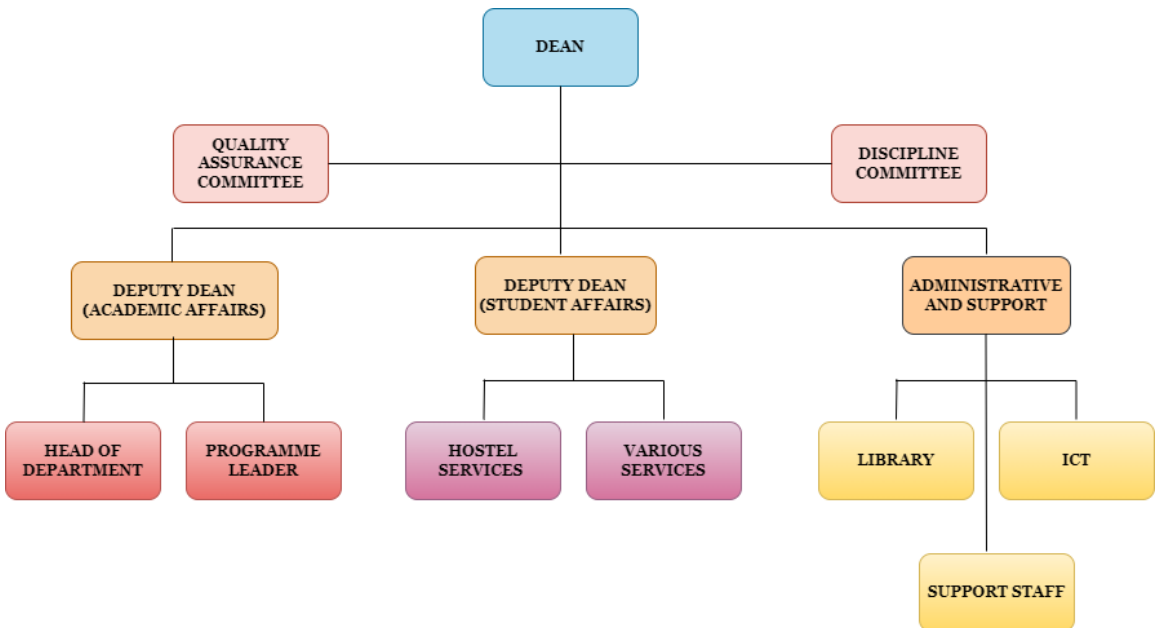
[2] Institute refers to those institutes offering only dental programs.
[3] Departments refers to those institutes offering various programs.

Annexure 2 - CHECKLIST FOR STANDARD I: GOVERNANCE AND MANAGEMENT

Direction:
Assess the available resources, put tick (√) in the appropriate column.

Date of Assessment: …………………………………………….……………..

Name of the institute/college: …………………………………….……………..

Address: ……………………………………………………………………………..

Sl. No.	Items	Yes	No	Remarks
1.	Is there clearly defined vision, mission and expected outcomes?			
2.	Is there a clearly defined governance and administrative structure including relevant boards and committees with clear terms of reference?			
2.1	Is there a defined organogram of the institute?			
2.2	Are the job responsibilities of the head of institute/board/committee defined?			
3.	Is there an identified teaching hospital for clinical training?			
4.	Is there a quality assurance unit/committee for monitoring and evaluation?			
5.	Is there a defined mechanism for allocation of adequate and regular financial resources?			
6.	Is there a process to get approval from the BMHC for introduction/revision of the program?			
7.	Is the management body of the institute monitored and evaluated by the relevant committee/body?			
8.	Is there an Academic Committee with a clear ToR?			
9.	Has the administrative body conducted regular meetings, recorded minutes, and communicated pertinent information to staff and students?			
9.1	Are there records of minutes for the regular meeting?			
9.2	Are the minutes and recommendations communicated to staff and the students?			

10	Does the head of the institute come from a relevant background with relevant qualifications and experience and is registered with BMHC?			

(Name & Signature of Evaluator)   **(Name & Signature of Representative of Institute)**

STANDARD II: CURRICULUM

This standard is set to ensure that the outcome of the programme is consistent with the vision, mission, and objectives of the institute. The curriculum shall include adequate theory and clinical practice on general education, biomedical sciences, basic dental sciences, and dental laboratory sciences to prepare the graduates with a level of competence required for safe and effective care at the level relevant to the programme offered.

2.1. Objective

To have a dynamic curriculum that leads to graduates who demonstrate competencies and skills with dental laboratory practice; and providing dental care services, adhere to the code of ethics and standards of the profession.

