

2022

# ACCREDITATION STANDARDS

**FOR** 

### **DENTAL INSTITUTES**

UNDERGRADUATE
DENTAL EDUCATION
(UGDE)









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#### **OVERVIEW**

The Pakistan Medical Commission (PMC), established in September 2020 pursuant to the Pakistan Medical Commission Act, 2020 is endeavored to develop the foundations for a qualitative modern medical education system. The Commission is entrusted with developing and executing accreditation standards to ensure improved quality of medical and dental education in Pakistan to the ultimate goal of producing quality and safe doctors.

PMC conducts inspections for recognition upon request of Medical or Dental institutions. For institutions to achieve and maintain accreditation at the undergraduate level, a dental institute must demonstrate appropriate performance in all standards stated in this document. Accreditation granted to the Medical/Dental institution shall be restricted to the primary site and shall not be applicable to the other affiliated hospitals/campuses/branches. The accredited institution may be inspected on a periodical basis, at least once in five years, or as and when required, to assess that the institution is complying with the PMC accreditation standards.

This document has various sections that help evaluate dental institutions (dental colleges and dental teaching hospitals) as well as improving medical and dental education in Pakistan. Section AS-1 covers accreditation standards for the Dental teaching Hospitals, Section AS-2 of this document, deals with the Accreditation standards for Dental Colleges and Minimum Standards for Faculty are covered under Section AS-3 of this document. These standards have been categorized as mandatory, essential and quality standards. Mandatory standards are prerequisites and must be fulfilled to initiate inspection. Essential standards must be met, and fulfillment must be demonstrated by the training hospital for accreditation. Quality standards indicate improvement/development and shall be used for grading of institutions. Moreover, annotations are used to clarify standards. The hospital inspection will be conducted by the Authority whereas, the college inspection will be conducted by Higher Education Commission (HEC), or a public University nominated by the HEC, in light of minimum standards laid down by the Commission.

The Accreditation Standards 2022 for the Undergraduate Dental Teaching Hospitals and minimum standards for Faculty have been developed by National Medical & Dental Academic Board through a consultative process and have been duly approved by the Medical & Dental Council. The contents of these standards have been developed to ensure that they are in line with the international accreditation standards, national and international best practices.



#### **DEFINITIONS**

ACCREDITATION	An accreditation granted to an institution indicates that the program meets the mandatory and essential standards for accreditation.
INITIAL ACCREDITATION	Initial Accreditation granted to any dental college/ hospital ensures that the institution has the potential for meeting the standards set forth by the PMC.  The accredited <u>dental teaching hospital</u> may be inspected on a periodical basis by the Authority, at least once in three years, or as and when required, to assess that the dental teaching hospital is complying with the PMC accreditation standards. However, the accredited <u>dental college</u> may be inspected by HEC on a periodical basis, at least once in three years, or as and when required, to assess that the dental college is complying with the PMC accreditation standards.  The initial accreditation granted to the dental college/ hospital shall be restricted to the primary site and <u>shall</u> <u>not</u> be applicable to the other affiliated hospitals/campuses/branches.
PROGRAMME DISCONTINUATION	A dental college/ teaching hospital may be removed from the list of accredited institutes, if the dental institute either:  1) voluntarily discontinue its participation in the accreditation program and no longer enrolls students/residents 2) is closed by the regulatory body/healthcare commissions.
WITHDRAWAL OF ACCREDITATION	An action taken by the Commission when a dental institute is unable to demonstrate compliance with the accreditation standards or policies within the time period specified. A final action to withdraw accreditation will be communicated to the institute and shall be notified.



#### **SECTION – AS 1**

### 2022 **ACCREDITATION STANDARDS**

**FOR** 

### **DENTAL TEACHING HOSPITALS**

**UNDERGRADUATE DENTAL EDUCATION** 









## 1.1 STEP-WISE PROCESS FOR AN INSTITUTION APPLYING FOR BDS PROGRAM INSPECTION

STEP 1	A formal letter from the Institutional Head clearly indicating the inspection type (initial or seat enhancement) to the Education & Evaluation Division
STEP 2	A list of requisite mandatory documents to be shared by the Education & Evaluation Division with the institution as a prerequisite of inspection.
STEP 3	Scrutiny of the documents by the relevant divisions will be followed by a request to submit the Hospital inspection fee.
STEP 4	Upon receipt of Hospital inspection fee and subsequently uploading information on the Hospital inspection portal (inspections.pmc.gov.pk), the hospital inspection will be scheduled according to the given timeline.
STEP 5	The Institute will be informed about the inspection result, that upon passing will be followed by the submission of college inspection fee and the uploading of relevant information on the hospital inspection portal.
STEP 6	An institution will be declared as passed in the inspection if it meets essential standards.



#### **1.2 ACCREDITATION RULES**

ACCREDITATION RULE 1 ON MANDATORY STANDARDS	<ol> <li>It is mandatory for an Institute to submit all the documents defined in Mandatory Standards.</li> <li>The process of accreditation will be initiated, on condition that the hospital submits all requisite documents and after scrutiny these documents were found satisfactory.</li> <li>If any of the document is not submitted or is not verified, the hospital would be declared unsatisfactory on the Mandatory standard and no further action would be taken.</li> </ol>
ACCREDITATION RULE 2 ON ESSENTIAL STANDARDS	It is compulsory for the teaching hospital to pass each Essential department.  On condition that 100% standards are met on evaluation of Essential Departments (equipment, infrastructure, caseload and HR) & Standards, the hospital will be declared accredited.
ACCREDITATION RULE 3 ON QUALITY STANDARDS	All standards exceeded by a college shall be assessed for determining the quality standard of a teaching hospital. During a quality standard inspection, the facilities, resources and caseload exceeding the essential standards shall be scored based on the Quality Matrix defined by the Authority.
ACCREDITATION RULE 4 ON ACCREDITATION FREQUENCY	<ol> <li>All the teaching hospital shall be re-inspected every three years.</li> <li>A teaching hospital may be selected for a spot inspection by the Authority at any time pursuant to cause.</li> <li>The Authority shall also be reviewing on a consistent basis maintenance of certain standards based on data to be provided through HIMS system.</li> <li>Any accredited teaching hospital may apply to the Authority for a Quality Inspection/ re-inspection after December 2022 allowing colleges' time to evaluate their facilities in response to the 2022 Standards</li> </ol>
ACCREDITATION RULE 5 ON CATEGORIZATION	1.Any teaching hospital found to have <u>not maintained the Essential Standards</u> during a re-inspection or a spot inspection shall be given a <b>120-day period</b> to meet the Essential Standards failing which the teaching hospital will be de-recognized.  2.A teaching hospital during the 120-day notice period shall be notified as <b>ON PROBATION</b> .



## 1.3 ACCREDITATION STANDARDS FOR A DENTAL TEACHING HOSPITALS

#### 1.3.1 Guidelines & Operational Definitions

GUIDELINES	This document describes the minimum requirements for an undergraduate teaching Dental hospital affiliated with a dental college to operate in Pakistan. The standards evaluate a hospital's infrastructure, human resource, equipment adequacy and caseload for the provision of dental education/ training. This section only deals with the initial inspection requirements (i.e., when a new dental college applies for the recognition of its hospital by PMC).  The accreditation standards are divided into the following:  A- Mandatory Eligibility Standards  B- Essential Standards  C- Quality Standards
	OPERATIONAL DEFINATIONS
MANDATORY ELIGIBILITY STANDARDS	Inspection would only be initiated upon fulfilling the Mandatory eligibility standards.
ESSENTIAL STANDARDS & DEPARTMENTS	Each Essential standard and Essential departments requirements must be fulfilled in entirety for accreditation. These shall be marked on a "yes/no" basis.
QUALITY STANDARDS & DEPARTMENTS	These standards and departments are in addition to the Essential standards for the purpose of assessing the quality of the program. Quality standards will be scored and graded.
	A consultant is a doctor who is a full-time faculty member, practices in one of the dental or medical/surgical specialties and leads multidisciplinary team in delivering

care. He/she is expected to be involved in the teaching and training of students and

junior doctors, and to contribute to their specialty field through research and

The total number of cases a unit deals with as indoor cases in a month.

**CONSULTANTS** 

**CASE LOAD** 

leadership.



## 1.3.2 Mandatory Eligibility Standards (MS) for Teaching Hospitals

STANDARD	DESCRIPTION
A teaching hospital	must have the following approvals to qualify for inspection:
MS 1	If a public hospital minimum period of operation is one year. If a private hospital minimum period of commercial operation 3 years with an average of more than 75 dental chairs during the entire period of operation.
MS 2	Registration as a legal entity in accordance with law either as a commercial or non-commercial entity.
MS 3	Ownership or lease documents regarding title and possession of the land and building of the hospital. In the event of leased premises, the lease must be valid for a minimum of 6 years on the date of inspection.
MS 4	Registered and licensed with the Federal/Provincial Healthcare Commissions or the alternative relevant regulatory authority as applicable.
MS 5	Registration with Pakistan Nuclear Regulatory Authority (PNRA)
MS 6	Approval of relevant Building Control Authority
MS 7	Fire safety certification
MS 8	Approval of Environmental Protection Authority (EPA) specifically hospital waste management
MS 9	Relevant prohibited drugs registration with Drug Regulation Authority
MS 10	National Tax number and other applicable tax registration
MS 11	Must have MOU with a Medical college for teaching of General Medicine & Surgery.
FIRE SAFETY & EVACUATION SERVICES	The teaching hospital must have a documented fire safety and evacuation policy/plan in conformity to the relevant government regulations. It should include training schedule for consultants, staff and students. Portable fire extinguishers must be available at suitable locations. Clear signs must be placed for the designated assembly area and fire exits.
WASTE MANAGEMENT	The teaching hospital must have a documented waste management policy/plan in conformity to the relevant government regulations.
INFECTION CONTROL	There is a documented infection control program designed by the infection control committee for the institution and should be in compliance with national infection control policy. There must be protocols in place to ensure safety of staff and patients handling biological and hazardous materials.
INPATIENT SERVICES	The patients admitted on the designated teaching beds must consent to allow access to students' participation. The admitted/treated patients should have diverse pathological backgrounds and case mix as per the training program requirement. (Applicable on General Medicine & General Surgery Departments).



#### 1.3.3 Essential Departments (ED) & Essential Standards

ESSENTIAL DEPARTMENTS				
Every dental teaching	hospital must have the following essential departments at undergraduate level:			
ED 1	Oral Diagnosis and Oral Medicine			
ED 2	Outpatient Services			
ED 3	Periodontics			
ED 4	Operative and Endodontic			
ED 5	Prosthodontics			
ED 6	Oral Surgery			
ED 7	Orthodontics			
ED 8	Skills Development Lab			
ED 9	Radiology			

Department of Accident & Emergency, General Surgery, General Medicine and Operation Rooms/ Theatres (shared with affiliated Medical Hospital).

The equipment, HR and caseload will be according to the specified "Accreditation Standards of Undergraduate Medical Education 2022" for 50 students.



#### 1.3.3 Details of Essential Standards (ES) & Essential

**Departments (ED)** 

Dopartii	ients (LD)	
STANDARD NO	STANDARD	DETAILS
ES 1	Institutional Autonomy and Academic Freedom	•The teaching hospital must have institutional autonomy to develop appropriate and effective management and oversight systems to ensure that the policies are implemented.
ES 2	Program Management	The training hospital must •have all the requisite aids and audio-visual facilities. (provision of internet, computers, multimedia per demonstration room in mandatory essential clinical departments) •have physical facilities to support a learning environment for the students. (proper ventilation, temperature control and seating capacity for at least 25 students/ demonstration room in mandatory essential clinical departments)
ES 3	Student	The teaching hospital must have infrastructure to facilitate differently abled students
ES 4	Consultants	The teaching hospital must have  •adequate staff with requisite qualifications to provide optimum patient care and impart teaching and training.  •various roles as defined by the hospital and the clinical training.  •ensure that the institution is led by qualified (education, training and experience) person commensurate with hospital's needs.
ES 5	Governance, Services And Resources	The teaching hospital must:  •have a hierarchical system of governance of training program  •demonstrate annual dental units usage of at least 60%, verifiable through an HIMS system, or by alterative means during the interim period while HIMS is installed.  •if HIMS system is not installed, accreditation shall be subject to installation of HIMS system within 12 months.  •have a hierarchical system of governance of training program  •have a Human Resource Department and an anti-harassment policy in line with the national guidelines  •ensure that patients admitted on the teaching beds have a documented consent to allow access to the trainees. have essential services as given in the next section of this document.



STANDARD	DEPARTMENT	STRUCTURE	ESSENTIAL EQUIPMENT	HUMAN RESOURCE	CASE LOAD
ED 1	ORAL DIAGNOSIS AND ORAL MEDICINE	1. Department with adequate space for dental units and sitting. 2. Washrooms 3.Examination and procedure facility. 4.Demonstrati on rooms with appropriate seating capacity. 5.Workstation s/offices for the faculty members	<ol> <li>Dental units with functional high-volume suction.</li> <li>100 sets of Examination instruments (mirror, probe, tweezers).</li> <li>Adequate number of disposable gloves packets, disposable masks packets and disposable syringes available and in use.</li> <li>One X ray illuminator available.</li> <li>2 high speed hand pieces with burs available.</li> <li>2 BP apparatus available.</li> <li>1 Pulse oximeter available.</li> <li>4 anesthesia syringe and needles available.</li> <li>Medical Emergency kit containing all emergency medications used in dealing medical emergencies available.</li> </ol>	Each unit must have at least the number of consultants that fulfil the minimum faculty requirements as laid down by PMC Minimum Standards for faculty in UG Dental Colleges of Pakistan 2022	30 patients /month
ED 2	OUTPATIENT SERVICES	The Outpatient department of the teaching hospital must have: - Separate OPD rooms for specialties			
ED 3	PERIODONTICS	with adequate space for dental units and sitting.	3 1	Each unit must have at least the number of consultants that fulfil the minimum faculty requirements as laid down by PMC Minimum Standards for faculty in UG Dental Colleges of Pakistan 2022	200 patients/ month



