

STUDY GUIDE

2024-2025



Program: Bachelor of Dental Surgery

Year: 3rd Professional Year

Subject: Periodontology

Batch No: D22

Session: 2024-2025

Content

<u>1. </u>	Introduction to Study Guide
	Objectives of the Study Guide BDS Program Outcomes
2.	Avicenna Medical & Dental College Overview
	 Institutional Organogram. Vision and Mission. Messages: o From the Chairman. o From the Principal. o From the Vice Principal. 7-Star Doctor Competencies (PMDC). About Dental College.
3.	Department & Subject Overview
	 Note from the Head of Department. Departmental Organogram. Faculty Members. Goal of the Department Course Objectives. Attendance Requirement & Internal Assessment Criteria.
4.	Learning Resources & Pedagogy
	 Book Recommendations. Teaching Methodologies. Infrastructure Resources. Digital Library & Learning Management System.
<u>5. </u>	Assessment Guideline
	 Internal Assessment. External Assessment. Sample Questions.
6.	Curriculum Details
	 Curriculum Framework & Allocation of hours. Curricular Map & Rationale. Learning Outcomes. Assessment TOS/Blueprint. Refer to Curriculum Booklet for Syllabus, Statute, Timetable and Annual Calendar and Weekly Schedule

Introduction to Study Guide

Welcome to the Avicenna Dental College Study Guide!

This guide serves as your essential resource for navigating the complexities of your dental education at Avicenna Medical & Dental College. It integrates comprehensive details on institutional framework, curriculum, assessment methods, policies, and resources, all meticulously aligned with UHS, PMDC and HEC guidelines.

Each subject-specific study guide is crafted through a collaborative effort between the Department of Dental Education and the respective subject departments, ensuring a harmonized and in-depth learning experience tailored to your academic and professional growth.

OBJECTIVES OF THE STUDY GUIDE

1. Institutional Understanding:

o Gain insight into the college's organizational structure, vision, mission, and graduation competencies as defined by PMDC, setting the foundation for your educational journey.

2. Effective Utilization:

Master the use of this guide to enhance your learning, understanding the collaborative role of the Department of Dental Education and your subject departments, in line with PMDC standards.

3. Subject Insight:

Obtain a comprehensive overview of your courses, including detailed subject outlines, objectives, and departmental structures, to streamline your academic planning.

4. Curriculum Framework:

o Explore the curriculum framework, academic calendar, and schedules for clinical and community rotations, adhering to the structured guidelines of UHS & PMDC.

5. Assessment Preparation:

o Familiarize yourself with the various assessment tools and methods, including internal exam and external exam criteria, and review sample papers to effectively prepare for professional exams.

6. Policies and Compliance:

o Understand the institutional code of conduct, attendance and assessment policies, and other regulations to ensure adherence to college standards and accrediting body requirements.

7. Learning Resources:

o Utilize the learning methodologies, infrastructure resources, and Learning Management System to maximize your educational experience and academic success.

This guide, meticulously developed in collaboration with your subject departments, is designed to support your academic journey and help you achieve excellence in accordance with the highest standards set by PMDC and HEC.



BDS Program Outcome Statements

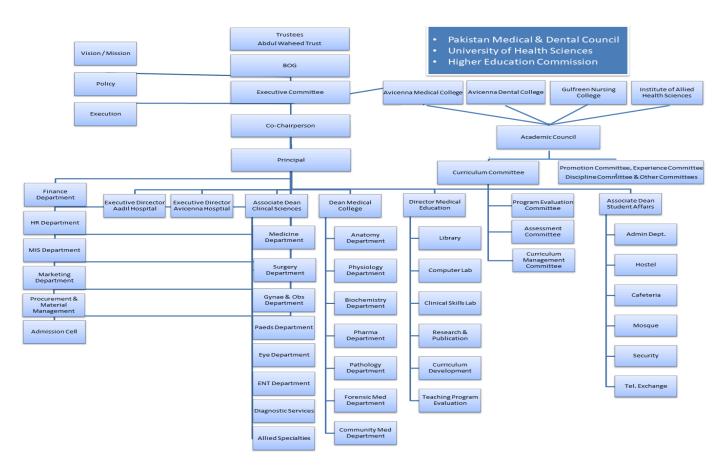
The outcome statements of Avicenna Dental College specify the core competencies and performance standards expected of graduates upon completion of the BDS program.