2.2. Quality Indicators

2.2.1. The curriculum includes General Education, Biomedical Sciences, Basic Dental Sciences and Dental Laboratory sciences.

2.2.2. The dental Technology program has established mechanisms to ensure sufficient theoretical knowledge, clinical and laboratory experience to attain competence and develop appropriate judgment.

2.2.3. The curriculum meets national education criteria, and professional and regulatory requirements for practice; validated and approved by the affiliated university/relevant boards.

2.2.4. There is a clear plan for the review of the curriculum;

2.2.5. The institution teaches the principles of scientific method and evidenced-based practices, including analytical, critical thinking and competencies required for the profession throughout the curriculum;

2.2.6. The duration of the training program is a minimum 3 years for a Diploma course.

Annexure 1 - CHECKLIST FOR STANDARD II: CURRICULUM

Direction:
Assess the available resources, put tick (√) in the appropriate column.

Date of Assessment: …………………………………………….…………..

Name of the institute/college: …………………………………….…………..

Address: …………………………………………………………………..

Sl. No.	Items	Yes	No	Remarks
1.	Is the curriculum validated and approved by the affiliated university/relevant boards ?			
2.	Does the curriculum meet national criteria, and professional and regulatory requirements for practise?			
3.	Is there a clear plan for the review of the curriculum?			
4.	Is there a clear mention of core competencies in the curriculum?			
5.	Is the teaching-learning methods clearly outlined for both practical and theory modules?			
6.	Are the learning outcomes and objectives clearly stated?			
7.	Is there a clear semester-wise description of course content?			
8.	Is the hour distribution for theory and practical components in accordance with the module requirement?			
9.	Is the duration of the course clearly stated according to the program offered?			

(Name & Signature of Evaluator)   **(Name & Signature of Representative of institute)**

Annexure 2 - CHECKLIST FOR STANDARD II: CURRICULUM CONTENT

Direction:
Assess the available resources, put tick (√) in the appropriate column.

Date of Assessment: ……………………………………………….…………..

Name of the institute/college: ……………………………………….…………..

Address: …………………………………………………………………………

Sl. No.	Items	Yes	No	Remarks
1.	Does the curriculum include General Education like sociology, psychology, academic skills?			
2.	Does the curriculum include Biomedical Sciences like anatomy, physiology, biochemistry, microbiology, immunology, nutrition and pharmacology?			
3.	Does the curriculum includes Dental sciences terminologies, legal, ethical and historical aspects of dentistry, Infection control and Waste management, Preventive Dentistry, Anatomy and Physiology in Dentistry, Microbiology, Biochemistry and pharmacology in Dentistry. Management and record keeping in a Dental Laboratory?			
4.	Does the curriculum include Dental Laboratory Technology covering ; Dental Materials, mechanics and metallurgy, Removable Partial Dentures, Fixed Partial Dentures, Complete Dentures and Removable Orthodontics?			
5.	Does the curriculum include Dental Laboratory Technology skills to gain competencies in; Removable Partial Dentures, Fixed Partial Dentures, Complete Dentures and Removable Orthodontics?			

*subjected to change as per curriculum revision.

(Name & Signature of Evaluator)   **(Name & Signature of Representative of institute)**

STANDARD III: ASSESSMENT

This standard is set to have a clear assessment system which will evaluate the achievement of intended learning outcomes. The assessment shall be fair, reliable and valid enabling students to demonstrate what proficiencies they achieved. Assessment shall include various methods for continuous quality improvement. The institute shall put in place mechanisms for appeal and scrutiny by the external experts.

3.1. Objectives

To have an appropriate, valid and reliable assessment system with continuous and summative methods to assess the learning outcome.

3.2. Quality Indicators

3.2.1.   The institute has a clear assessment policy and process;

3.2.2.   Assessment system encompasses continuous and summative modes;

3.2.3.   Assessment is open to scrutiny by the external experts;

3.2.4.   There is a method of assessment to avoid conflict of interest;

3.2.5.   There is a system for appeal of assessment results;

3.2.6.   There is consistent approach to assessment across modules that are periodically reviewed and updated;

3.2.7.   The faculty conducting the assessment adopts a formal preparation process in assessment and evaluation;

3.2.8.   The assessors have experience/expertise in the subject area;

3.2.9.   The assessment is mapped to the curriculum and occurs throughout the programme;

3.2.10. Practical assessment is facilitated and evidenced by observations and other appropriate methods.

Annexure 1 - CHECKLIST FOR STANDARD III: ASSESSMENT

Direction:
Assess the available resources, put tick (√) in the appropriate column.