DEPT NO	DEPARTMENT	STRUCTURE	ESSENTIAL EQUIPMENT	HUMAN RESOURCE	CASE LOAD
			11. Minimum 4 Model &Brush available. 12. Minimum 10 Scalpel Handle (straightround). 13. Minimum 10 Papilla elevator-periosteal elevator. 14. Minimum 8 Prichard Periosteal. 15. Minimum 25 Gracey's Curettes, available and in use. 16. Minimum 25 Universal Curettes available and in use. 17. Minimum 10 Prichard Periodontal Surgical Curette. 18. Minimum 10 Furcation Curettes. 19. Minimum 15 Piezoelectric scalers i.e EMS Satalec, Wood Pecker 20. Minimum 20 Coe-Pack periodontal dressing 21. Minimum 10 Sugarmanfile - db833r 22. Minimum 10 Cawood Minnesotretractors CRM2 23. Minimum 15 Small trays 24. Minimum 15 Medium trays 25. Minimum 10 Polishing cups/brushes 26. Minimum 100 Sterlization pouch roll 27. Minimum 2 packs of Non-Eugenol periodontal dressing. 28. Minimum 10 packs of Suturing material,4.0 Vicryl available. 29. Minimum 10 36/37 Rhodes Back Action Periodontal Chisel 30. Minimum 10 Mayo-Hegar Perma Sharp Needle holder 16cm/6.25" 31. Minimum 10 Delicate Scissors eg (Goldman Fox or similar) 32. Minimum 3 Mixing Spatulas (wooden/plastic) 33. Minimum 5 Glass slabs 34. Minimum 1 Illuminator 35. Minimum 1 Fluoride Gel 36. Minimum 1 Fluoride Gel 37. Minimum 1 Fluoride Gel 38. Minimum 1 Fluoride Gel 39. Minimum 10 Suture forceps 06 39. Minimum 10 Straight Castroviejo Perma Sharp Needle holder 18cm/7 40. Minimum 10 Straight Castroviejo Perma Sharp Needle holder 18cm/7 41. Minimum 10 Straight Castroviejo Perma Sharp Needle holder 18cm/7 42. Minimum 200 Polishing cups/brushes available and in use		



DEPT NO	DEPARTMENT	STRUCTURE	ESSENTIAL EQUIPMENT	HUMAN RESOURCE	CASE LOAD
			<ol> <li>Minimum 1 X ray illuminator</li> <li>Minimum 1 Electrocautery / or laser available.</li> <li>Minimum 2 Electric Pulp Tester (EPT) available.</li> <li>Adequate Sterilization pouch rolls available if no CSSD</li> <li>Minimum 4 anesthesia syringe and needles available.</li> <li>Minimum 10 packs 2 X 2, 4x4 Surgical Gauze available in use</li> <li>Minimum 10 Surgical Scrubs</li> <li>Minimum 5 Model &amp; Brushes</li> </ol>		
ED 4	OPERATIVE AND ENDODONTICS	1. Department with adequate space for dental units and sitting. 2. Washrooms 3.Examination and procedure facility. 4.Demonstration rooms with appropriate seating capacity. 5.Workstations/ offices for the faculty members.	available. 3. Minimum 24 high Speed hand pieces available. 4. Minimum Autoclave if no CSSD available. 5. Minimum 5 Light Curing unit available. 6. Minimum 2 Amalgamator available. 7. Minimum 20 matrix band retainers available. 8. Minimum 10 Gingival Margin Trimmer available. 9. Minimum 2 MTA gun available.	Each unit must have at least the number of consultants that fulfil the minimum faculty requirements as laid down by PMC Minimum Standards for faculty in UG Dental Colleges of Pakistan 2022	month



DEPT NO	DEPARTMENT	STRUCTURE	ESSENTIAL EQUIPMENT	HUMAN RESOURCE	CASE LOAD
			24. Minimum 4 Instrument trolley available. 25. Minimum 15 Amalgam gun Double ended available. 26. Minimum 15 Cement spatula available. 27. Minimum 3 full sets of composite finishing burs and discs available. 28. Minimum 10 Round Diamond burs (box) 29. Minimum 10 slow speed Round Diamond burs (box) 30. Minimum 10 Plungers available 31. Minimum 5 Barb broches 32. Minimum 10 Spreaders assorted 33. Minimum 10 Gates Glidden drills (assorted) 34. Minimum 5 Retraction cards 35. Minimum 5 retraction cards 36. Minimum Polishing brushes boxes 37. Minimum 2 Screw post kit 38. Minimum 10 Dycal Applicators 40. Minimum 15 GP POINTS 15-40 (Packs) 41. Minimum 15 GP POINTS 15-40 (Minimum 15 Amalgam Finishing kits 43. Minimum 1 Dentin pins (pack) 44. Minimum 1 Dentine Drills (pack) 45. Minimum 1 Dentine Drills (pack) 46. Minimum 3 Bite block available. 47. Minimum 1 Haemostat available. 48. Minimum 5 Amalgam guns available. 50. Digital camera of intraoral photography available. 51. Minimum 15 packs of Rotary Reciprocating endodontic files available. 52. Minimum 1 Endodontic Instrument retrieval kit available.		



					مستان میڈیکل کھیا
DEPT NO	DEPARTMENT	STRUCTURE	ESSENTIAL EQUIPMENT	HUMAN RESOURCE	CASE LOAD
ED 5	PROSTHO-DONTICS	1•Department with adequate space for dental units and sitting. 2•Washrooms 3.Examination and procedure facility. 4.Demonstrati on rooms with appropriate seating capacity. 5•Workstation s/offices for the faculty members.	1. Dental units with functional high-volume suction.  2. Minimum10 Slow Speed hand pieces available.  3. Minimum12 high Speed hand pieces available.  4. Minimum 1 Autoclave if no CSSD available.  5. Minimum 4 Light Curing unit available.  6. Minimum 5 Compatible facebow available.  7. Minimum 5 Compatible facebow available.  8. Minimum 5 semi adjustable articulators available.  9. Minimum 15 Air turbines  11. Minimum 10 Air Motors  12. Minimum 10 Articulating paper (boxes)  13. Minimum 2 GIC Luting agents  14. Minimum 100 Crown cutting diamond burs  15. Minimum 50 straight fissure short  16. Minimum 50 Tapered fissure round end  18. Minimum 50 Round burs  19, Minimum 50 sets of round end cylinderical burs  20. Minimum 50 sets of flat end tapering burs  21. Minimum 50 sets of Goldstein burs  22. Minimum 50 sets of Goldstein burs  23. Minimum 50 sets of cone burs  25. Minimum 50 sets of round end tapering burs  24. Minimum 50 sets of finishing burs  24. Minimum 50 sets of sone burs  25. Minimum 50 sets of round end tapering burs  24. Minimum 50 sets of fone burs  25. Minimum 50 sets of fone burs  26/Minimum 50 sets of fone burs  27. Minimum 50 sets of fone burs  28. Minimum 50 sets of fone burs  29. Minimum 50 sets of fone burs  29. Minimum 50 sets of fone burs  20. Minimum 50 sets of fone burs  21. Minimum 50 sets of fone burs  22. Minimum 50 sets of fone burs  23. Minimum 50 sets of finishing burs  24. Minimum 50 sets of fone burs  25. Minimum 50 sets of fone burs  26/Minimum 50 sets of fone burs  27. Minimum 50 sets of fone burs  28. Minimum 50 sets of fone burs  29. Minimum 50 sets of fone burs  29. Minimum 50 sets of finishing burs  20. Minimum 50 sets of finishing burs  20. Minimum 50 sets of finishing burs	Each unit must have at least the number of consultants that fulfil the minimum faculty requirements as laid down by PMC Minimum Standards for faculty in UG Dental Colleges of Pakistan 2022	25 patients/ month



					ستان میڈیک <i>ل علیا</i>
DEPT NO	DEPARTMENT	STRUCTURE	ESSENTIAL EQUIPMENT	HUMAN RESOURCE	CASE LOAD
			31.Minimum 25 articulators simple plane line available. 32. Minimum 5 semi adjustable articulators 33.Minimum 1 curing tank facility available. 34. Minimum 1 de-waxing unit available. 35.Minimum 6 micro motor available. 36. Minimum 2 polishing unit available. 37.Minimum 25 press and flasks available. 38.Minimum 10 dental lathe stones assorted available. 39.Minimum 3 sets of Cavex imp. paste (boxes) 40.Minimum 5 packs of GIC/RMGIC luting agents available. 41.Minimum 10 packs of Impression compound available. 42.Minimum 15 packs Green stick available. 43.Minimum 50 kg Soft plaster available. 44.Minimum 5 boxes of rubber base impression material plus putty and wash available. 45.Minimum 10 Self-cure acrylic powder 800g and 400ml liquid available. 46.Minimum 10 roll each of wire 0.7mm,0.8mm available. 47.Minimum 8 packs of Heat cure acrylic (pink & clear) available 48.100 sets of Examination instruments (mirror, probe, tweezers). 49.Adequate number of disposable gloves packets, disposable masks packets and disposable syringes available and in use. 50.Minimum 10 Suction tips 51.Minimum 2 crown and bridge removers 52.One X ray illuminator. 53.Adequate Sterilization pouch rolls available if no CSSD 54.4 anesthesia syringe and needles available. 55.20 instrument trays available. 55.20 instrument trays available.		



					سستان میڈیک <i>ل کھیٹیٹ</i>
DEPT NO	DEPARTMENT	STRUCTURE	ESSENTIAL EQUIPMENT	HUMAN RESOURCE	CASE LOAD
ED 6	ORAL SURGERY	1. Department with adequate space for dental units and sitting. 2. Washrooms 3. Examination and procedure facility. 4. Demonstrati on rooms with appropriate seating capacity. 5. Workstation s/offices for the faculty members	1.Dental units with functional high-volume suction. 2. 2 portable suction machines available. 3.12 (micro-motor) hand piece available. 4. Minimum 100 sets of examination instruments i.e., Mirrors, Probes and Tweezers available. 5. 15 each extraction crown forceps for upper and lower teeth available. 6.15 each root forceps for upper and lower teeth available. 7. Minimum 10 each deciduous molar forceps available. 8. Minimum 10 wire cutters available. 9. Minimum 12 twisters available. 10. Minimum 2 bone files available. 11. Minimum 3 surgical chisels / osteotomes and mallet available. 12. Minimum 12 bone rongeurs available. 13. Minimum 8 root tips pick available. 14. Minimum 8 root tips pick available. 15. Minimum 10 Pen Reduction Internal Fixation (ORIF) Kit for bone plating available. 16. Minimum 24 Extraction forceps for upper & lower teeth (molar & premolar) 17. Minimum 10 BDR forceps for upper & lower teeth (molar & premolar) 17. Minimum 2 Excavators 20. Minimum 2 Excavators 20. Minimum 2 Skin hooks 25. Minimum 8 mouth props 22. Minimum 8 suction tips 23. Minimum 5 Artery forceps (straight & curved) 26. Minimum 5 Large trays 27. Minimum 10 Instrument trays 28. Minimum 10 Hand piece (micro-motors) 29. Minimum 6 Cheek retractors (right angle retractor)	Each unit must have at least the number of consultants that fulfil the minimum faculty requirements as laid down by PMC Minimum Standards for faculty in UG Dental Colleges of Pakistan 2022	300 patients / month



					و هیدیکل
DEPT NO	DEPARTMENT	STRUCTURE	ESSENTIAL EQUIPMENT	HUMAN RESOURCE	CASE LOAD
			30.Minimum 6 instrument boxes 31.Minimum 10 scalpel handles 32.Minimum 25 Syringes 33.Minimum 6 needle holders 34.Minimum 6 suture cutting scissors 35.Minimum 3 steel scissors (straight & curved) 36.Minimum 15 Straight elevators 37.Minimum 15 Periosteal elevators 38.Minimum 1 set standard emergency instrument kit in oral and maxillofacial surgery ward available. 39.Minimum 1 set standard emergency instrument kit in oral and maxillofacial surgery department available. 40.Minimum 1 set standard emergency instrument kit in oral and maxillofacial surgery department available. 40.Minimum 1 set standard emergency instrument kit in oral and maxillofacial surgery ward available.1 set of Orthognathic surgery instruments available. 41.Minimum 1 set standard emergency instrument kit in oral and maxillofacial surgery ward available.1 set of implant surgical kit with physio-dispenser with drill and saw available.		
ED 7	ORTHODONTICS	1.Department with adequate space for dental units and sitting. 2.Washrooms 3.Examination and procedure facility. 4.Demonstrati on rooms with appropriate seating capacity. 5.Workstation s/offices for the faculty members	1.Dental units with functional high-volume suction. 2. Minimum 3 composite light cure unit available. 3.Minimum 1 DSLR camera with macro lens in use. 4.Adequate illuminators for rotation batch available for cephalometric purposes and X-ray investigations. 5.Minimum 2 semi adjustable articulator available. 6.Minimum 6 plane line articulators available. 7.Minimum 2 Hanau Face bow available. 8.Minimum 5 slow speed hand piece available. 9.Minimum 10 fissure and round burs for high speed hand pieces 10.Minimum 5 cutting burs for slow hand piece (no 1172) for composite removal	Each unit must have at least the number of consultants that fulfil the minimum faculty requirements as laid down by PMC Minimum Standards for faculty in UG Dental Colleges of Pakistan 2022	15 patients / month



DEPT NO	DEPARTMENT	STRUCTURE	ESSENTIAL EQUIPMENT	HUMAN RESOURCE	CASE LOAD
			11.Minimum 6 straight hard wire cutters 12.Minimum 1 TAD kit with palatal &buccal drivers 13.Minimum 1 B-Ti wire 19*25, 21*25 14.Minimum 1 Ring light 18 15.Minimum 30 Brackets complete sets available. 16.Minimum 1 of molar bands (all sizes) available. 17.Minimum 1 premolar band set 18.Adequate number of molar tubes for upper and lower, first and second molars available 19.Adequate number of spot weldable lingual cleats available. 20.Adequate number of full range of NiTi arch wires available. 21.Adequate number of full range of stainless-steel arch wires available and equate number of elastomeric power chains available. 22.Adequate number of elastic ligatures available. 25.Adequate number of steel ligatures available. 26.Minimum 1 composite bracket bonding kit available 27.Adequate number of luting and restorative GIC available. 28.Adequate number of Self-cure acrylic should be available. 29.Adequate number of Solf-cure acrylic should be available. 30.Adequate number of solder available. 31.Adequate number of soft plaster available. 32.Adequate number of soft plaster available. 33.Adequate number of solder available. 34.Mequate number of solder available. 35.Adequate number of solder available. 36.35% phosphoric acid etchant available. 37.Minimum 1 spool each of open and closed coil spring.		