Upon graduation, students will be able to:

- Prioritize patient care above all, applying their knowledge and skills in a competent, ethical, and professional manner, and taking responsibility for their actions in complex and uncertain situations.
- 2. Conduct thorough consultations and assessments of patients.
- 3. Independently diagnose and manage common, non-critical dental and oral health conditions.
- 4. Assist in the management of critically ill patients as relevant to dental practice.
- 5. Demonstrate clear and efficient written and verbal communication skills.
- 6. Exhibit professional, ethical, and culturally appropriate behavior in all clinical and patient interactions.
- 7. Promote oral health and advocate for preventive measures against dental diseases.
- 8. Work effectively as a team member within Pakistan's healthcare system.
- 9. Apply critical thinking, reflection, research skills, and teamwork capabilities in clinical practice.
- 10. Pursue personal and professional development with a commitment to lifelong learning.

Avicenna Medical & Dental College Overview

Institutional Organogram



Vision & Mission



Avicenna Medical & Dental College



Vision

The vision of **Avicenna Medical & Dental College** is to become a college that thrives to achieve improvement in healthcare of masses through creative delivery of educational programs, innovative research, commitment to public service and community engagement in a environment that supports diversity, inclusion, creative thinking, social accountability, lifelong learning and respect for all.

Mission

The mission of Avicenna Medical and Dental College is to educate and produce competent, research oriented healthcare professionals with professional commitment and passion for life-long learning from a group of motivated students through quality education, research and service delivery for the improvement of health status of the general population.

Message from the Chairman

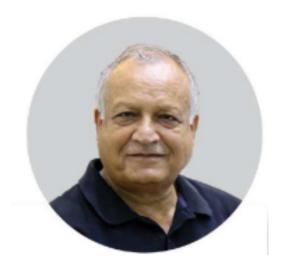
The Avicenna Medical & Dental College is a project of Abdul Waheed Trust which is a Non-profitable, Non-governmental, Non-political & Social organization, working for the welfare of Humanity and based on Community empowerment. Avicenna Medical College has its own 530 bedded Avicenna teaching Hospital (Not for Profit hospital) within the College Campus & 120 bedded Aadil Hospital, at 15 minutes distance. Separate comfortable hostels for boys & girls are provided on the campus.

Our students benefit from the state of the art College Library with facilities of Internet & online Journals that remain open 15 hours a day, for our students & faculty members. I am particularly pleased with the hard work by the Faculty and Students in the achievement of historic 100% results for all the classes. It is a rare achievement and speaks of dedication of the Faculty and Staff. Our motto is Goodness prevails and we aim at producing Doctors' who are knowledgeable, competent in clinical skills and ethical values.

Avicenna Medical College & Hospital was founded to provide quality health care services to the deserving patients belonging to the rural areas near Avicenna Hospital as well as to provide quality medical education of international standard to our students. The Hospital provides all medical services and Lab diagnostics to the local population at minimal cost. So far by the grace of Allah Almighty the number of patients being treated and operated upon at our Hospital is increasing every day as there is no other public or charity hospital in the circumference of 20km. We have already established two Satellite Clinics in the periphery which are providing outdoor care while admission cases are brought to the Hospital in Hospital transport.

Following the success of our reputable Medical College and Hospital, we were able to successfully establish Avicenna Dental College which is recognized by the Pakistan medical & Dental Council & University of Health Sciences. To date, we have enrolled five batches in our dental college and we aim to achieve the same level of success for our dental students as our medical students.

Chairman **Abdul Waheed Sheikh**Avicenna Medical & Dental College



Message from the Principal

Prof. Dr. Sohail Abbas Khan Principal Dental College MDS, Dip Op (Hons) BDS



It is a matter of immense honor and privilege as the first Principal of Avicenna Dental College to welcome you to one of the finest dental institutes in the private sector of Pakistan. Avicenna Dental College is a private dental college, which aims to provide the finest dental education to dental undergraduate students in accordance with the latest trends in Dental Education, and to develop them to practice dentistry in the 21st century.

While educating dental students to become licensed, empathetic and competent professionals, Avicenna Dental College endeavors to educate students in a supportive environment in which they provide dental care for a diverse populace. In the times to come, we wish to transform our graduates into unfeigned teachers, researchers and consultants by starting post-graduation programs as well.

Avicenna Dental College aims to achieve an enterprising curriculum integrating the basic sciences with clinical experience while utilizing modern technological modalities.

In addition to the production of outstanding oral health professionals, we at Avicenna Dental College recognize our responsibility as a private dental institution to the citizens of the country in making the provision of oral health care available to those who are deprived of ready access.

I feel proud to lead this dental establishment such an inspiring time and hope all of you at Avicenna Dental College will share this pride and play your respective roles in materializing the dream of making this institution the premier dental educator in Pakistan



Message from the Vice Principal

Prof. Dr. Usman Muneer
Vice Principal Dental College
BDS, FCPS

It is a matter of great privilege to be associated with Avicenna Dental College. Our institution boasts of renowned, well-qualified and devoted faculty members in each and every specialty of dentistry. We are looking forward to diligently equipping our undergraduates with comprehensive artistic and ethical oral health care.