Date of Assessment: …………………………………………………..……………..

Name of the institute/college: ………………………………………………………..

Address: ……………………………………………………………….……………..

Sl. No.	Items	Yes	No	Remarks
1.	Is there a clear written exam policy/regulation /guideline?			
2.	Are the modes of assessment clearly mentioned against each module?			
3.	Are the elements of continuous assessment (e.g. observation, questioning, quizzes, feedback, competency signout, assignment, reflective journal, performance evaluation, presentation, unit test, log book, etc) adopted?			
4.	Are the elements of summative assessment (e.g. objective structured clinical/practical and theory examination) adopted?			
5.	Is there a system to avoid conflict of interest?			
6.	Is there a system to appeal for the assessment results?			
7	Do the assessors have experience/expertise in the subject area?			
8.	Is the assessment fair, reliable and valid?			
8.1	Is there a moderation checklist and has it been implemented?			
8.2	Is the security and confidentiality of the assessment documents maintained?			
9.	Is the assessment mapped (weighted) to the curriculum and occurs throughout the programme?			
10.	Is the practical assessment facilitated and evidenced by observations and other appropriate methods?			
10.1	Is there a checklist and documentation of how the practical assessments are to be conducted?			

(Name & Signature of Evaluator)   **(Name & Signature of Representative of Institute)**

STANDARD IV: TEACHING FACULTY

This standard is set to enable the institute to recruit adequate faculty members with relevant qualifications and experience. The faculty members shall strive to provide quality teaching and learning, promote and facilitate research and develop academic leadership to assist the institute in attaining the goals and outcomes of the educational programme.

4.1. Objective

To promote recruitment of appropriate (qualification and competency) and adequate faculty members to deliver the programme effectively.

4.2. Quality Indicator

4.2.1.   There is a clear policy and robust process of faculty recruitment;

4.2.2.   The teaching faculty members possess dentist or dental technologist qualification with appropriate professional experience;

4.2.3.   There is a required number of teaching faculty members as per the standard teacher students ratio;

4.2.4.   There is a required number of teaching faculty members as per the standard teacher modules ratio;

4.2.5.   The faculty members teaching clinical subjects are involved in clinical practice for at least 20% of the time (at least one day in a week);

4.2.6.   The dental technology/Hygiene program has program coordinator for planning, operation, supervision, evaluation and revision of the program;

4.2.7.   The faculty members are registered with the Bhutan Medical and Health Council;

4.2.8.   The faculty members are trained in basic pedagogy and basic biomedical research;

4.2.9.   There is a plan for continuing professional education for academic and clinical faculty to maintain their expertise and competence;

4.2.10. The faculty promotes research activities;

4.2.11. There is a robust mechanism for evaluating the faculty periodically;

4.2.12. The institute has recruited an adequate number of faculty.

*calculate hours requirement for faculty * maximum of 3 modules for one faculty*

Annexure 1 - CHECKLIST FOR STANDARD IV: TEACHING FACULTY

Direction:
Assess the available resources, put tick (√) in the appropriate column.

Date of Assessment: …………………………………………………….………

Name of the institute/college: …………………………………………….………

Address: ………………………………………………………………………..

Sl. No.	Items	Yes	No	Remarks
1.	Is there a clear policy for faculty recruitment?			
2	Do the faculty members who are teaching possess appropriate professional qualification and experience relevant to the areas of their expertise?			
3.	Teacher: student ratio			
3.1	Is the teacher-student ratio for theory classes 1:25 or less?			
3.2	Is the teacher-student ratio for the tutorial, clinical and laboratory classes 1:12 or less?			
4	Is the teacher-module ratio 1:3 or less?			
5.	Are the faculty members teaching clinical subjects involved in clinical practice for at least 20% of the time (at least one day in a week)?			
6	Is there a designated program coordinator for the dental hygiene/technology program?			
7	Are the dental hygiene faculty members registered with BMHC?			
8	Basic pedagogy and basic medical research.			
8.1	Are all the faculty members trained in basic pedagogy?			
8.2.	Are all the faculty members trained in basic medical research? (faculty development programme *)			
9	Is there evidence of availing continuing professional development by the faculties?			
10	Is there evidence of the faculty conducting the research or research-based teaching and learning?			
11	Evaluation of faculty performance			

11.1	Is there evidence of teaching-learning activities?			
11.2	Is there evidence of instructional leadership activities?			
11.3	Is there evidence of co-curricular and extracurricular activities?			
11.4	Is there a peer feedback system in place for effective teaching and learning?			
11.5	Is there a student feedback system in place for effective teaching and learning?			