DEPT NO	DEPARTMENT	STRUCTURE	ESSENTIAL EQUIPMENT	HUMAN RESOURCE	CASE LOAD
			38.Adequate amount of modelling and sticky wax available. 39.Minimum 5 Bird beak pliers 40.Minimum 5 Round pliers 41.Minimum 8 Wiengart pliers 42.Minimum 3 tweed loop forming pliers 43.Minimum 5 Adam pliers 44.Minimum 8 Light wire cutters 45.Minimum 10 band pushers and band seaters available. 46.Minimum 6 band removers available. 47. Minimum 5 pairs of base formers upper and lower of medium and large size available. 48.Minimum 10 bracket holders available. 49.Minimum 5 bracket removers available. 50.Minimum 10 distal end cutters available. 51.Minimum 3 sets of reflectors for orthodontic photography available 52.Minimum 5 pairs of separate cheek retractors available. 53.Minimum 3 pairs of lip retractors available. 54.Adequate number of orthodontic pliers. 55.Minimum 6 sets (S,M,L) impression trays set (assorted) both stainless steel and plastic available. 56.Minimum 15 Mathieu pliers 57.Minimum 15 Mathieu pliers 57.Minimum 5 Plaster and spatulas 59. Minimum 40 sets of examination instruments including tweezers, mirrors and probes available. 60.Minimum 5 plastic instruments and glass slabs 61.Minimum 4 tweed torqueing pliers 62.Adequate amount of fissure and round burs for high-speed hand pieces available. 63.Adequate number of burs for slow hand piece for composite removal available. 64.Minimum 4 soldering gun available. 65.Minimum 5 pairs of scissors		



DEPT NO	DEPARTMENT	STRUCTURE	ESSENTIAL EQUIPMENT	HR
ED 8	SKILLS DEVELOPMENT LAB	A standalone dental clinical training facility/Hospital, must have its own skills lab with both medical and dental skill training facilities/Hospital.  If a dental training facility/Hospital is affiliated with a medical college, the skills lab may be shared with the medical college for BLS and medical skill training only	1.The necessary equipment and materials for Dental Materials, Oral Biology and Oral Pathology and Clinical Disciplines to effectively teach the skills identified in the training program.  2. The necessary equipment to train for BLS and other essential medical skills identified in the training program.  3. Adequate number (1/3 class strength) of models, mannequins, and simulators to effectively teach the required skills.  4. Equipment for airway management, IV cannulation, plastering, suturing, and surgical sets.	1.A designated Director / In-charge of the skills lab with a clearly defined job description 2.A full time / dedicated supervisor, technician, 3.computer operator
ED 9	RADIOLOGY	The department should exist as a distinct entity with designated area for seating, radiological services, review of results, and staff offices	<ol> <li>Cephalometric</li> <li>Panoramic</li> <li>Digital X-ray</li> <li>CT/CBCT (have valid agreement for specialized imaging)</li> </ol>	2 qualified     radiographer/     assistant     radiographers.

• Essential Departments must be equipped with the relevant Dental Laboratories in Hospital or College where applicable.

#### DENTAL LABORTORY

- 1. Dental Materials Sciences laboratory
- 2. Pre-Clinical prosthodontics laboratory
- 3. Plaster and curing room
- 4. Prosthodontic lab/Orthodontic laboratory
- 5. Casting and Ceramic Laboratory
- 6. A multi-purpose lab for Oral Pathology and / or Oral Biology.
- 7. A CEPH Tracing Room with wire work facilities



#### 1.3.4 Quality Departments (QD) & Standards (QS)

QUALITY DEPARTMENTS				
Every teaching hospital has the option of following departments at Undergraduate Level:				
QD 1	PAEDRIATRIC DENTISTRY			
QUALITY STANDARDS				
QS 1	MISSION STATEMENT			
QS 2	FACULTY			
QS 3	GOVERNANCE, SERVICES & RESOURCES			



#### **Quality Departments (QD)**

STANDARD	DEPARTMENT	STRUCTURE	ESSENTIAL EQUIPMENT	HUMAN RESOURCE
QD 1	PAEDRIATRIC DENTISTRY	1.Department with adequate space for dental units and sitting. 2.Washrooms 3.Examination and procedure facility. 4.Demonstrati on rooms with appropriate seating capacity. 5.Workstation s/offices for the faculty members	1.Minimum 7 High Speed Handpiece 2.Minimum 6 Slow Speed Handpiece 3.Minimum 2 Rotary Endodontic machine 4.Minimum 5 Rubber Dam Kits 5.Minimum 2 Light Cure Machine 6.Minimum 1 Electric Pulp Tester 7.Minimum 1 kit set of S.S Crowns 8.Minimum 2 sets of Separators applying forceps 9.Minimum 1 Band pusher 10.Minimum 1 Band seater 11.Minimum 2 wire cutters 12.Minimum 1 set of Flat pliers 13.Minimum 1 set of Round pliers 14.Minimum 1 set of Round pliers 15.Minimum 3 sets of Pediatric Extraction Forceps 16.Minimum 3 sets of all types of elevators 17.Minimum 10 sets of all examination and filling instruments 18.Minimum 5 sets of all endodontic instruments 19.Minimum 1 Prophy Jet for Prophylaxis 20.Minimum 1 Set of MTA Carrier (Messing gun) 21.Minimum 1 Radiographic illuminator 22.Minimum 1 Radiographic illuminator 22.Minimum 3 sets impression for children and adolescent 23.Minimum 2 each bowl and spatula 24.Minimum 5 Anesthesia Cartridge gun 25.Minimum 1 Amalgator 26.Minimum 2 Mortar and pestle 27.Minimum 5 bottles Calcium Hydroxide (Non setting) 28.Minimum 1 Calcium Hydroxide with Idoform 30.Minimum 1 Mineral Trioxide Aggregate 31.Minimum 2 Zinc oxide Eugenol Cement	One Consultant with 2 years of experience One Senior Registrar or above One Demonstrator Note: Allied qualification may be considered for appointment as faculty member. The allied subjects are:  Operative Dentistry Orthodontics



STANDARD	DEPARTMENT	STRUCTURE	ESSENTIAL EQUIPMENT	HUMAN RESOURCE
			32.Minimum 2 sets Composite filling materials with etchant 33.Minimum 2 sets of Fissure sealants 34.Minimum 3 packs of GIC 35.Minimum 1 pack Stainless steel crowns (Pre formed) 36.Minimum 1 pack of Strip Crowns 37.Minimum 3 sets of all Materials for Endodontic treatments of Permanent teeth 38.Minimum 10 each Diamond Burs for cavity preparations of Permanent & Primary teeth 39.Minimum 3 Floride varnish 40.Minimum 2 Xylocaine gel/Spray 41.Minimum 1 Pumice Polish 42.Minimum 2 Alginate 43.Minimum 5 Dental Amalgam 44.Minimum 5 Tormocresol 45.Minimum Ferric Sulphate 46.Minimum 2 Co-axial wire	



#### **Quality Standards (QS)**

SR NO	SUBJECT	DETAILS
QS 1	MISSION STATEMENT	The teaching hospital must have a written institutional mission statement, which:  •demonstrates a clear institutional commitment to social accountability, achievement of competencies and addresses the healthcare needs of Pakistan.  • is aligned with the overall vision of the institution or with which it is affiliated or of which it is a constituent institution.  •is developed and known to all the stakeholders (for example trainers, staff, students, university, health ministry officials).  •Teaching hospitals should have a written institutional mission statement, which aims at professional development and commitment to life-long learning.
QS 2	FACULTY	The Teaching Hospital should:  • have a CME/CPD program for faculty with clear goals aligned with teaching and training requirements.
QS 3	GOVERNANCE, SERVICES & RESOURCES	The teaching Hospital should:  •have mechanisms for dissemination of all policies and procedures related to governance, services and resources.  •have a Human Resource Department and an anti-harassment policy in line with the national guidelines.  •have mechanisms for addressing disciplinary issues of trainer, staff and trainees.  •adhere to its commitment to social accountability.  •have appropriate budgetary allocations for faculty/trainers' professional development program have mechanisms for addressing disciplinary issues of trainer, staff and trainees.  •adhere to its commitment to social accountability.  •have appropriate budgetary allocations for faculty/trainers' professional development program



## SEAT ENHANCEMENT (BACHELOR OF DENTAL SURGERY PROGRAM)







#### 1.4 GUIDELINES & CRITERIA

	MANDATORY STANDARDS	For institutions applying for Enhancement of Seats, the Mandatory Standards (MS) for the Hospital remains the same as mentioned in section -I.
GUIDELINES	ESSENTAIL DEPARTMENTS & STANDARDS	For the seat enhancements, in addition to the departments mentioned in Section 1, Following shall also be included in the Essential Departments:  1: PEADRIATRIC DENTISTRY  For the seat enhancements, in addition to the standards mentioned in Section 1, sub-section 1.3, following shall also be included in the Essential Standards:  ES 1: Mission Statement ES 2: Outcomes ES 3: Institutional Autonomy & Academic Freedom ES 4: Program Organization ES 5: Educational Content ES 6: Program Management ES 7: Assessment ES 8: Students ES 9: Consultants ES 10: Program Evaluation and Continuous Renewal ES 11: Governance Services & Resources
	QUALITY DEPARTMENTS & STANDARDS	Any quantity over & above specified in the essential departments/ standards would be counted as <b>QUALITY</b> .
CRITERIA FOR SEAT ENHANCEMENT OF HOSPITALS		
CRITERIA 1	The equipment, consultants and staff shall be increased by <b>25% proportionate increase</b> for each 50 students against the standard determined for 50 students of the BDS Program.	
CRITERIA 2	Seat Enhancement shall be subject to the availability of sufficient space to accommodate the increase in strength of students with specifically a measurable increase in the teaching areas.	



#### 1.4.1 ESSENTIAL STANDARDS FOR SEAT ENHANCEMENT

STANDARD NO	STANDARD	DETAILS
ES 1	MISSION STATEMENT	The teaching hospital must have a written institutional mission statement, which:  •demonstrates a clear institutional commitment to social accountability, achievement of competencies and addresses the healthcare needs of Pakistan.  • is aligned with the overall vision of the institution or with which it is affiliated or of which it is a constituent institution.  •is developed and known to all the stakeholders (for example trainers, staff, students, university, health ministry officials).  •Teaching hospitals should have a written institutional mission statement, which aims at professional development and commitment to life-long learning.
ES 2	INSTITUTIONAL AUTONOMY AND ACADEMIC FREEDOM	<ul> <li>The teaching hospital must have institutional autonomy to</li> <li>formulate and implement policies to ensure smooth execution of its educational outcomes.</li> <li>develop appropriate and effective management and oversight systems to ensure that the policies are implemented.</li> <li>identify individual program and departments suitable for undergraduate training and present them for inspection and recognition from concerned authority.</li> <li>allocate and appropriately use resources for implementation of the teaching.</li> </ul>
ES 3	PROGRAM ORGANIZATION	The teaching hospital must:  •clearly document the sequence and content of teaching along with the rationale for the sequence being recommended.  •ensure that its clinical service needs DO NOT compromise the learning/teaching requirements and objectives of the undergraduate dental education program.  •use practice-based teaching involving the personal participation of the students in the services and responsibilities of patient care.  •deliver the curriculum in accordance with principles of equality.  •inform students about the teaching methodology and the rights and obligations of students.  •include the commitment to ethical considerations in the teaching.
ES 4	PROGRAM MANAGEMENT	The training hospital must  •have an Oversight Committee that governs, approves and oversees undergraduate programs. This committee must ensure the quality of the program and approve it. Oversight Committee should have appropriate student representation  •have all the requisite aids and audio-visual facilities. (provision of internet, computers, multimedia per demonstration room in mandatory essential clinical departments)



SR NO	SUBJECT	DETAILS
		<ul> <li>have a grievance policy and a committee to manage grievances.</li> <li>issue a certificate of completion of programme of study as per the policy/regulations of the qualification awarding institution.</li> <li>provide a system for provision of financial support and benefits for needy students to ensure that they are able to fulfill the responsibilities of their undergraduate program.</li> <li>provide an educational and work environment in which students may raise and resolve issues without fear of intimidation or retaliation.</li> <li>have physical facilities to support a learning environment for the students. (proper ventilation, temperature control and seating capacity for at least 25 students/ demonstration room in mandatory essential clinical departments)</li> </ul>
ES 5	EDUCATIONAL CONTENT	<ul> <li>have a detailed document of the training, which includes the learning objectives of each rotation and the desired skills to be achieved. This must be disseminated to all the stakeholders.</li> <li>ensure that the content and its delivery are aligned with the competencies and outcomes prescribed by PMC.</li> <li>ensure that the content that is taught and assessed are congruent with the level of the undergraduate students.</li> <li>use logbooks (preferably electronic) which clearly specify the objectives and skills-to- be-achieved during the clinical rotations.</li> <li>have an orientation program for undergraduate students.</li> <li>Include, but not limited to the following:</li> <li>a) Communication Skills</li> <li>b) Patient Safety &amp; Infection Control</li> <li>c) Professionalism, Medical and Islamic Ethics</li> <li>d) Evidence-Based Medicine</li> <li>e) Ethics of Patient Care</li> <li>have an orientation program for undergraduate students</li> <li>implement the curriculum of program prescribed by the university/ institution.</li> <li>ensure the curriculum is conveyed to and understood by all stakeholders</li> </ul>
ES 6	ASSESSMENT	<ul> <li>develop appropriate and contextual policies for in training assessment of students.</li> <li>ensure that formative assessments cover all domains including knowledge, skills and attitudes.</li> <li>use a wide range of assessment methods.</li> <li>define a clear process of assessment.</li> <li>ensure that the assessment practices are compatible with educational outcomes and instructional strategies.</li> <li>have a system for appeal of results.</li> </ul>



SR NO	SUBJECT	DETAILS
ES7	STUDENT	The teaching hospital must have  •infrastructure to facilitate differently abled students  •follow the rules and regulations of the applicable admitting institution (dental college) and regulations of the qualification awarding institution.  •have clear policies on funding, technical support and facilities for the students.  •have a documented policy on providing healthcare coverage to the students.  •ensure that all students have access to all the teaching bed patients/ dental units  •have adequate mechanisms in place to ensure the well-being of students and faculty  •have a documented policy on providing healthcare coverage to the students.  •ensure confidentiality of students' academic and medical records.
ES 8	FACULTY	The Teaching Hospital should:  • have a CME/CPD program for faculty with clear goals aligned with teaching and training requirements.  •have robust trainer's recruitment, selection, promotion and retention policies.  •have sufficient qualified and trained faculty/trainers based on needs of the undergraduate training.  •ensure that the faculty/trainers fulfill their various roles as defined by the hospital and the clinical training.  •ensure that the institution is led by qualified (education, training and experience) person commensurate with hospital's needs
ES 9	CONSULTANTS	The teaching hospital must have  •adequate staff with requisite qualifications to provide optimum patient care and impart teaching and training.  •various roles as defined by the hospital and the clinical training.  •ensure that the institution is led by qualified (education, training and experience) person commensurate with hospital's needs.
ES 10	PROGRAMME EVALUATION AND CONTINUOUS RENEWAL	The teaching hospital must  •ensure the standards are in compliance with PMC accreditation standards.  •have mechanism for monitoring of training and of progressive improvements.  •ensure that amendments based on results of program evaluation findings are implemented and documented.
ES 11	GOVERNANCE, SERVICES AND RESOURCES	The teaching hospital must:  •have a hierarchical system of governance of training program  •have HMIS system. If HMIS system is not installed, accreditation shall be subject to the installation of HMIS system within 12 months.  •have a Human Resource Department and an anti-harassment policy in line with the national guidelines  •have adequate and safe buildings and structures  •have satisfactory and functional IT and library facilities.  •have appropriate budgetary allocations for faculty/trainers' professional development programs.  •have mechanisms for addressing disciplinary issues of trainer, staff and trainee eadhere to its commitment to social accountability.  •ensure that patients admitted on the designated teaching beds / dental chairs have a documented consent to allow access to the trainees.  •have a documented policy ensuring that clinical work or procedures and cost of any material used during training and studentship is not charged to the undergraduate students.