Our goal is to inspire a lifelong passion for learning and innovation in our students, ensuring they are well-prepared to meet the evolving challenges of the dental profession. I look forward to collaborating with our students on this transformative journey, guiding them toward achieving excellence in oral health care.

7-Star Doctor Competencies (PMDC)

According to national regulatory authority PMDC, a Pakistani medical/dental graduate who has attained the status of a 'seven-star doctor' is expected to demonstrate a variety of attributes within each competency. These qualities/ generic competencies are considered essential and must be exhibited by the individual professionally and personally.

- 1. Skillful / Care Provider.
- 2. Knowledgeable / Decision Maker.
- 3. Community Health Promoter / Community Leader.
- 4. Critical Thinker / Communicator
- 5. Professional / Lifelong learner.
- 6. Scholar / Researcher
- 7. Leader/ Role Model / Manager



About Avicenna Dental College

Avicenna Dental College is a purpose-built, fully equipped Dental institution with experienced and excellence-driven faculty to train high-quality dental professionals in Pakistan.

Avicenna Dental College runs under the umbrella of Abdul Waheed Trust. Abdul Waheed Trust is a non-profit social welfare organization and registered under the Societies Act with the Registrar of Societies. The Trust is legalized through a Trust Deed that bears necessary rectifications. The Trust Deed is further supported by its Memorandum and Article of Association that authorizes the establishment and operation of the Medical College, the Dental College, the Nursing College, the Allied Health Sciences College, and other activities in the healthcare sector.

In 2018, Avicenna Dental College was recognized by the Pakistan Medical & Dental Council. With the advent of advanced tools and technology in every field of health science, dentistry today has shot up to the greater end of the gamut with superior choice and promises in dental therapy in the very vicinity of the common man. ADC promises to be one such neighborhood.



Department & Subject Overview

Note from the Head of Department

Periodontology is a specialized branch of dentistry that focuses on the prevention, diagnosis, and treatment of periodontal diseases and conditions. These diseases are pathological processes that affect the tooth-supporting structures known as the "periodontium." Among the most prevalent periodontal diseases worldwide are gingivitis and periodontitis, with an estimated 538 million people suffering from severe forms of periodontitis, leading to tooth loss.

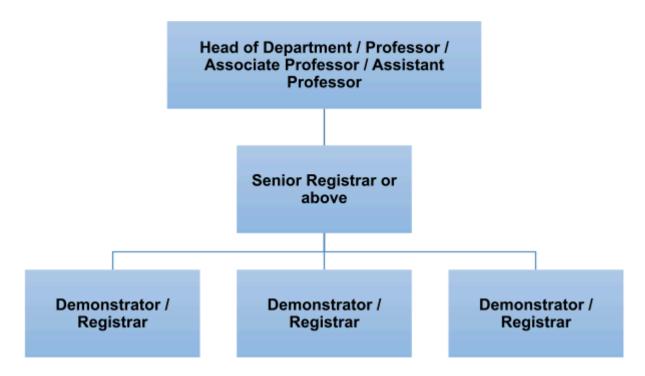
Periodontology is a core subject in dental training, taught in the third year of the BDS program. It offers a stimulating and challenging experience for dental students, providing an opportunity to fully grasp the importance and basics of the healthy and diseased periodontium, as well as diagnose and execute treatment plan for various periodontal conditions.

In addition to didactic (instructor-led lectures), students are trained to provide non-surgical treatment to a specified number of patients under direct supervision. This practical experience, which involves treating real patients, strengthens their skills in patient evaluation, diagnosis, treatment planning, and counseling, preparing them for the complexities of advanced dental techniques and the challenges of final year subjects.

We have an active and dedicated clinical department focused on providing comprehensive care for periodontal and peri-implant conditions, collaborating with other specialists as needed. We employ the latest nonsurgical and surgical techniques to maintain healthy teeth and their supporting structures, including bone augmentation and soft tissue grafting. We are skilled in treating ailing or failing dental implants and offer a range of cosmetic periodontal procedures, regenerative procedures, periodontal plastic/mucogingival surgeries, and pre-prosthetic surgery. Our primary focus is on the prevention of periodontal diseases through education, early intervention, and increasing public awareness of the critical link between periodontal health and overall systemic well-being.