Note: * Essential CPD, basic pedagogy and research course planned for faculty members periodically.

(Name & Signature of Evaluator)   **(Name & Signature of Representative of Institute)**

Annexure 2 - CHECKLIST FOR STANDARD IV: TEACHING FACULTY STRENGTH

Direction:
Assess the available resources, put tick (√) in the appropriate column.

Date of Assessment: ………………………………………………….………..

Name of the institute/college: ………………………………………….………..

Address: …………………………………………………………………………..

Sl. No.	Items	No. of faculty required (upto 50 students)	Yes	No	Remarks
A.	Basic Science and academic skills				
1.	Anatomy and Physiology	2			
2.	Biochemistry and Pharmacology	2			
3.	Pathology and Microbiology	1			
4.	Psychology and Sociology	1			
5.	Academic skills	1			
6.	ICT	1			
7.	Dzongkha	1			
B. Second Year, First Semester					
1.	Orientation in Dentistry and Sterilization	1			
2.	Dental Anatomy and Physiology	1			
3.	Oral Microbiology	1			
4.	Dental Sciences and Mechanics	1			
5.	Dental Anatomy wax carving (Practical)	1			
C. Second Year, Second Semester					
1.	Dental Materials and Sciences	1			

2.	Removable Partial Denture and Dental Surveying Techniques	1			
3.	Artificial Teeth Settings and Occlusion	1			
4.	Dental Casting Alloys and Metallurgy	1			
5.	Removable Partial Denture and Teeth Setting (Practical)	1			
D. Third Year, First Semester					
1.	Complete Denture Fabrication	1			
2.	Immediate and Overdentures	1			
3.	Repair, Relining & Rebasing of Dentures	1			
4.	Fixed Partial Denture- I	1			
5.	Fixed Partial Denture- II (Practical)	1			
E. Third Year, Second Semester					
1.	Field Posting and Attachment	1			
2.	Articulators, Facebow & Occlusal splints	1			
3.	Maxillo-facial Prostheses & Obturators	1			
4.	Dental Waxes and Casting Defects	1			
5.	Removable Orthodontic Appliances	1			

** The above modules for diploma in dental technology are prepared as an example for the inclusiveness of curriculum content only.

** as per the faculty:module ratio (max 3 modules per faculty)

(Name & Signature of Evaluator)   **(Name & Signature of Representative of the institute)**

STANDARD V: STUDENTS

The teaching and learning environment should be a conducive learning environment for the students. Strategies should be in place to ensure that admission requirements are in line with the proposed program's academic demands and the academic level of the student intake.

5.1. Objective

To have strategies in place to ensure that admission requirements are in line with the proposed program's academic demands and level of student intake.

5.2. Quality Indicators

5.2.1. There is a written document outlining the policy on admission, eligibility criteria, selection procedures, and fee structure to ensure fair, transparent student admission;

5.2.2. The institute has a mechanism in place to support progression, student support, and student representation in place for the completion of the programme;

5.2.3. Students have access to support services which include but are not limited to health, counselling, extracurricular activities, advice on academics, career placement and financial aid;

5.2.4. The institute defines the size of student intake and relates it to its capacity at all stages of the programme;

5.2.5. In case of an increase in its admission capacity, the institution obtains approval from the Bhutan Medical and Health Council.

Annexure 1: CHECKLIST FOR STANDARD V: STUDENTS

Direction:
Assess the available resources, put tick (√) in the appropriate column.

Date of Assessment: …………………………………………….……………..

Name of the institute/college: ………………………………….……………..

Address: …………………………………………………………………………..

Sl. No	Items	Yes	No	Remarks
1.	Is there written documents outlining its policy on admission criteria and processes in place to ensure fair and transparent student admission?			
2.	Are there strategies in place to ensure that admission requirements are in line with the proposed program's academic demands and academic level of student intake?			
3.	Is there a mechanism in place to support progression, student support, student representation in place for the completion of the programme?			
4.	Is there access to support services which include but are not limited to health, counselling, extracurricular activities, advice on academics, career placement and financial aid?			
5.	Has the institute defined the size of student intake and related its capacity at all stages of the programme?			
6.	Is there policy on student representation in decision making bodies or committees relating to academic,administrative and disciplinary matters?			
7.	Is the programme of student support addressing social, financial and personal and special needs?			
8.	Is there a mechanism in place to maintain confidentiality in relation to counselling and support?			