# COMPETENCIES FOR DENTAL STUDENTS







#### 1.5: Competencies for Dental Students

Competencies that a Dental Graduate should demonstrate include, but are not limited to, the following:

#### **C-1 Patient Assessment**

NO	COMPETENCY	LEVEL OF COMPETENCE
PA 1	Elicit, and record patient history	Competent to practice under direct supervision
PA 2	Perform, and record intra and extra oral examination for diagnosis of problems presenting to all specialties of dentistry, including caries, periodontal disease, malocclusion & dentofacial deformity, common oral cysts and benign lesions, oral cancer and potentially malignant lesions, odontogenic and facial infections, mucosal disorders, dentoalveolar & maxillofacial trauma, TMJ and facial pain/neurological disorders.	Competent to practice under direct supervision
PA 3	Perform the following examinations as part of dental patient assessment: Neck, cranial nerves V and VII, TMJ and muscles of mastication, dentofacial deformity	Perform Independently
PA 4	Perform, and record results of diagnostic investigations: transillumination test, pulp vitality test (heat, cold, electrical )	Competent to practice under direct supervision
PA 5	Select, and safely take the following intraoral radiographs using PNRA safety guidelines, for adults, children, and pregnant patients: periapical, bitewing, occlusal.	Competent to practice under direct supervision
PA 6	Select, order, and interpret extraoral imaging: OPG, lateral ceph, PA jaws, occipitomental (PNS), lateral oblique views mandible, CBCT.	Has observed/assisted and is familiar with the steps.
PA 7	Select, perform/obtain, and interpret diagnostic investigations: haematological (CBC, coagulation profile, HbA1c, FBG, RBG), FNA, biopsy (excisional, incisional, trephine, brush), glucometer use.	Has observed/assisted and is familiar with the steps



#### C-2 PROFESSIONAL & MULTIDISCIPLINARY SKILLS

NO	COMPETENCY	LEVEL OF COMPETENCE
PM 1	Apply ethical standards in the provision of dental care.	Competent to practice under direct supervision
PM 2	Practice within one's scope of competence and consult with or refer to professional colleagues when indicated.	Competent to practice under direct supervision
PM 3	Formulate a comprehensive diagnosis, treatment, and/or referral plan for the management of patients	Competent to practice under direct supervision
PM 4	Take and record informed consent for common procedures in dentistry	Has observed/assisted and is familiar with the steps
PM 5	Apply appropriate interpersonal and communication skills	Has observed/assisted and is familiar with the steps
PM 6	Apply psychosocial and behavioral principles in patient-centred health care.	Has observed/assisted and is familiar with the steps
PM 7	Communicate effectively with individuals from diverse populations	Has observed/assisted and is familiar with the steps
PM 8	Provide prevention, intervention, and educational strategies	Competent to practice under direct supervision
PM 9	Counsel patients on physiological and biochemical principles of growth and healing to promote, maintain, and restore oral soft and hard tissues, in health and disease	Has observed/assisted and is familiar with the steps
PM 10	Communicate responsibly and professionally when using media, including but not limited to television, print, advertisements, and electronic social media	Has observed/assisted and is familiar with the steps



NO	COMPETENCY	LEVEL OF COMPETENCE
PM 11	Communicate verbally and in writing (face to face, electronically and phone) with patients (special or aggressive, children and teenagers, geriatric, mentally challenged, visually and auditorily challenged), their relatives, colleagues, dental technicians, laboratory personnel, and wider health care professionals, including referral.	Has observed/assisted and is familiar with the steps
PM 12	Communicate professionally with a pathologist to discuss lab and biopsy samples and results	Has observed/assisted and is familiar with the steps
PM 13	Explain diagnosis, investigation and evidence- based treatment/management plan to patient/attendant involved in decision making	Competent to practice under direct supervision
PM 14	Give post-procedure instructions and counsel patient on home care after common procedures in dentistry, and on the safe use of prescribed medication	Competent to practice under direct supervision
PM 15	Safely prescribe drugs for common dental indications, including pain and anxiety management, infectious diseases (bacterial, viral & fungal), periodontal and mucosal diseases including ulcers and Lichen Planus, dentin hypersensitivity, oral trauma & abrasions	Competent to practice under direct supervision
PM 16	Practice antibiotic stewardship	Competent to practice under direct supervision
PM 17	Deliver oral hygiene instructions i.e. instruct patients in appropriate oral hygiene methods compatible with oral health	Has observed/assisted and is familiar with the steps
PM 18	Apply counselling skills in dentistry: advice patients on lifestyle and risk factors: habit breaking, dietary, oral hygiene, oral health, caries prevention, smoking cessation, health promotion.	Competent to practice under direct supervision
PM 19	Apply principles of dispute resolution during a conflict i.e. apply principles of conflict management in all aspects of dental practice	Has observed/assisted and is familiar with the steps



NO	COMPETENCY	LEVEL OF COMPETENCE
PM 20	Breaking bad news	Has observed/assisted and is familiar with the steps
PM 21	Demonstrate different operator positions, instrument grips, and patient positions required to perform common procedures in dentistry	Perform Independently

#### **C-3 INFECTION CONTROL**

NO	COMPETENCY	LEVEL OF COMPETENCE
IC 1	Demonstrate hand hygiene, respiratory etiquette, and donning and doffing of PPE for non-aerosol generating, and for aerosol generating procedures	Perform Independently
IC 2	Aseptically set up an instrument tray and equipment for a general dental procedure. including sterile set up of handpiece and suction, and application of sterile barriers	Perform Independently
IC 3	Follow standard precautions for infection control for handling of equipment, instruments and materials during dental procedures, including: material dispensing & manipulation & transfer to dentist, curing light use, oral radiology, dental unit water lines purging and treatment, use of intra oral cameras.	Perform Independently
IC 4	Disinfect impressions and prosthetic/orthodontic appliances and devices before delivery, and before sending to the laboratory	Perform Independently
IC 5	Segregate and dispose contaminated waste and sharp items generated in a dental procedure	Perform Independently
IC 6	Perform dental unit disinfection after procedures, and at the start of the day	Perform Independently



NO	COMPETENCY	LEVEL OF COMPETENCE
IC 7	Disinfect, wash/clean, & package contaminated dental instruments for autoclaving.	Competent to practice under direct supervision
IC 8	Run, monitor and record an autoclave cycle.	Competent to practice under direct supervision
IC 9	Remove and store sterile packs from an autoclave	Competent to practice under direct supervision
IC 10	Demonstrate cleaning and disinfection of blood or saliva spillage	Competent to practice under direct supervision
IC 11	Demonstrate initial management of a needle prick injury.	Competent to practice under direct supervision

#### **C- 4 MEDICAL & DENTAL EMERGENCIES**

NO	COMPETENCY	LEVEL OF COMPETENCE
MD 1	Prevent, recognize, and manage dental emergencies, including: uncontrolled bleeding, abscess (local swelling/pain), cellulitis, severe dental pain from pulpal inflammation, acute periodontitis, pericoronitis, alveolar osteitis, tooth fracture, tooth avulsion/luxation, caries/defective restorations causing pain, denture/ ortho appliance adjustment if impeding function/painful, acute myofascial pain dysfunction with trismus, endodontic hypochlorite accident	Competent to practice under direct supervision
MD 2	Prevent, recognize, and manage medical emergencies in a dental clinic, including impairment or loss of consciousness, chest pain, and respiratory obstruction/distress, panic/anxiety. The dentist should be competent in recording blood pressure, Pulse & Respiratory rate, basic life support (BLS, including cardiopulmonary resuscitation), blood glucose testing by glucometer	Competent to practice under direct supervision



NO	COMPETENCY	LEVEL OF COMPETENCE
MD 3	The dentist should be competent in administering oxygen therapy, giving injections (I/M, I/V, S/C), managing infusion lines, and use of automated external defibrillator.	Has observed/assisted and is familiar with the steps
MD 4	Provide first aid including wound care and dressings, taking swabs, and suturing simple orofacial lacerations.	Has observed/assisted and is familiar with the steps

#### C-5 ANXIETY & PAIN MANAGEMENT

NO	COMPETENCY	LEVEL OF COMPETENCE
AP 1	Select and safely prescribe drugs for the management of preoperative, operative and postoperative pain and anxiety	Competent to practice under direct supervision
AP 2	Select and safely administer the following local anesthesia techniques for the practice of dentistry: infiltration for maxilla and mandible (including intrapulpal, intraligamentary), and the following nerve blocks: inferior alveolar, lingual, long buccal, greater palatine, & nasopalatine	Perform Independently
AP 3	Administer the following local anesthesia techniques for the practice of dentistry: mental block, posterior superior alveolar block, Gow Gates block, Infraorbital block, Vazirano Akinosi closed mouth block	Has observed/assisted and is familiar with the steps
AP 4	Manage potential complications of local anesthesia	Has observed/assisted and is familiar with the steps
AP 5	Identify indications for appropriate application of inhalation and intravenous conscious sedation techniques for dental procedures	Has observed/assisted and is familiar with the steps



#### DISCIPLINE SPECIFIC COMPETENCIES PERIODONTICS

NO	COMPETENCY	LEVEL OF COMPETENCE
PR 1	Educate patients concerning the etiology of periodontal disease and encourage them to assume responsibility for their oral health	Competent to practice under direct supervision
PR 2	Perform periodontal charting and instrumentation techniques for plaque, calculus and stains removal using manual and powered instruments	Competent to practice under direct supervision
PR 3	Instruct the patients on when and how to use chemical plaque control agents in periodontal disease management.	Competent to practice under direct supervision
PR 4	Discuss the outcome of periodontal therapy and carry out any further procedures required to maintain (supportive periodontal therapy) or improve the obtained treatment outcome.	Competent to practice under direct supervision
PR 5	Discuss local, systemic and acquired risk factors of periodontal disease with patients, discuss the role of perio-systemic inter-relationship and its influence on periodontal treatment strategies	Competent to practice under direct supervision
PR 6	Provide symptomatic relief to patients presenting with painful conditions such as necrotizing ulcerative conditions, periodontal abscess, food impactions, and dentine hypersensitivity	Competent to practice under direct supervision
PR 7	Use plaque disclosing agents	Competent to practice under direct supervision
PR 8	Perform instrument sharpening techniques and identify worn down periodontal instruments	Competent to practice under direct supervision
PR 9	Perform functional crown lengthening to achieve biological harmony in direct and indirect restorations	Has observed/assisted and is familiar with the steps



NO	COMPETENCY	LEVEL OF COMPETENCE
PR 10	Perform gingivectomy procedure and application of periodontal surgical dressing	Has observed/assisted and is familiar with the steps
PR 11	Perform periodontal surgical therapy for periodontal pocket reduction.	Has observed/assisted and is familiar with the steps

# OPERATIVE DENTISTRY, ENDODONTICS & PAEDIATRIC DENTISTRY

NO	COMPETENCY	LEVEL OF COMPETENCE
OP 1	Diagnose Caries Risk and formulate Treatment Plan accordingly	Competent to practice under direct supervision
OP 2	Select and use restorative materials based upon location, size and shape of cavity, oral environment, and occlusal load	Competent to practice under direct supervision
OP 3	Select and use burs and other materials for tooth preparation, finishing and polishing of restorations.	Competent to practice under direct supervision
OP 4	Demonstrate knowledge of oral anatomy and morphology in performing intracoronal restorations	Perform Independently
OP 5	Demonstrate principles of minimal invasive dentistry during tooth preparation.	Competent to practice under direct supervision
OP 6	Execute vital pulp therapies, and restore endodontically treated primary and permanent teeth	Competent to practice under direct supervision
OP 7	Perform different classes of amalgam restorations, including tooth preparation	Perform Independently



NO	COMPETENCY	LEVEL OF COMPETENCE
OP 8	Perform anterior and posterior direct	Perform Independently
0. 0	composite/GIC restorations, including tooth preparation for preventive Resin Restoration and other cavity forms.	
OP 9	Apply rubber dam for performing restorative and endodontic procedures	Competent to practice under direct supervision
OP 10	Manipulate and apply adhesives/liners/bases and restorative materials for direct restorations.	Perform Independently
OP 11	Achieve static and dynamic occlusal harmony for restorations, prostheses and appliances.	Competent to practice under direct supervision
OP 12	Select and manipulate dental cements for luting and restoration based on biological and mechanical clinical requirements.	Competent to practice under direct supervision
OP 13	Select and use occlusal relation registration materials.	Competent to practice under direct supervision
OP 14	Select, manipulate, and use materials for endodontic treatment	Perform Independently
OP 15	Handle and dispose dental mercury waste.	Competent to practice under direct supervision
OP 16	Use Stainless steel crowns for restoring deciduous teeth	Perform Independently
OP 17	Perform pulpotomy in deciduous and young permanent teeth.	Competent to practice under direct supervision
OP 18	Perform non-surgical endodontic therapy on teeth with single canal: access opening, chemomechanical preparation, working length estimation, & obturation.	Competent to practice under direct supervision



NO	COMPETENCY	LEVEL OF COMPETENCE
OP 19	Perform preventive dental procedures independently: pit & fissure sealants	Competent to practice under direct supervision
OP 20	Apply non-pharmacological behavior management strategies on pediatric patients	Has observed/assisted and is familiar with the steps
OP 21	Perform Atraumatic Restorative Treatment (ART)	Competent to practice under direct supervision
OP 22	Deliver fluoride & non-fluoride caries preventive therapy and use of desensitizing agents for dentine hypersensitivity	Competent to practice under direct supervision

#### **PROSTHODONTICS**

NO	COMPETENCY	LEVEL OF COMPETENCE
PR 1	Apply knowledge of oral anatomy and morphology in fabrication of temporary crowns	Competent to practice under direct supervision
PR 2	Achieve static and dynamic occlusal harmony for restorations, prostheses and appliances	Competent to practice under direct supervision
PR 3	Select and manipulate dental cements for luting and restoration based on biological and mechanical clinical requirements	Competent to practice under direct supervision
PR 4	Select and use burs and other materials for tooth preparation, finishing and polishing of and prosthesis	Competent to practice under direct supervision
PR 5	Perform wire bending into different shapes, and clasps used in removable partial dentures.	Competent to practice under direct supervision
PR 6	Select and manipulate different types of plaster of paris to: pour dental models for study, and prosthesis fabrication; mount casts/models on an articulator	Perform Independently