(Name & Signature of Evaluator)   **(Name & Signature of Representative of institute)**

STANDARD VI: RESOURCES

This standard is to set the minimum requirement of resources to maintain the quality of academic clinical and practical competencies. The allocation of the resources should be based on the number of students, academic faculty, type of programs, infrastructure facilities, etc. to support in achieving the programs objectives and outcomes.

6.1. Objective

To allocate adequate resources (physical infrastructure, human resources, curriculum, equipment and other teaching and learning facilities) to ensure that the curriculum can be delivered without any hindrance to faculties and students.

6.2. Quality Indicators

Physical facilities

6.2.1.   The institution has required physical facilities (lecture rooms, office space, practical rooms, laboratories, libraries, information technology) for the staff and students to ensure proper delivery of the curriculum;

6.2.2.   There is adequate human resource to support the development and implementation of the programme;

6.2.3.   There is adequate resource allocation in keeping with the academic development of the institution and increasing number of students;

6.2.4.   There is a mechanism for effective maintenance and optimal use of infrastructures.

Information technology

6.2.5.   Formulates and implements a policy which addresses effective and ethical use;

6.2.6.   There are accessible information technology services including computer and electronic facilities;

6.2.7.   Have access to learning resources such as e-learning programs and platforms, web-based or other electronic media and current collection of literature on dental laboratory technology related subjects;

6.2.8.   There are sufficient and relevant books, e-journals and other learning materials.

6.2.9.   There is provision for technology and professional support services for hardware and software technical personnel employed;

6.2.10. There are qualified staff to manage ICT facilities and services available.

Research and development

6.2.11. There is a policy that fosters the relationship between medical research and education;

6.2.12. Reviews periodically its research resources and facilities and take appropriate action to enhance its research capabilities and to promote a conducive research environment;

Educational expertise

6.2.13. There is a clear policy on the use of educational expertise in curriculum with access to educational expertise;

6.2.14. There is a system to develop teaching-learning and assessment methods;

6.2.15. There is evidence to demonstrate the use of in-house or external educational expertise in staff development.

Educational exchanges

6.2.16. Formulates and implements a policy for national and international collaboration with other educational institutions, including staff and student mobility, and transfer of educational credits;

6.2.17. Encourages provision of scholarship and has documented understanding for the student exchange program;

Financial resources

6.2.18. There is financial viability and sustainability for the programme;

6.2.19. There is a clear procedure to ensure that its financial resources are sufficient and managed efficiently;

6.2.20. There is a clear line of responsibility and authority for resourcing the curriculum, including a dedicated educational budget;

6.2.21. There is a clear procedure to ensure its financial resources are sufficient for the implementation of the curriculum and distribute the educational resources in relation to the educational needs.

Recreational facilities

6.2.22. There are recreational facilities like playfields, gym, meditation center, prayer hall, infirmary etc.

Clinical training resources

6.2.23. There are provisions of necessary resources (clinical training facilities, office space, classrooms, library, IT facilities with reliable internet services, and supervision of their clinical practice) for students to acquire adequate clinical and practical experiences; (Annexure 2)

6.2.24. The institute has access to dental/medical equipment for teaching and learning activities to the students

Denture laboratory Facility

6.2.25. There are required infrastructures (practical rooms, laboratory and clinic rooms) for the staff and students to ensure proper delivery of the curriculum. (Annexure 3)

6.2.26. There are provisions of necessary resources (clinical training facilities like required equipment, instruments and consumables) for students to acquire adequate clinical and laboratory skills. (Annexure 3)

6.2.27. The facility should be equipped with adequate safety features (proper ventilation, adequate lighting, fire safety equipment, personal protective equipment, etc.) that provides a safe environment for the staff and the students.

Crown and Bridge laboratory Facility

6.2.28. There are required infrastructures (practical rooms, laboratory and clinic rooms) for the staff and students to ensure proper delivery of the curriculum. (Annexure 4)

6.2.29. There are provisions of necessary resources (clinical training facilities like required equipment, instruments and consumables) for students to acquire adequate clinical and laboratory skills. (Annexure 4)

6.2.30. The facility should be equipped with adequate safety features (proper ventilation, adequate lighting, fire safety equipment, personal protective equipment, etc.) that provides a safe environment for the staff and the students.

Orthodontic Laboratory Facility

6.2.31. There are required infrastructures (practical rooms, laboratory and clinic rooms) for the staff and students to ensure the proper delivery of the curriculum (if the facility has a separate orthodontic laboratory). (Annexure 5)

6.2.32. There are provisions of necessary resources (clinical training facilities like required equipment, instruments and consumables) for students to acquire adequate clinical and laboratory skills. (Annexure 5)

6.2.33. The facility should be equipped with adequate safety features (proper ventilation, adequate lighting, fire safety equipment, personal protective equipment, etc.) that provide a safe environment for the staff and the students.