NO	COMPETENCY	LEVEL OF COMPETENCE
PR 7	Select and manipulate impression materials for recording impressions of dentate, partially dentate and edentulous jaws as well as indirect intra / extra coronal restorations	Competent to practice under direct supervision
PR 8	Design, prepare and deliver indirect extracoronal restorations: anterior and posterior full coverage crowns i.e. perform anterior and posterior crown preparations for full metal, porcelain fused to metal, or all ceramic crowns	Competent to practice under direct supervision
PR 9	Fabricate direct temporary crowns	Competent to practice under direct supervision
PR 10	Perform post and core buildups	Has observed/assisted and is familiar with the steps
PR 11	Design, prepare and deliver simple 3 unit bridges  Has observed/assisted and is familiar with the steps	
PR 12	Design, fabricate, and deliver removable partial dentures: impressions, maxillomandibular relationship, denture trial & insertion	Competent to practice under direct supervision
PR 13	Design, fabricate, and deliver conventional complete dentures: Primary and secondary impressions, post dam marking, maxillomandibular relationship, denture trial and insertion.	Competent to practice under direct supervision
PR 14	Produce diagnostic casts, and mount with inter-occlusal records. Perform the laboratory procedure of pouring, removal and trimming of a gypsum cast from an alginate impression.	Perform Independently
PR 15	Demonstrate face bow transfer, articulation, and programming of a semi adjustable articulator	Has observed/assisted and is familiar with the steps



NO	COMPETENCY	LEVEL OF COMPETENCE
PR 16	Perform segmental tooth setup for upper and lower arches, complete or partial, followed by finishing and festooning	Perform Independently
PR 17	Manage post-insertion (post- delivery) complaints of the patient using removable prostheses  Competent to practice under direct supervision	
PR 18	Service removable prostheses when necessary i.e.: relining, rebasing, repair	Competent to practice under direct supervision
PR 19	Prepare an abutment for a removal cast partial denture	Competent to practice under direct supervision
PR 20	Identify errors in fixed and removable prosthesis delivered from the laboratory and suggest correction	Competent to practice under direct supervision
PR 21	Design removable cast partial, and acrylic partial and complete dentures using surveyors.	Has observed/assisted and is familiar with the steps
PR 22	Perform shade selection and mapping for aesthetic restorations.	Competent to practice under direct supervision
PR 23	Select and use occlusal relation registration materials	Competent to practice under direct supervision
PR 24	Perform lab procedures in fabrication of partial dentures on models	Competent to practice under direct supervision
PR 25	Design, fabricate and deliver occlusal splints appropriate to the patient's needs	Competent to practice under direct supervision
PR 26	Use instruments and materials for denture fabrication	Competent to practice under direct supervision
PR 27	Perform the clinical procedure of impression making with alginate and elastomeric impression materials	Competent to practice under direct supervision
PR 28	Perform the steps of occlusal rims fabrication and adjustment	Competent to practice under direct supervision



#### **ORAL & MAXILLOFACIAL SURGERY & ORAL MEDICINE**

NO	COMPETENCY	LEVEL OF COMPETENCE
OM 1	Apply knowledge of primary and secondary fascial spaces involved in spread of infections in the treatment of odontogenic infections	Competent to practice under direct supervision
OM 2	Perform simple extraction of erupted deciduous and permanent teeth, under local anesthesia	Competent to practice under direct supervision
OM 3	Perform surgical extraction of an erupted tooth and perform surgical removal of fractured or retained roots, including design and development of mucoperiosteal flaps.	Has observed/assisted and is familiar with the steps
OM 4	Give post procedure instructions and counsel patients on care after dental extractions and after minor oral surgery procedures.	Competent to practice under direct supervision
ОМ 5	Manage common intra-operative and postoperative minor oral surgery complications	Competent to practice under direct supervision
ОМ 6	Perform uncomplicated pre- prosthetic procedures	Has observed/assisted and is familiar with the steps
OM 7	Perform intra-oral incision and drainage for management of odontogenic abscess.	Has observed/assisted and is familiar with the steps
OM 8	Safely perform incisional biopsy for oral mucosal lesions.	Has observed/assisted and is familiar with the steps
OM 9	Place sutures: simple interrupted sutures for closure of intraoral incisions, and intra or extra-oral lacerations; figure of 8 suture over an extraction socket.	Competent to practice under direct supervision
OM 10	Demonstrate reduction of TMJ dislocation	Has observed/assisted and is familiar with the steps



NO	COMPETENCY	LEVEL OF COMPETENCE
OM 11	Identify sites of extraoral surgical access (incisions) to the facial skeleton and structures, based on site, skin tension / Langer's lines, and on vital anatomical structures.	Has observed/assisted and is familiar with the steps
OM 12	Use principles of bone and soft tissue physiology in treatment planning to promote oral health and healing, including epithelial migration, guided tissue regeneration, bone growth modification	Has observed/assisted and is familiar with the steps
OM 13	Identify, on models of maxilla and mandible or of the oral cavity, sites which are suitable for harvesting of soft and hard tissue grafts for reconstruction of oral tissues.	Has observed/assisted and is familiar with the steps
OM 14	Evaluate, plan, and place dental implants	Has observed/assisted and is familiar with the steps
OM 15	Perform closed reduction for immediate management of fractures of the maxilla and mandible.	Has observed/assisted and is familiar with the steps
OM 16	Splint teeth for management of dentoalveolar trauma - using acid etch splint, arch wire technique, and figure of 8 wiring	Has observed/assisted and is familiar with the steps
OM 17	Perform wire bending for dental splinting for dento-alveolar trauma. Management of avulsed teeth splinting techniques and have knowledge of duration of immobilization in such cases.	Has observed/assisted and is familiar with the steps



#### **ORTHODONTICS**

NO	COMPETENCY	LEVEL OF COMPETENCE
OR 1	Patient assessment and Cephalometric tracing	Has observed/assisted and is familiar with the steps
OR 2	Brackets placement	Has observed/assisted and is familiar with the steps
OR 3	Select and execute space management protocols: maintenance, regaining, supervision.	Has observed/assisted and is familiar with the steps
OR 4	Adjust space maintainer.	Competent to practice under direct supervision
OR 5	Perform mixed dentition analysis on casts, and perform/measure arch length discrepancy in permanent dentition.	Has observed/assisted and is familiar with the steps
OR 6	Execute simple orthodontic treatment procedures: insert and adjust active removable appliances to move a single tooth or to correct a cross bite, insert/adjust or remove different types of removable retainers, insert, adjust or remove a wire, ligature and separator.	Competent to practice under direct supervision
OR 7	Manage orthodontic post-operative complaints requiring orthodontic first aid.	Competent to practice under direct supervision
OR 8	Demonstrate basic wire bending skills to fabricate removable orthodontic appliances: Retainers, Adam's clasps	Competent to practice under direct supervision



# SECTION - AS 2

# 2022 ACCREDITATION STANDARDS

**FOR** 

# **DENTAL COLLEGES**

UNDERGRADUATE DENTAL EDUCATION









# 2.1: STEP-WISE PROCESS FOR AN INSTITUTION APPLYING FOR DENTAL COLLEGE INSPECTION

STEP 1	The institute will apply formally to the PMC for inspection. Upon successful registration of the affiliated teaching Hospital, PMC shall intimate HEC to conduct inspection of the college.
STEP 2	HEC through its nominated University will then plan and conduct the inspection of the college based on the minimum standards provided by the PMC.
STEP 3	The inspection result will be communicated by HEC to the National Medical Authority of PMC.
STEP 4	National Medical Authority will then cumulate the scores of both the inspections (Hospital & College).
STEP 5	The report, along with recommendations will be submitted by the Authority to the Council for consideration and approval.
STEP 6	After approval, the college would be required to acquire affiliation with requisite University for final recognition.



## 2.2: ACCREDITATION RULES

ACCREDITATION RULE 1 ON MANDATORY STANDARDS	<ul> <li>1.It is mandatory for an Institute to submit all the documents defined in Mandatory Standards.</li> <li>2.The process of accreditation will be initiated, on condition that the college submits all requisite documents and after scrutiny these documents are found satisfactory.</li> <li>3 The application shall not be processed if any of the requisite document is missing or not verified.</li> </ul>
ACCREDITATION RULE 2 ON ESSENTIAL STANDARDS & DEPARTMENTS	It is compulsory for the dental college to pass each Essential department & Standard.  On condition that 100% standards are met on evaluation of Essential Standards & Departments (equipment, infrastructure, HR and Student's Evaluation), the college shall be declared passed on essential standards.
ACCREDITATION RULE 3 ON QUALITY STANDARDS & DEPARTMENTS	All essential standards exceeded by a Dental college shall be assessed for determining the quality standard of the college. During a quality standard inspection, the facilities, resources and student's results exceeding the essential standards shall be scored based on the Quality Matrix defined by the Authority
ACCREDITATION RULE 4 ON ACCREDITATION FREQUENCY	<ol> <li>All the dental colleges shall be re-inspected every three years.</li> <li>A dental college may be selected for a spot inspection by the Authority at any time pursuant to cause.</li> <li>Any accredited dental college may apply to the Authority for a <u>Quality Inspection/re-inspection after December 2022</u> allowing college's time to evaluate their facilities in response to the 2022 Standards</li> </ol>
ACCREDITATION RULE 5 ON CATEGORIZATION	<ul> <li>1.Any dental college found to have not maintained the Essential Standards during a re-inspection or a spot inspection shall be given a 120-day period to meet the Essential Standards failing which the college will be de-recognized.</li> <li>2.A dental college during the 120-day notice period shall be notified as ON PROBATION.</li> </ul>



## 2.3: GUIDELINES & OPERATIONAL DEFINITIONS

GUIDELINES	This section describes the minimum requirements for a Dental College to operate in Pakistan. The standards evaluate a college's infrastructure, human resources, and equipment adequacy for the provision of teaching to undergraduate Dental education. It deals with the inspection requirements for initial inspection of a Dental College applying for 50 students.  The accreditation standards are divided into the following:  A- Mandatory Eligibility Standards  B- Essential Standards  C- Quality Standards
	OPERATIONAL DEFINITIONS
MANDATORY ELIGIBILITY STANDARDS	Inspection would only be initiated upon fulfilling the Mandatory eligibility standards.
ESSENTIAL STANDARDS & DEPARTMENTS	Each Essential standard and Essential departments requirements must be fulfilled in entirety for accreditation. These shall be marked on a "yes/no" basis.
QUALITY STANDARDS & DEPARTMENTS	These standards and departments are in addition to the Essential standards for the purpose of assessing the quality of the program. Quality standards will be scored and graded.
FACULTY MEMBERS	These are professionals who are not only subject matter experts but have accepted professional service roles that normally hold the responsibility for teaching, research and service within the higher education organization but also within the profession at the organizational, regional, national and international levels of scholarly engagement.



# 2.4: MANDATORY ELIGIBILITY STANDARDS (MS)

STANDARD	DESCRIPTION	
A teaching Dental College must have the following to qualify for inspection:		
MS 1	An independent purpose-built building.	
MS 2	Ownership or lease documents regarding title and possession of the land and building of the College. In the event of leased premises, the lease must be valid for a minimum of 6 years on the date of inspection.	
MS 3	The Dental teaching college must have an MOU with any affiliated Hospital/Medical college for teaching of General Medicine & Surgery	
MS 4	Registration as a legal entity in accordance with law either as a commercial or non-commercial entity (SECP etc)	
MS 5	Approval of relevant Building Control Authority	
MS 6	Fire Safety Certification	
MS 7	Food Control Authority License	
FIRE SAFETY & EVACUATION SERVICES	The Dental College must have a documented fire safety and evacuation policy/plan in conformity to the relevant government regulations. It should include training schedule for faculty, staff and students. The college must conduct mock fire evacuation drills. The college staff must be aware of the designated assembly area and fire exits. Portable fire extinguishers must be available at suitable locations.	
INFECTION CONTROL	There is a documented infection control program designed by the infection control committee for the institution and should be in compliance with national infection control Policy. There must be protocols in place to ensure the safety of staff and patients handling biological and hazardous materials. The infection control program must comply with government regulations.	
ENVIRONMENTAL PROTECTION & SUSTAINABILITY	The Dental College must have a documented policy for environmental protection and sustainability inclusive of recycling, green energy, and maintaining green areas in the premises.	
WASTE MANAGEMENT	The Dental College must have a documented waste management policy/plan in conformity to the relevant government regulations.	



# 2.5: ESSENTIAL STANDARDS (ES), DEPARTMENTS (ED) & REQUIREMENTS (ER)

The Dental College must have fully functional Basic Sciences Departments focused on teaching & training of dental students under the umbrella of guidelines prescribed by Pakistan Medical Commission & affiliated University.

ESSENTIAL STANDARDS			
ES 1	Mission Statement		
ES 2	Outcomes		
ES 3	Institutional Autonomy & Academic Freedom		
ES 4	Program Organization		
ES 5	Educational Content		
ES 6	Program Management		
ES 7	Assessment		
ES 8	Students		
ES 9	Faculty		
ES 10	Program Evaluation and Continuous Review		
ES 11	Governance, Services and Resources		
	ESSENTIAL DEPARTMENTS		
ED1			
LDI	Anatomy		
ED 2	Anatomy Physiology		
ED 2	Physiology		
ED 2 ED 3	Physiology Biochemistry		
ED 2 ED 3 ED 4	Physiology Biochemistry Pharmacology		
ED 2 ED 3 ED 4 ED 5	Physiology Biochemistry Pharmacology Pathology		
ED 2 ED 3 ED 4 ED 5 ED 6	Physiology Biochemistry Pharmacology Pathology Community Dentistry		
ED 2 ED 3 ED 4 ED 5 ED 6 ED 7	Physiology Biochemistry Pharmacology Pathology Community Dentistry Oral Biology		



ESSENTIAL REQUIREMENTS		
ER 1	Lecture Halls	
ER2	Student Health Facility	
ER 3	Library	
ER 4	Student & Faculty Record Room	
ER 5	I.T Department	
ER 6	Wi-Fi Internet Connectivity	
ER 7	Cafeteria	
ER 8	Indoor & Outdoor Sports Facilities	
ER 9	Skill Lab	
ER 10	Common Room	
ER 11	Biomedical / Maintenance Department`	
ER 12	Exam cell	