Annexure 1 - CHECKLIST FOR STANDARD VI: RESOURCES

Direction:
Assess the available resources, put tick (√) in the appropriate column.

Date of Assessment: …………………………………………………………………..

Name of the institute / college: ……………………………………………………..

Address: ……………………………………………………………………………..

Sl. No.	Items	No. of required (upto 50 admission)	Yes	No	Remarks
A.	**Physical Facilities**				
1.	Administrative block	1			
2.	Offices(equipped with table, chair & computer)	As required			
3.	Conference hall	1			
4.	Examination hall	1			
5.	Multipurpose hall	1			
6.	● Lecture and tutorial room equipped with blackboard/white board/LCD projector, desk, table and chairs ● Area as per standard	As required			
7.	Hostel ● Separate hostel for boys and girls with toilet and bathroom facilities ● Hygienic kitchen with adequate sitting arrangement	As required			
8.	Are there recreational facilities including outdoor sports?				
B.	**Information Technology**				
1.	Is there access to ICT facilities including computer and electronic facilities ?				
2	Is there a reliable Internet connection?				

3.	Is there access to e-learning programs and platforms, web-based or other electronic media for faculty and students?				
4.	Are there electronic books, online learning materials and e-journals for references and as study materials?				
5.	Is there ICT support service and ICT professionals?				
C. Research and Development					
1.	Is there any record of research and development activities undertaken by both faculty and students?				
2.	Are research resources and facilities reviewed periodically to promote a conducive research environment?				
3.	Is there a facility in the institute to meet the needs of teaching-learning college-wide communications, research and operational system?				
D. Educational Expertise					
1.	Is there a clear policy on the use of educational expertise in curriculum with access to educational expertise?				
2.	Is there a system in place to develop teaching-learning and assessment methods?				
3.	Is there evidence to demonstrate the use of in-house or external educational expertise in staff development?				
4.	Does the institute have access to educational expertise when required?				
E. Educational exchanges					
1.	Does the institute have a policy for international collaboration with other educational institutions, including staff and student mobility and transfer of educational credits?				

2.	Is there in place a provision of scholarship and have maintained documented understanding of the student exchange program?				
3.	Is there a policy or plan to foster the relationship between medical research and educational exchange programs?				
F. Financial resources					
1.	Is there financial viability and sustainability for the programme?				
2.	Is there clear procedures to ensure that its financial resources are sufficient and managed efficiently?				
3	Is there a clear line of responsibility and authority for resourcing the curriculum, including a dedicated educational budget?				
4.	Is there a clear procedure to ensure its financial resources are sufficiently located for implementation of the curriculum and address educational needs?				
G. Educational Resources					
1.	Is there a library (furnished with recent editions of relevant books; local and international journals) relevant to the individual programme?				
2.	Is the library equipped with a comfortable sitting arrangement for users with proper lightning and ventilation?				
3.	Are there printing, copying and binding facilities?				

(Name & Signature of Evaluator)   **(Name & Signature of Representative of the institute)**

Annexure 2 - CHECKLIST FOR STANDARD VI: RESOURCES FOR CLINICAL TRAINING

Direction:

Assess the available resources, put tick (√) in the appropriate column.

Date of Assessment: …………………………………………………….…………..

Name of the institute/college: ………………………………………….…………..

Address: …………………………………………………………………………..

Sl. No	Items	Yes	No	Remarks
1.	Are there clinical training facilities (dental laboratory, office space, classrooms)?			
2.	Is there dental/medical equipment for teaching and learning activities?			
3.	Are there IT facilities with reliable internet service?			
4.	Are there library facilities equipped with adequate resources?			

(Name & Signature of Evaluator)   **(Name & Signature of Representative of institute)**

Annexure 3 - CHECKLIST FOR STANDARD VI: RESOURCES FOR DENTURE LABORATORY

Direction:
Assess the available resources, put tick (√) in the appropriate column.

Date of Assessment: …………………………………………………….………..

Name of the institute/college: …………………………………….……….…..

Address: ………………………………………………………………………..