#### **Details of Essential Standards (ES)**

STANDARD NO	STANDARD	DETAILS
ES 1	MISSION STATEMENT	The Dental College must have a written institutional mission statement which:  1. Aligned with the overall vision of the institution or with which it is affiliated or of which it is a constituent institution.  2. Demonstrates a clear institutional commitment to social accountability, achievement of competencies and addresses the healthcare needs of Pakistan.  3. Developed with stakeholders' participation (for example trainers, staff, students, university, health ministry officials).  4. Known to all stakeholders.
ES 2	OUTCOMES	<ol> <li>The Dental College must develop training outcomes that:</li> <li>In congruence with the mission of the institution which distinguishes it from other institutions.</li> <li>Contextually appropriate for health care delivery in Pakistan.</li> <li>Demonstrates the colleges' commitment to meet the requirements of undergraduate dental education.</li> <li>Incorporate knowledge, skills &amp; potential behavior that the students will demonstrate upon graduation.</li> </ol>
ES 3	INSTITUTIONAL AUTONOMY AND ACADEMIC FREEDOM	<ol> <li>The Dental College must have autonomy to:</li> <li>Formulate and implement policies to ensure smooth execution of its educational outcomes.</li> <li>Develop appropriate and effective management and oversight systems to ensure that the policies are implemented.</li> <li>Identify individual programs and departments suitable for undergraduate training and present them for inspection and recognition from concerned authorities.</li> <li>Allocate and appropriately use resources for implementation of the teaching.</li> </ol>
ES 4	PROGRAM ORGANISATION	<ol> <li>The Dental College must:</li> <li>Document the sequence and content of teaching along with the rationale for the sequence being recommended.</li> <li>Ensure systematic and organized learning.</li> <li>Implement teaching programs in all departments that incorporate hands-on, active learning as the principal educational strategy.</li> <li>Ensure that its clinical service needs DO NOT compromise the learning/teaching requirements and objectives of the undergraduate medical education program.</li> <li>Inform students about the teaching methodology and the rights and obligations of students.</li> <li>Deliver the curriculum in accordance with principles of equality</li> <li>Inform students about the teaching methodology and the rights and obligations of students.</li> <li>Use a student-centered approach that stimulates, prepares, and supports students to take responsibility for their own learning process and to reflect on their own practice.</li> </ol>



STANDARD NO	STANDARD	DETAILS
ES 5	EDUCATIONAL CONTENT	The Dental College must:  1. Detailed documents which includes the learning objectives of each rotation and the desired skills to be achieved. This must be disseminated to all the stakeholders.  2. Ensure that the content and its delivery are aligned with the competencies and outcomes prescribed by PMC.  3. Ensure that the content that is taught and assessed are congruent with the level of the undergraduate students.  4. Use logbooks (preferably electronic) which clearly specify the objectives and skills-to- be-achieved during the clinical rotations.  5. Include but not limited to the following:  a) Communication Skills  b) Patient Safety & Infection Control  c) Professionalism, Medical and Islamic ethics  d) Evidence-Based Medicine  e) Ethics of Patient Care  6. Have an orientation program for undergraduate students.  7. Implement the curriculum of program prescribed by the university/ institution.  8. Ensure the curriculum is conveyed to and understood by all stakeholders.
ES 6	PROGRAM MANAGEMENT	The Dental College must:  1. Ensure that adequate supervision and feedback is provided to the students throughout the period of program of study.  2. Have an Oversight Committee that governs, approves and oversees undergraduate educational programs. This committee must ensure the quality of the teaching and approve it. Oversight Committee should have appropriate student representation.  3. Have all the requisite aids and audio-visual facilities  4. Have physical facilities to support a conducive learning environment for the students.  5. Have a grievance policy and a committee to manage grievances.  6. Issue a certificate of completion of the program as per the policy/regulations of the qualification awarding institution  7. Provide a system for provision of financial support and benefits for needy students to ensure that they are able to fulfill the responsibilities of their undergraduate program.  8. Provide an educational and work environment in which students may raise and resolve issues without fear of intimidation or retaliation.
ES 7	ASSESSMENT	<ol> <li>The Dental College must:</li> <li>Develop appropriate and contextual policies for assessment of students.</li> <li>Ensure that formative assessments cover all domains including knowledge, skills and attitudes.</li> <li>Use a wide range of assessment methods/tools.</li> <li>Define a clear process of assessment.         ensure that the assessment practices are compatible with educational outcomes and instructional strategies.</li> <li>Have a system for appeal of results</li> </ol>



STANDARD NO	STANDARD	DETAILS
ES 8	STUDENTS	<ol> <li>The Dental College must:</li> <li>Follow the admission policy in congruence with the national regulations/guidelines or in the absence thereof the applicable institutional regulations of the qualification awarding institution.</li> <li>Clearly communicate the responsibilities and expectations to the students before the start of the training.</li> <li>Ensure that students have access to counseling to address their psychological, academic and/or career needs.</li> <li>Ensure confidentiality of students' academic and medical records.</li> <li>Access to records and appeal's process in case of discrepancies.</li> <li>Clear policies on funding, technical support and facilities for co-curricular opportunities for the students.</li> <li>Policy and practice to systematically seek, analyze and respond to student's feedback about the processes and products of the undergraduate teaching programs.</li> <li>Ensure a fair and formal process for taking any action that affects the status of a student.</li> <li>Policies and code of conduct that is known to all students.</li> <li>Documented policy on forbidding students from taking part in any political activity and illegal agitations.</li> <li>Zero tolerance for substance abuse and smoking.</li> <li>Infrastructure to facilitate differently abled students</li> <li>Documented policy on providing healthcare coverage to the students.</li> </ol>
ES 9	FACULTY	The Dental College must have:  1. Faculty recruitment, selection, promotion and retention policies.  2. Qualified and trained faculty based on needs of the program.  3. Ensures that the faculty fulfills their various roles as defined by the Medical College and the teaching program.  4. CME/CPD program for faculty with clear goals aligned with teaching and training requirements.  5. Policy for maternity leave and must ensure its implementation as per government policy.  6. Dean/ Principal of the dental college will be FCPS or equivalent alternative to Medical/dental qualification recognized/ registered by the PMC with required experience.  7. He/she should be a consultant (FCPS or equivalent alternative to Medical/dental qualification recognized/ registered by the PMC).  8. Every faculty member in clinical disciplines must be a full-time consultant in affiliated teaching hospital  9. Dean/ Principal will be the Chief Executive of the dental college/ hospital.  10. Dental college will be financially, administratively and legally independent from medical college



STANDARD NO	STANDARD	DETAILS
ES 10	PROGRAM EVALUATION AND CONTINUOUS REVIEW *(ES 10.2, 10.5 & 10.6 to be considered in seat enhancement/ re- inspection).	<ol> <li>The Dental College must:</li> <li>Ensure processes and schedules for review and update of all teaching activities through an established mechanism of program evaluation.</li> <li>Regularly review results of evaluation and students' assessments to ensure that the gaps are adequately addressed in the training in consultation with the relevant committee.</li> <li>Allocate resources to address deficiencies and continuous review of program.</li> <li>Ensure the standards are in compliance with PMC accreditation standards.</li> <li>Ensure that the students, faculty and administration are involved in program evaluation.</li> <li>Mechanism for monitoring of training and ensure that amendments suggested for improvement of training based on results of program evaluation findings are implemented and documented.</li> </ol>
ES 11	GOVERNANCE, SERVICES AND RESOURCES	<ol> <li>The Dental College must:</li> <li>Demonstrate student attendance at 75% or above, verifiable through an CMS (Campus Management System), or by alterative means if CMS is not installed (subject to installation of a CMS before 31.12.2023).</li> <li>Hierarchical system of governance of teaching program.</li> <li>Mechanisms for dissemination of all policies and procedures related to governance, services and resources.</li> <li>Human Resources Department and an anti-harassment policy in line with the national guidelines.</li> <li>Adequate and safe buildings and structures.</li> <li>Satisfactory and functional IT and library facilities.</li> <li>Appropriate budgetary allocations for professional development of faculty.</li> <li>Mechanisms for addressing disciplinary issues of faculty, staff and students.</li> <li>Adhere to its commitment to social accountability.</li> <li>Documented policy ensuring that clinical work or procedures and cost of any material used during teaching and studentship is not charged to the undergraduate students</li> </ol>



### **Details of Essential Departments (ED)**

DEPT NO	SUBJECT	INFRASTRUCTURE	EQUIPMENT	HR
ED 1	ANATOMY	1. Access to multipurpose large group discussion with appropriate seating capacity (110-120) & audio-visual aid for learning. 2. Access to multipurpose small group discussion with appropriate seating capacity (12-15) & audio-visual aid for learning. 3. Access to multipurpose lab for histology 4. Workstations/offices for the faculty members	Essential teaching aids for anatomy include any combination of the following:  Dissection Hall:  1.Minimum 2 Cadavers or equivalent 2.Minimum 6 operational full dissection table 3.Minimum 10 half dissection tables  Museum: 1.Minimum 100 Plastic models (gross anatomy, histology, embryology) 2. Minimum 5 Torso (male & female) 3.Minimum 1 Cross sectional torso 4. Minimum 8 Upper Limb 5. Minimum 8 Lower Limb 6. Minimum 5 Head & Neck (muscles, vessels, nerves etc) 7. Minimum 4 Eye 8. Minimum 4 Eya 9. Minimum 4 Pharynx 11. Minimum 4 Pharynx 12. Minimum 4 Pharynx 12. Minimum 10 Brain 13. Minimum 1 Histology model of each system 14.Minimum 3 General Embryology 15.Minimum 2 Special embryology models of each system 16. Minimum 4 Male pelvis 17. Minimum 7 Abdominal viscera 19. Minimum 7 Liver 20. Minimum 7 Kidneys 21. Minimum 7 Fidneys 21. Minimum 7 Fidneys 22.Minimum 7 Fidneys 23. Minimum 7 Fidneys 24. Minimum 3 articulated vertebral column 25. Documentary Videos Histology Laboratory 1. Minimum 25 Microscopes along with relevant teaching aids 2. Minimum 4 Histology side sets 3. Minimum 1 slide projecting microscope	Each department must have at least the number of consultants that fulfil the minimum faculty requirements as laid down by PMC Minimum Standards for faculty in UG Medical and Dental Colleges of Pakistan 2022

DEPT NO	SUBJECT	INFRASTRUCTURE	EQUIPMENT	HR
			1. Minimum 25 Microscopes along with relevant teaching aids 2. Minimum 4 Histology side sets 3. Minimum 1 slide projecting microscope 4. Minimum 6 articulated skeletons 5. Minimum 20 bone sets 6. Minimum 2 LCD 7. Minimum 5 multimedia 8. Minimum 2 refrigerator 9. Minimum 1 Mortuary plants for at least 2 bodies 10. Minimum 4 dissecting instrument sets 11. Minimum 1 colored printer 12. Minimum 1 laser scanner 13. Minimum 300 cadaveric specimens 14. Minimum 1 anatomical chart of every system 15. Minimum 4 white boards	
ED 2	PHYSIOLOGY	1.Access to multipurpose large group discussion with appropriate seating capacity & audio-visual aid for learning. 2.Access to multipurpose small group discussion with appropriate seating capacity & audio-visual aid for learning. 3.Access to multipurpose lab for physiology practical 4.Workstations/offices for the faculty members.	1.Minimum 15 Sphygmomanometers 2.Minimum 20 Binocular Microscopes 3.Minimum 30 Haemocytometers 4.Minimum 20 Haemoglobin meters 5.Minimum 15 Complete perimeters 6.Minimum 30 ESR pipettes 7.Minimum 30 Percussion hammers 8.Minimum 50 Clinical thermometers 9. Minimum 15 kymographs 10.Minimum 2 ECG machines 11.Minimum 3 Centrifuge machine 12. Minimum 30 Stethoscopes 13.Minimum 30 Tuning forks 14.Minimum 5 Vision Essential type charts/ Snellen's charts 15. Minimum 5 Ishihara Charts	Each department must have at least the number of faculty that fulfil the minimum faculty requirements as laid down by PMC Minimum Standards for faculty in UG Medical Colleges of Pakistan 2022



DEPT NO	SUBJECT	INFRASTRUCTURE	EQUIPMENT	HR
			16. Minimum 10 Jaeger's 17.Minimum 5 Ophthalmoscopes 18. Minimum 1 Refrigerators 19.Minimum 10 Assorted tourniquets 20.Minimum 10 graduated beakers of various sizes 21.Minimum 100 boxes of Tiles or Glass slides 22.Minimum 20 packs of assorted capillary tubes (heparinized) 23. Minimum 1000 test tubes with racks 24. Lancets 25. Antisera 26. Antiseptic agents 27. Filter paper 28. Torches 29. Measuring tapes 30. Height scale 31. stopwatches	
ED 3	BIOCHEMISTRY	1.Access to multipurpose large group discussion with appropriate seating capacity & audio-visual aid for learning.  2.Access to multipurpose small group discussion with appropriate seating capacity & audio-visual aid for learning.  3.Access to multipurpose lab for Biochemistry practical  4.Workstations/ offices for the faculty members.	1.Minimum1 Clinical PH meters 2.Minimum1Large size incubators 3.Minimum 2 Electronic balances 4. Thermal cyclers 5. Minimum2 Bench top centrifuge 6. Minimum 2 Microlabs 7. Minimum 4 Microscopes 8. Minimum 1 Refrigerator 9. Minimum1 Water distillation unit (10 Litres) 10.Minimum1 Electric water bath 11. Minimum1 Hot box oven	Each department must have at least the number of faculty that fulfil the minimum faculty requirements as laid down by PMC Minimum Standards for faculty in UG Medical Colleges of Pakistan 2022
ED 4	PHARMACOLOGY	1.Access to multipurpose large group discussion with appropriate seating capacity & audio-visual aid for learning.  2.Access to multipurpose small group discussion with appropriate seating	1.Minimum 2 Audiovisual facility (Multimedia) 2.Minimum 8 assorted experimental CDs 3. Minimum 8 BP apparatuses	Each department must have at least the number of faculty that fulfil the minimum faculty requirements as



DEPT NO	SUBJECT	INFRASTRUCTURE	EQUIPMENT	HR
		& audio-visual aid for learning.  2.Access to multipurpose lab for pharmacology practical	4. Minimum 15 Stethoscopes 5. Minimum 15 Kymographs 6. Minimum 2 Electronic balance 7. Minimum 15 Tissue organ bath with thermostat	laid down by PMC Minimum Standards for faculty in UG Medical College s of Pakistan 2022
ED 5	PATHOLOGY	1.Access to Multipurpose Large group discussion with appropriate seating capacity & audio-visual aid for learning.  2.Access to Multipurpose small group discussion with appropriate seating capacity & audio-visual aid for learning.  3.Access to multipurpose lab for pathology practicals  4.Workstations/offices for the faculty members	1.Minimum 25 Binocular microscopes 2.Minimum1 Multi head (5-piece) Microscope 3.Minimum 1 Microscope slide projection system 4.Minimum 10 Stain dropping bottles (250ml) 5. Minimum 10 Wash bottles 6.Minimum 10 Adjustable staining racks 7.Minimum 2 Refrigerators 8.Minimum1 Minus 20 degree C deep freezer 9.Minimum 4 Glass beaker (graduated) (Pyrex) 500 ml graduated 10.Minimum 4 Glass cylinders (graduated) (Pyrex) 500 ml graduated 11. Minimum 1 Water stills 12.Minimum 2 Incubator 37 degrees C large 13. Minimum 1 Floating bath 14. Minimum 2 Staining jars 15.Minimum 1 Automatic tissue processor 16.Minimum 1 Embedding station 17. Minimum 1 Microtome 18. Minimum 2 Incubator 19. Minimum 2 Multimedia 20. Minimum 2 White boards	Each department must have at least the number of faculty that fulfil the minimum faculty requirements as laid down by PMC Minimum Standards for faculty in UG Medical College s of Pakistan 2022