Sl. No.	Items	No. of required upto 50 admission	Yes	No	Remarks
A. Infrastructure					
1	Examination and Impression Room	1			
2	Insertion Room	1			
3	Plaster room	1			
4	Denture Processing Room	1			
5	Denture Curing Room	1			
6	Finishing and polishing Room	1			
B. Equipment					
1	Standard Dental Chair with Compressor set.	2			
2	Dental Autoclave Sterilizer	1			
3	Acrylizer Bath (Electrical)	1			
4	Model Trimmer	1			
5	Micro Motor	4			
6	Lathe Polishing Machine	1			
7	Suction unit, portable	1			
C. Instruments					
1	Dental Examination Set (explorer, mouth mirror and tweezer)	10 Sets			

2	Perforated Impression stock tray (Upper)	10			
3	Perforated Impression stock tray (Lower)	10			
4	Non Perforated impression stock tray (Upper)	10			
5	Non Perforated impression stock tray (Lower)	10			
6	Rubber Bowls	10			
7	Plaster Mixing Spatula	5			
8	SS bowl (Medium)	5			
9	Plaster Knife	5			
10	Wax Knife	10			
11	Lacron Carver	10			
12	Wax Spatula	10			
13	Spirit Lamp	5			
14	Articulators (hinged)	5			
15	Dental Surveyor	1			
16	Facebow set	1			
17	Fox Plane	4			
18	Hot Plate (Metal)	5			
19	Dental Flask	5			
20	Dental Flask Clamp	5			
21	Hydraulic Clamp	1			
22	Mallet	2			
23	Silicone Rubber Cups	10			
24	Adams Plier	5			
25	Young's Universal Plier	5			
26	Heavy Wire Cutter	2			

27	Chip blower	5			
D. Consumables					
1	Alginate Impression materials	10 Pkts			
2	Impression compound	5 Pkts			
3	Zinc Oxide Eugenol Impression material (set)	10			
4	Plaster of Paris	50 Kgs			
5	Stone Plaster	10 Kgs			
6	Modelling Wax	10 Pkts			
7	Shellac Base Plate (Upper & Lower)	5 Pkts			
8	Wrought Wire (Assorted Gauges: 19 to 23)	5 spools each			
9	Acrylic Teeth set (assorted sizes and shades)	20 sets			
10	Acrylic, cold cure, power and liquid set, (Pink)	5 sets			
11	Acrylic, heat cure, power and liquid set, (Pink)	5 Sets			
12	Cold Mould Seal(450 Ml)	2 bottles			
13	Pumice powder	2 kgs			
14	Denture Polishing Buff-Cotton	5 nos			
15	Denture Polishing cake	2 pcs			
16	Acrylic trimming Burs (Assorted Sizes)	2 sets			
17	Sand Paper	As required			
18	Articulating papers	As required			
20	Disposable gloves	As required			
21	Sterile gloves	As required			
22	Patient drapes	As required			
23	Hand towels	As required			

24	Liquid soaps	As required			
25	Disinfectant solutions	As required			
26	Disinfectant sprays	As required			
27	Vaseline	As required			
27	Green stick (Tracing) wax	As required			
28	Sticky wax	As required			
29	Sterilization-tape	As required			

(Name & Signature of Evaluator)   **(Name & Signature of Representative of institute)**

ANNEXURE 4 - CHECKLIST FOR STANDARD VI: ADDITIONAL RESOURCES FOR CROWN AND BRIDGE LABORATORY

Direction:
Assess the available resources, put tick (√) in the appropriate column.

Date of Assessment: …………………………………………………….………..

Name of the institute/college: …………………………………………….………..

Address: ………………………………………………………………………..

Sl. No.	Items	No. of required upto 50 admission	Yes	No	Remarks
A. Infrastructure					
1.	FPD processing room	1			
2.	Casting room	1			
3.	Ceramic processing room	1			
B. Equipment					
1.	Induction casting Machine	1			
2.	Sand Blasting Machine	1			
3.	Ceramic Furnace	1			
4	Vacuum mixer	1			
5	Dental vibrator	1			
6.	Burn out machine	1			
7	Mini sandblasting machine	1			
8	Steam cleaner	1			
9	Die splitting machine	1			
10	Pindex Machine	1			
11	Cast Dryer machine	1			
12	Electric FPD waxing unit	5			
13	Dipping wax unit	2			

14	Digital weighing machine	1			
15	Semi-adjustable articulators	5			
16	Lathe trimmer	1			
C. Instruments					
1	FPD Wax carving set	5			
2	Wax knife	5			
3	Wax spatula	5			
4	Silicone Casting rings (small, medium and large)	2 each			
5	Crown caliper	2			
6	Mini hand saw (for model splitting)	2			
7	Straight artery forceps (small and medium)	5			
8	Curved artery forceps (small and medium)	5			
9	Base former set (upper and lower)	5 set			
10	Tongs (for wax burnout)	2			
11	Glass slab	5			
12	Porcelain built-up set for PFM	2 sets			
D. Consumables					
1	Silicone impression materials (putty)	5 Pkts			
2	Silicone impression materials (light body)	5Pkts			
3	Die stone	10 kgs			
4	Die spacer (20 ml)	5 bottles			
5	Dowel pins with sleeves	As required			
6	Dipping wax	As required			
7	Margin wax	As required			