DEPT NO	SUBJECT	INFRASTRUCTURE	EQUIPMENT	HR
ED 6	COMMUNITY DENTISTRY	1. Access to multipurpose large group discussion with appropriate seating capacity & audio-visual aid for learning.  2. Access to multipurpose small group discussion with appropriate seating capacity & audio-visual aid for learning.  3. Access to multipurpose lab for practical  4. Workstations/offices for the faculty members.	1•Minimum 2 portable dental units. 2• Periodontology models (CPITN models) available (at least 25% of class strength) 3• DMFT models available (at least 25% of student's strength). 4•Minimum 10 tooth brushing models available. 5•Minimum 10 light-weight folding chairs/ couches for dental examination and preventive procedures. 6• Minimum100 CPI-C probes available. 7•Minimum 100 sets of Examination instruments (mirror, probe, tweezers). 8• Adequate amount of disposable gloves packets, disposable masks packets and disposable syringes available and in use. 9• 20 Periodontal Probes available. 10• 5 stethoscopes. 11• 02 measuring tapes available. 12• Adequate amount of plaque disclosing agent/ lozenges. 13• One X ray illuminator available. 14• 01 weighing machine (digital) 15• 25 sets of ART available; each set must comprise of small & medium size excavators, cavity opener and Application-Filling-Contouring-Instrument (AFCI). 16• 01 Sterilization pouch roll available if no CSSD 17• 2 high speed hand pieces with burs available. 18• 5 BP apparatus available. 19• 1 Pulse oximeter available. 20• 4 anesthesia syringe and needles available. 21• 06 instrument trays available. 22• 05 Glass slabs available. 23• Assorted torches available. 24• 01 Temperature maintained ice boxes available.	Each department must have at least the number of consultants that fulfil the minimum faculty requirements as laid down by PMC Minimum Standards for faculty in UG Medical and Dental Colleges of Pakistan 2022



DEPT NO	SUBJECT	INFRASTRUCTURE	EQUIPMENT	HR
ED 7	ORAL BIOLOGY AND TOOTH MORPHOLOGY	1. Access to multipurpose large group discussion with appropriate seating capacity & audio-visual aid for learning2. Access to multipurpose small group discussion with appropriate seating capacity & audio-visual aid for learning. 3. Access to multipurpose lab for practical 4. Workstations/offices for the faculty members.	1,Microscopes available 25% of total strength of the class Access to multipurpose small group discussion with appropriate seating capacity & audio-visual aid for learning.  2.Adequate number of oral histology slides of oral tissue.  3.3 sets of single teeth moulds  4.3sets of deciduous teeth study models available.  5.3sets of permanent teeth study models available.  6. 3sets of mixed dentition study models available.  7.One multi head microscope with 3 heads  8.One microscope with multimedia connectivity	Each department must have at least the number of consultants that fulfil the minimum faculty requirements as laid down by PMC Minimum Standards for faculty in UG Medical and Dental Colleges of Pakistan 2022
ED 8	ORAL PATHOLOGY	1. Access to multipurpose large group discussion with appropriate seating capacity & audio-visual aid for learning. 2. Access to multipurpose small group discussion with appropriate seating capacity & audio-visual aid for learning. 3. Access to multipurpose lab for practical 4. Workstations/offices for the faculty members.	1.Microscopes for 1/4th of total class strength available. 2.One centrifuge machine available. 3.One calorimeter/chemistry analyzer available. 4.One reagent refrigerator available. 5.One balance available. 6.Two staining rack available. 7.10 packs of glass slides available. 8.Ten boxes of cover slip available. 9.Adequate hydrogen peroxide available.	Each department must have at least the number of consultants that fulfil the minimum faculty requirements as laid down by PMC Minimum Standards for faculty in UG Medical and Dental Colleges of Pakistan 2022



DEPT NO	SUBJECT	INFRASTRUCTURE	EQUIPMENT	HR
ED 9	DENTAL MATERIALS	1. Access to multipurpose large group discussion with appropriate seating capacity & audio-visual aid for learning. 2. Access to multipurpose small group discussion with appropriate seating capacity & audio-visual aid for learning. 3. Access to multipurpose lab for practical 4. Workstations/offices for the faculty members.	1.2 cast trimmers available. 2.2 vibrators available. 3.6 plaster buckets available. 4.20 Bunsen burners available. 5.Adequate cold mould seal. 6. 6 cutters (wire) available. 7. 1 green stick box (for demo purpose) available. 8. 6 Glass slabs available. 9. 1 cement each of all types 10•Adequate hard plaster available. 11.1 box of impression compound available. 12.6 sets each of impression trays (Assorted for partial and complete dentures – for demo) • 13.Adequate modelling wax available. 14.3 moulds each (partial and complete denture) available 15.Adequate petroleum jelly 16.6 plaster knife available. 17.Adequate self-cure acrylic powder available. 18.Adequate additional silicone impression materials (for demo) 19•Adequate soft plaster. 20.Adequate soft plaster. 20.Adequate sticky wax every system 22.30 boxes of acrylic teeth 23.Adequate heat cures acrylic powder available. 24.A dental composite kit including bond and etchant available. 25.Adequate amount of different cements available. 26.Adequate dental amalgam available. 27.Adequate boxing-in wax available. 27.Adequate boxing-in wax available.	Each department must have at least the number of consultants that fulfil the minimum faculty requirements as laid down by PMC Minimum Standards for faculty in UG Medical and Dental Colleges of Pakistan 2022



DEPT NO	SUBJECT	INFRASTRUCTURE	EQUIPMENT	HR
ED 10	BEHAVORIAL SCIENCE  Note: The Institution may establish separate or combine department of Psychiatry and Behavioral Sciences	1. Access to a multipurpose large group discussion with appropriate seating capacity & audio-visual aid for learning. 2. Access to multipurpose small group discussion with appropriate seating capacity & audio-visual aid for learning. 3. Access to multipurpose lab for practical 4. Workstations/offices for the faculty members.	Audio-visual facility with appropriate seating capacity for students.	Each department must have at least the number of consultants that fulfil the minimum faculty requirements as laid down by PMC Minimum Standards for faculty in UG Medical and Dental Colleges of Pakistan 2022



#### **Details of Essential Requirements**

#### Every Undergraduate Dental College must have the following essential requirements: Fully equipped lecture halls for each session with minimum seating capacity LECTURE HALLS **ER 1** for a class of 50 students The Dental College must have student health facility staffed with a student STUDENT HEALTH ER2 health officer who holds a full license. **FACILITY** Dental College must have a Library/Digital Resource Centre with functioning computers and seating capacity. The computers must have access to the **ER 3** LIBRARY HEC digital library in the Learning Resource Centre. The Dental College should have Wi-Fi connectivity all across its premises, with access to every undergraduate student and faculty. Wi-Fi connectivity must allow access to HEC digital library. Dental College must have a system for maintaining student and faculty **ER 4 STUDENT &** records and maintain confidentiality. **FACULTY RECORD ROOM ER 5** I.T DEPARTMENT Dental College must have a fully functional and equipped I.T Department managed by appropriate I.T experts. The students must have access to I.T Department, whenever required. WIFI INTERNET Dental College must have Wi-Fi internet connectivity all across the campus, to **ER 6** CONNECTIVITY which every student and faculty member must have access. **ER 7 CAFETERIA** Dental College must have a cafeteria for faculty members & students. Dental College must have indoor & outdoor facilities for faculty members & **ER 8 INDOOR &** students or have a MOU for these activities. **OUTDOOR SPORTS FACILITIES** Fully equipped Skill Development Lab · Skill and demonstration areas Audio visual setup SKILL LAB **ER 9** · Internet facility · Models and equipment for undergraduate teaching · Staff for demonstration and management Dental College must have two separate common rooms, one for boys and **COMMON ROOMS ER 11** one for girls. **BIOMEDICAL/** Dental College must have a biomedical/ maintenance department

supervised by a biomedical engineer responsible for the repair and

Dental College must have an exam cell to handle the conduct, checking and

maintenance of the instruments placed in the college.

result formulation of the college.

**ER 12** 

**ER 13** 

**MAINTAINANCE** 

**DEPARTMENT** 

**EXAM CELL** 



# 2.6: QUALITY STANDARDS (QS), QUALITY DEPARTMENTS (QD), EQUIPMENT (QE) & SERVICES (QSe)

	QUALITY STANDARDS		
Every Dental Co	ollege can follow these additional standards as part of quality standards		
QS 1	Mission Statement		
QS 2	Program Organization		
QS 3	Students		
QS 4	Faculty		
	QUALITY DEPARTMENT		
Every Dental College can establish following departments as additional quality			
QD 1	Medical Education department		
QD 2	Quality Assurance Cell		
QD 3	Counselling Cell		
	QUALITY EQUIPMENT		
QE 1	Anatomy		
QE 2	Physiology		
QE 3	Biochemistry		
QUALITY SERVICES			
QSe 1	Daycare		
QSe 2	Hostel for Boys & Girls separately		



### **Details of Quality Standards (QS)**

QS 1	MISSION STATEMENT	The Dental College should have  1. Written institutional mission statement, which aims at professional development and commitment to life-long learning.
QS 2	PROGRAM ORGANISATION	The Dental College should have:  1. Encourage students to link concepts in a clinical context  2. Use practice-based teaching involving the personal participation of the students in the services and responsibilities of patient care.  3. Incorporate innovative educational/training strategies such as self-directed learning, independent learning, inter-professional learning, use of etechnology and simulations.  4. Recognize gender, cultural and religious specifications and prepare the student to interact appropriately.
QS 3	STUDENTS	The Dental College should have 1. Possess a mechanism for future career counseling of the students. 2. Ensure students representation and appropriate participation in educational committees and any committee where they can provide meaningful input. 3. Have adequate mechanisms in place to ensure the well-being of students and faculty. 4. Ensure measures to identify and prevent burnout in students
QS 4	FACULTY	The Dental College should:  1. Ensure that the institution is led by qualified (education, training and experience) person commensurate with college's needs.

### **Details of Quality Departments (QD)**

QD 1	DENTAL EDUCATION DEPARTMENT	The Dental College should have a well-established Dental education department led by a full-time educationist that would ensure the implementation of curriculum, transparency of assessment policies, and oversee the adherence to the standards provided by PMC in terms of teaching and learning both at college & hospital.
QD 2	QUALITY ENHANCEMENT CELL	The Dental College should have an established quality enhancement cell led by a director, that would ensure the implementation of strategies to enhance the quality of education at a dental college and hospital
QD 3	COUNSELLING CELL	The Dental College should have a counselling cell led by a psychiatrist who would ensure measures to identify and prevent burnout in students.



#### **Details of Quality Equipment**

ANATOMY	<ol> <li>3D images of each region</li> <li>Computer terminals with access to digital library</li> <li>Smart boards</li> <li>Anatomy dissection table for virtual 3D Anatomy/ cyber facility</li> </ol>
PHYSIOLOGY	<ol> <li>Oxygen cylinders</li> <li>Weighing scales</li> <li>Examination Couches</li> <li>Finger pulse oximeter</li> <li>Audiometer</li> <li>Various preparation solutions</li> <li>Microhematocrit reader</li> <li>Microhematocrit centrifuge</li> <li>Water Bath</li> <li>Disposable syringes</li> <li>Pin Aesthesiometer</li> <li>Hair Aesthesiometer</li> <li>Viber Compass</li> <li>Pregnancy test strips</li> <li>Treadmill or an aergometer cycle</li> </ol>
BIOCHEMISTRY	<ol> <li>Glucometers</li> <li>Thermal Cyclers</li> <li>Electrophoresis equipment</li> </ol>

### **Details of Quality Services**

QS 1	DAY CARE	A fully equipped daycare facility for its faculty and students.
QS2	HOSTEL FACILITIES	A furnished separate hostel facilities for both male & female students.



#### **Details of Quality Standards**

STANDARD NO	STANDARD	DETAILS
QS 1	MISSION STATEMENT	The teaching hospital must have a written institutional mission statement, which:  •demonstrates a clear institutional commitment to social accountability, achievement of competencies and addresses the healthcare needs of Pakistan.  • is aligned with the overall vision of the institution or with which it is affiliated or of which it is a constituent institution.  •is developed and known to all the stakeholders (for example trainers, staff, students, university, health ministry officials).  •Teaching hospitals should have a written institutional mission statement, which aims at professional development and commitment to life-long learning.
QS 2	FACULTY	The Teaching Hospital should:  • have a CME/CPD program for faculty with clear goals aligned with teaching and training requirements.
QS 3	GOVERNANCE, SERVICES & RESOURCES	The teaching Hospital should:  •have mechanisms for dissemination of all policies and procedures related to governance, services and resources.  •have a Human Resource Department and an anti-harassment policy in line with the national guidelines.  •have mechanisms for addressing disciplinary issues of trainer, staff and trainees.  •adhere to its commitment to social accountability.  •have appropriate budgetary allocations for faculty/trainers' professional development program have mechanisms for addressing disciplinary issues of trainer, staff and trainees.  •adhere to its commitment to social accountability.  •have appropriate budgetary allocations for faculty/trainers' professional development program

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# 2.7: CRITERIA FOR SEAT ENHANCEMENT OF DENTAL COLLEGES

CRITERIA FOR SEAT ENHANCEMENTS OF DENTAL COLLEGES		
CRITERIA 1	The equipment & faculty shall be increased by 25% proportionate increase for each 50 students against the standard determined for 50 students.	
CRITERIA 2	Seat Enhancement shall be subject to the availability of sufficient space to accommodate the increase in strength of students with specifically a measurable increase in the teaching areas.	
CRITERIA 3	70% of the students who graduated during the last session must have cleared their NLE.  When more than three classes have graduated, an average of 70% of the graduates of last three sessions must have cleared their NLE	



#### SECTION – AS 3

2022

# MINIMUM STANDARDS FOR

**FACULTY** 

# IN UNDERGRADUATE DENTAL COLLEGES OF PAKISTAN









#### 3.1: GUIDELINES

- 1. These standards have been framed by the Commission and may be called the Minimum Standards for Faculty in Undergraduate Dental Colleges of Pakistan 2022
- 2. The universities may formulate their own criteria for faculty and with respect to Basic Science faculty, under the guidance of HEC. However, to assist Dental colleges, the National Academic Board of Pakistan Medical Commission has recommended best practices.
- 3. Universities may also appoint faculty level trainee entry positions in both Clinical, Non-Clinical and Basic Sciences.
- 4. Non-Clinical qualified persons shall not be eligible for appointment as faculty in clinical domain.