8	Dental inlay casting wax	As required			
9	Sprue forming wax	As required			
10	De-bubblizer	As required			
11	Investment materials (Powder and Liquid set)	As required			
12	Casting alloys for FMC	As required			
13	Casting alloys for PFM	As required			
14	Crucible	5			
15	Carborundum disc	As required			
16	Mandrels for SHP	As required			
17	Carbide burs for SHP(assorted sizes and shapes)	As required			
18	Stone mounted burs (assorted sizes and shapes)	As required			
19	Sintered diamond burs for SHP (assorted sizes and shapes)	As required			
20	Porcelain set for PFM	2 sets			
21	Fit Checker	As required			
22	Silicone polishing burs (Assorted sizes and shapes	As required			

(Name & Signature of Evaluator)   **(Name & Signature of Representative of institute)**

ANNEXURE 5 - CHECKLIST FOR STANDARD VI: ADDITIONAL RESOURCES FOR ORTHODONTIC LABORATORY

Direction:

Assess the available resources, put tick (√) in the appropriate column.

Date of Assessment: …………………………………………………….……………..

Name of the institute/college: …………………………………………….……………..

Address: …………………………………………………………………………………

Sl. No.	Items	No. of required upto 50 admissions	Yes	No	Remarks
A. Equipment					
1	Suck down machine	1			
2	Pressure pot with compressor	1			
3	Spot Welder	1			
B Instrument					
1	Butane Gas Torch				
2	Jarabak Plier				
3	Aderer Plier				
4	Bird Beak Plier				
5	Optical Pliers				
6	Plier Stand				
C. Consumables					
1	Silver solder	As required			
2	Flux	As required			
3	Butane gas can	As required			

4	Thermoform materials	As required			
5	Arch expansion screws	As required			
6	Cold cure acrylic (clear) set	As required			

(Name & Signature of Evaluator)   **(Name & Signature of Representative of institute)**

STANDARD VII: PROGRAM EVALUATION AND QUALITY ASSURANCE

The standard sets the requirements for the program evaluation and quality assurance. The training institution should have stipulated policies and procedures to monitor the quality and effectiveness of its program and operations. This should be organized through relevant committees and boards.

7.1. Objective

To have an adequate evaluation and quality assurance system in place to ensure continuous improvement and quality of the training program.

7.2. Quality Indicators

7.2.1. There is a written policy for a systematic and continuous program evaluation and improvement of the quality of education;

7.2.2. There is a Quality Assurance Unit/Committee with clear terms of references designated for internal auditing and monitoring of the program;

7.2.3. There is a written record of plans for evaluation of the program's purposes and outcomes;

7.2.4. There is a documented disaster contingency plan in place?

7.2.5. There is a record of analysis and implementation of improvement plans including communication to relevant regulatory bodies.

Annexure 1: CHECKLIST FOR STANDARD VII: PROGRAMME EFFECTIVENESS AND QUALITY IMPROVEMENT

Direction:

Assess the available resources, put tick (√) in the appropriate column.

Date of Assessment: …………………………………………………………….………..

Name of the institute/college: ……………………………………………….…………..

Address: …………………………………………………………………………………..

Sl. No.	Items	Yes	No	Remarks
1.	Is there a written policy (SOP/Manual/ Guidelines) in place for the evaluation and continuous improvement of programs?			
2.	Quality Assurance Unit/Committee			
2.1	Is there a designated Quality Assurance Unit/Committee in the institute?			
2.2.	Is there a TOR for Quality Assurance Officials?			
3.	Is there evidence of plans for evaluation of the program's purposes and outcomes;?			
4.	Is there a documented disaster contingency plan in place?			
5.	Analysis and implementation of improvement plans including communication to relevant regulatory bodies.			
5.1	Is there a report of feedback from relevant stakeholders?			
5.2	Is there a process for peer evaluation?			
5.3	Is there a corrective action and preventive action plan in place?			
5.4	Is there a self-assessment report?			
5.6	Is there an external monitoring and evaluation report available?			

(Name & Signature of Evaluator)   **(Name & Signature of Representative of the institute)**

Standard for Eduction of Dental Technicians

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