#### **3.2: MINIMUM RECOMMENDED STANDARDS**

## 3.2.1. Non-Clinical (Educationists/ Researchers) and Basic Science Faculty in Undergraduate Dental Colleges

ACCREDITATION	REQUIRED MINIMUM QUALIFICATIONS	YEARS OF MINIMUM TEACHING EXPERIENCE AFTER POSTGRADUATION
Up to 20% of the faculty	HEC or PMC recognized postgraduate or alternative qualification in relevant subject	None – to 2 Years teaching experience
At least 30% of the faculty	HEC or PMC recognized postgraduate or alternative qualification in relevant subject	More than 5 years teaching experience
At least 10% of the faculty	HEC or PMC recognized postgraduate or alternative qualifications in relevant subject	10 years or more teaching experience



# 3.2.2. Clinical Science Faculty In Undergraduate Medical And Dental Colleges

ACCREDITATION	REQUIRED MINIMUM QUALIFICATIONS	YEARS OF MINIMUM TEACHING EXPERIENCE AFTER POSTGRADUATION
Up to 20% of the faculty	FCPS or equivalent alternative to clinical postgraduate medical or dental qualifications recognized/ registered by the PMC	None
At least 30% of the faculty	FCPS or equivalent alternative to clinical postgraduate medical or dental qualifications recognized/ registered by the PMC	More than 5 years teaching experience
At least 10% of the faculty	FCPS or equivalent alternative to clinical postgraduate medical or dental qualifications recognized/ registered by the PMC	10 years or more teaching experience



## 3.2.3. Minimum Number Of Faculty Members For Dental Clinical Disciplines

Disciplines	Required minimum number of faculty for 50 students* (to be increased pro rata)
Community and preventive dentistry	4
Oral surgery	6
Operative /restorative /conservative dentistry/endodontics	7
Pediatric dentistry	3
Periodontology	5
Orthodontics	6
Prosthodontics	7
Oral medicine and oral diagnosis	4
General Medicine	3
General Surgery	3

The faculty shall be increased by 25% pro-rata increase for each 50 students against the standard determined for 50 students.



# 3.2.4. Minimum Teacher-Student Ratio For Basic Science Disciplines

DISCIPLINES	MINIMUM FACULTY STUDENT RATIO
Anatomy Biochemistry Pathology Pharmacology Physiology Oral biology Oral pathology Dental Materials	1: 15
Behavioral Sciences	1: 25

<sup>\*</sup>Round of to highest whole number



#### 3.3: RECOMMENDED BEST PRACTICES

In order to assist dental colleges, the National Academic Board has recommended best practices for the development of faculty structures and criteria by institutions. These are in NO WAY MANDATORY and only meant to serve as recommendations to enable institutions to develop their own faculty structures and criteria.

The goal of the best practices is to encourage institutions to select and develop quality faculty for the attainment of the primary objective and discharge of the institution's obligation to deliver quality education to its students and bolster the research profile and culture.

Whether the candidate achieves the goal by utilizing the base criteria only OR by a combination of the base and relative criteria (both demarcated below), is the institution's discretion.

### 3.3.1. Point System Based On Base & Relative Criteria For Faculty In Undergraduate Dental Colleges

			+(	OR	
	BASIC CRITERIA RESEARCH PRODUCTIVITY RELATIVE CRITER		VE CRITERIA		
Clinical Sciences	Qualification	Min and Max Experience in Previous Post	Publications required for promotion to next post	Publications	Academic/ Service Productivity
Assistant Professor			6 in current post	N/A	N/A
Associate Professor	FCPS or equivalent alternative to clinical postgraduate qualifications recognised/	4 to 8 years	7 in current post (50 points)	Minimum 7* (35 points)	(Upto 15 points) clinical, education, scholarship, citizenship (different from those achieved previously)
Professor	registered by the PMC	4 to 8 years	Recommended that Professor should continue to publish at least 2 papers annually to maintain their position	Minimum 13* (70 points)	(Upto 30 points) clinical, education, scholarship, citizenship (different from those achieved previously)



			+(	OR	
	BASIC CRITE	ERIA	RESEARCH PRODUCTIVITY	RELATIVE CRITERIA	
Non- Clinical and Basic Sciences	Qualification	Min and Max Experience in Previous Post	Publications required for promotion to next post	Publications	Academic/ Service Productivity
Assistant Professor			6 in current post	N/A	N/A
Associate Professor	HEC or PMC recognized postgraduate or alternative qualification in relevant subject	4-8 years	7 in currentpost (50 points)	Minimum 7* (35 points)	(Upto 15 points) education, scholarship, citizenship (different from those achieved previously
Professor		4-8 years	Recommended that Professor should continue to the publish atleast 2 papers annually to maintain their position)	Minimum 13* (70 points)	(Upto 30 points) education, scholarship, citizenship (different from those achieved previously)

<sup>\*</sup>The number of publications mentioned in the table are for journals with an impact factor (this number will alter for journals with a 3 or higher or no impact factor)

The principal investigator/the first author has to declare the role of each author in the publication which will be published with the paper

For high quality of publications following points are to be ensured:

For first or corresponding author marks will be assigned as follows:

- a. 5 marks for papers in recognized journals with impact factor > 1.0
- b. 2 marks for journals with impact factor >0.3 <1.0
- c. 0.5 marks for journals with impact factor >0.1<0.3
- d. 0.25 marks for journals in the HEC list, excluding ones noted above.

For all other authors the marks above will be reduced by 50%.



#### 3.3.2. Relative Criteria

### a. Documented Evidence of Outstanding Clinical Performance through the following activities

SR NO	ACTIVITY	POINTS
1	Evidence of peer recognition in the community as a consultant or a primary provider as assessed by patient referrals/patient satisfaction surveys/patient complaints/ incident reports etc. The department head/chair may obtain written documentation from clinical colleagues in the community as a means of documenting recognition.	5
2	Development, documentation, and evaluation of innovative patient care activities, new techniques and breakthroughs.	5
3	Membership on advisory committees of and consultantships to hospitals and educational, clinical, or other similar institutions.	5
4	Programs of national, state, or local professional organizations which the candidate organized or in which he/she participated.	5
5	Maintenance of board certification/ evidence of continuing professional education	5



# b. Documented Evidence of Recognition as an Educator through the following activities

SR NO	ACTIVITY	POINTS
1	Demonstrated competence in teaching undergraduate and/or graduate courses as measured by growth in students' ability to comprehend, reason, analyze, and work with others. Such competence is measured by a combination of achieving the outcomes specified for the course and reviewing the results of student course evaluations, reports from peer attendance of representative classes, and documentation of clear and constant efforts to improve teaching as demonstrated in the teachingportfolio.	2.5
2	Provision of consistently challenging and contemporary course content with regular revision and updating to international standards and the development of new curricula, courses, and programs that include professionally appropriate teaching materials that strive to remain up-to-date with advances in the field.	2.5
3	Use of up-to-date technology in teaching, where possible and appropriate.	2.5
4	Development of innovative pedagogical methods and materials and encouragement of students to take a more active role and greater responsibility for their own education	2.5
5	Publication in refereed education journals	2.5
6	Supervision and mentoring of graduate and honor students including membership of thesis and project committees; guiding and evaluating senior and graduate research projects and theses	2.5
7	Student evaluations: evaluations and comments that reflectteaching excellence, creativity, and enhancement of studentachievements	2.5
8	Special recognition received for teaching accomplishments and teaching awards.	2.5



# c. Documented Evidence of Scholarship through the following activities

SR NO	ACTIVITY	POINTS
1	Demonstration of a research focus. This refers to the extent that the research of the individual can be described as having a theme and is directed towards solving or tackling a major problem or hypothesis in an organized and methodologically sound fashion. Also included is whether there is a clear plan for the future that shows where this research will create positive interaction with peers, moves the field forward, and is supported by available resources.	5
2	Publication in high-impact refereed (either international or regional) journals, with special consideration given to the quality of the publication, such as the reputation of the journal and the nature of the authorship	5
3	Publication of scholarly and creative works such as books, articles, novels, monographs, and participation in professionally relevant juries, competitions, or exhibitions.	5
4	Frequency with which the candidate's publications have been cited.	5
5	Publication and funding resulting from collaborative efforts with researchers in other fields.	5
6	Submission of significant proposals for research and development grants and extramural funding, whether proposals were funded or not, and an indication of whether or not funding was awarded.	5
7	Receipt of fellowships and awards.	5
8	Editing of professional academicjournals, reviewer of articles, books, funding applications, and other creative works	5
9	Evidence of recognition as an expert within a particular academic field, whenever appropriate.	5



# d. Documented Evidence of Citizenship through the following activities

SR NO	ACTIVITY	POINTS
1	Participation in committee work at department/track, faculty/school, and university levels.	2.5
2	Service as chair/convener either of a department/track, of committees at various levels, of university taskforces, etc.	2.5
3	Serving as a mentor to faculty who have recently joined the University.	2.5
4	Presentations at conferences, seminars, and symposia; delivering of lectures at other universities, or professional meetings such as keynote or invited speeches.	2.5
5	Organizing role in national or international conferences, workshops, or other academic meetings.	2.5
6	Provision of services to national, regional, and international agencies, task forces, boards, and commissions.	2.5
7	Participation in local, regional, national, and civic activities that promote a positive relationship between the University and the community.	2.5
8	Service as an officer of a national, regional, or international professional association.  Service will be evaluated through the evaluations of the department/trackhead, the program director, the dean, and others (including outside experts) qualified to comment on activities and performance.	2.5



#### **LIST OF ABBREVIATIONS**







#### **LIST OF ABBREVIATIONS**

NMDAB	National Medical and Dental Academic Board
NMDAB	National Medical and Dental Academic Board
CAC	Committee on Accreditations and Curriculum
MBBS	Bachelor of Medicine and Bachelor of Surgery
BDS	Bachelor of Dental Surgery
PMC	Pakistan Medical Commission
HEC	Higher Education Commission
СМЕ	Continuous Medical Education
CPD	Continuous Professional Development
TOR	Terms of Reference
HOD	Head of Department
SOP	Standard Operating Procedure
LT.	Information Technology
ENT	Ear Nose and Throat
SECP	Securities and Exchange Commission of Pakistan
FDP	Faculty Development Program
МНРЕ	Masters in Health Professions Education
NA	Not Applicable
IPD	In-Patient Department
OPD	Out-Patient Department
OR	Operation Room
MOU	Memorandum of Understanding
CPC	Clinical-Pathological Conferences



# SECTION-5 ANNOTATIONS





#### **ANNOTATIONS**

SOCIAL ACCOUNTABILITY	Social accountability of training hospitals is their responsibility towards the community and their trainees. It is the responsibility of the training hospitals to meet the healthcare needs of the country through provision of quality training and service delivery. This service delivery should take ownership of defined populations (especially marginalized populations including trans genders) and improve the health status of those communities. In this regard, training hospitals will need to delineate how they are contributing towards serving their communities and are socially accountable.
OUTCOMES	Outcomes are statements of intention, just like objectives. Outcomes provide a clear idea of what the trainees are expected to do (perform) by the end of the entire learning period (e.g., by the end of the postgraduate training program). Hence, they provide an overview (and not details) of what the trainee is expected to do upon completion of the training program in which s/he is enrolled.
ACTIVE LEARNING	Active learning is any instructional strategy in which trainees are required to do meaningful activities and think about their learning in order to achieve the session's objectives.
EDUCATIONAL STRATEGY	Educational strategy means teaching method or instructional method, for example lecture or tutorial or small groupdiscussion.
PATIENT- CENTEREDNESS	Patient-centeredness keeps the training focused on issues of the patient and not around diseases. It aims to produce doctors who deal with patients as humans and not as carriers of disease. It helps trainees provide holistic care to the patients.
ACADEMIC COUNSELING	Academic counseling would include addressing questions related to the trainees' choice of selected rotation. Academic counseling may also involve helping students improve their learning.
CAREER COUNSELING	Career counseling would include guidance related to achieving their career goals.
CONFIDENTIALITY	Confidentiality means available only to members of the trainers and administration on a need-to-know basis. Laws concerning confidentiality of record need to be kept in view.



COMMITTEES	Committees include all educational, management and disciplinary committees. This includes development of the mission and vision, policy guidelines, curriculum committees, academic council and service delivery.
AREAS OF APPEALS	Areas of appeals include admission, attendance, assessment, promotion, demotion or dismissal processes and products of the educational programs means curriculum, teaching and learning processes.
FAIR AND FORMAL	Fair and formal process includes timely notice of the impending action, disclosure of the evidence on which the action would be based, an opportunity for the Trainees to respond and an opportunity to appeal.
STATUS OF TRAINEES	Status of trainees means that can affect his/her educational progression for example admission, graduation or dismissal.
DISABILITY	Disability means any physical disability which may not affect his/her ability to actively contribute as a member of healthcare team. The institutional medical team should decide it on case-to-case basis.
TRANSFER POLICY AND EXCHANGE MECHANISMS	Transfer policy and exchange mechanisms mean policies devised by the training hospital for transfer and trainee exchange in congruence with the affiliating university (where applicable), PMC guidelines & government policies
PROGRAM EVALUATION	Program evaluation means gathering, analysis and interpretation of information, using valid and reliable methods of data collection, from all components of the program. The process of evaluation should serve to make judgments about its effectiveness in relation to the mission, curriculum and intended educational outcomes.
ACADEMIC ACTIVITIES	Academic activities include all formal educational experiences of the Trainees during their enrolment in the institute.
RENEWAL OF PROGRAMS	Renewal of program refers to modifications made in the programby incorporating results of program evaluation



#### MISSION STATEMENT

**Social Accountability** of training hospitals is their responsibility towards the community and their students. It is the responsibility of the training hospitals to meet the healthcare needs of the country through provision of quality training and service delivery. This service delivery should take ownership of defined populations (especially marginalized populations including trans genders) and improve the health status of those communities. In this regard, training hospitals will need to delineate how they are contributing towards serving their communities and are socially accountable.

#### PROGRAM ORGANISATION

**Active learning** is any instructional strategy in which students are required to do meaningful activities and think about their learning in order to achieve the session's objectives.

**Educational strategy** means teaching method or instructional method, for example lecture or tutorial or small group discussion.

**Patient-centeredness** keeps the training focused on issues of the patient and not around diseases. It aims to produce doctors who deal with patients as humans and not as carriers of disease. It helps trainees provide holistic care to the patients.

#### **CONSULTANTS**

A consultant is a doctor who is a full-time faculty member, practices in one of the dental or medical/surgical specialties and leads multidisciplinary team in delivering care. He/she is expected to be involved in the teaching and training of students and junior doctors, and to contribute to their specialty field through research and leadership.

#### FACULTY MEMBERS

These are professionals who are not only subject matter experts but have accepted professional service roles that normally hold the responsibility for teaching, research and service within the higher education organization but also within the profession at the organizational, regional, national and international levels of scholarly engagement.

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