Dr. Resham Hafeez BDS, MCPS-PerioAssistant Professor & Head of Department Department of Periodontology

Departmental Organogram (as per PMDC guidelines)



Faculty Members

Name	Designation	Qualification		
Dr. Resham Hafeez	Head of Department / Assistant Professor	B.D.S., MCPS PERIODONTOLOGY PG DIP PUBLIC HEALTH		
Dr. Ali Anwar	Senior Registrar	BDS, MCPS PERIODONTOLOGY		
Dr. Nazia Kalim	Demonstrator	BDS		
Dr. Syed Zain Abbas	Demonstrator	BDS		
Dr. Nida Ayub	Demonstrator	BDS		

Goal of the Department

Periodontology is intended to provide a sound and intensive knowledge of the basic principles of the etiology, progression and pathology of periodontal tissues as well as the diagnosis and management of advanced periodontal diseases. Initial therapy, nonsurgical management, and simple surgical procedures also form part of this one-year clinical subject taught in Third Year BDS



Course Objectives

- Understand the etiology, pathogenesis, and clinical features of periodontal diseases.
- Learn to diagnose and manage various forms of gingivitis and periodontitis.
- Gain knowledge of the latest techniques in periodontal therapy, including surgical and non-surgical methods.
- Emphasize the importance of prevention, patient education, and maintenance therapy in periodontal health.

Attendance Requirement & Internal Assessment Criteria

The institution follows the regulations for examinations of the UHS in letter and spirit. The students require **85% attendance** in all academic sessions and **50% marks** in internal assessments and send-up examinations to be eligible for the UHS Professional Examinations.



Learning Resources & Pedagogy

Book Recommendations



Sr.	Book Name	Author	Edition
1.	Newman and Carranza 's Clinical Periodontology and Implantology	By Michael G. Newman, Perry R. Klokkevold, Satheesh Elangovan, Yvonne Kapila, DDS, PhD, Fermin A. Carranza, DR ODONT, FACD and Henry Takei	14th edition
2.	Lindhe's Clinical Periodontology and Implant Dentistry	Jan Lindhe, Niklaus P. Lang, Thorkild Karring	7th Edition
3.	Clinical periodontology by Glickman	Irving Glickman	7th Edition
4.	Clinical Periodontology by Manson	Barry M. Eley, Mena Soory, J. D. Manson	6th Edition
5.	Colour Atlas of Clinical and Surgical Periodontology by Strahan & Waite	lan M. Waite, J. Dermot Strahan	2nd Edition
6.	Fundamentals of Periodontic by Thomas G. Wilson, Kenneths Kornman	Jr. Wilson, Thomas G, Kenneth S. Kornman	2nd Edition
7.	Periodontology and Periodontics, Modern Theory and Practice by Sigurd P. Ramford Major M. Ash.	Sigurd Peder Ramfjord, Major M. Ash	2nd Edition

Traditional & Innovative Teaching Methodologies



Sr.	Pedagogical Methodologies	Description		
1.	Lectures	Traditional method where an instructor presents information to a large group of students (large group teaching). This approach focuses on delivering theoretical knowledge and foundational concepts. It is very effective for introducing new topics.		
2.	Tutorial Tutorial Tutorial Tutorials involve small group discussion (SGD) where students receive focused instruction and guidance on specific topics.			
	Demonstrations	Demonstrations are practical displays of techniques or procedures, often used to illustrate complex concepts or practices, particularly useful in dental education for showing clinical skills.		

3.	Practicals	Hands-on sessions where students apply theoretical knowledge to real-world tasks. This might include lab work, clinical procedures, or simulations. Practicals are crucial for developing technical skills and understanding the
		application of concepts in practice.
4.	Student Presentations	Students prepare and deliver presentations on assigned topics. This method enhances communication skills, encourages students to explore topic in-depth. It also provides opportunities for peer feedback and discussion.
5.	Assignment	Tasks given to students to complete outside of class. Assignments can include research papers, case studies, or practical reports. They are designed to reinforce learning, assess understanding, and develop critical thinking and problem-solving skills.
7.	Self-directed Learning	Students take initiative and responsibility for their own learning process. Students are encouraged to seek resources, set goals, and evaluate their progress. This is a learner-centered approach where students take the initiative to plan, execute, and assess their own learning activities. This method promotes independence, critical thinking, and lifelong learning skills.
8.	Flipped Classroom	In this model, students first engage with learning materials at home (e.g., through videos, readings) and then use class time for interactive activities, discussions, or problem-solving exercises. This approach aims to maximize in-class engagement and application of knowledge.
9.	Peer-Assisted Learning (PAL)	A collaborative learning approach where students help each other understand course material. PAL involves structured peer tutoring, study groups, or collaborative tasks. It enhances comprehension through teaching, reinforces learning, and builds teamwork skills.
10.	Team-based Learning (TBL)	A structured form of small group learning where students work in teams on application-based tasks and problems. Teams are responsible for achieving learning objectives through collaborative efforts, promoting accountability, and deeper understanding of the material.
11.	Problem-based Learning (PBL)	Students work on complex, real-world problems without predefined solutions. They research, discuss, and apply knowledge to develop solutions. PBL fosters critical thinking, problem-solving skills, and the ability to integrate knowledge from various disciplines.
		A collection of student's work that showcases learning achievements, reflections, and progress over time.
12.	Academic Portfolios	Portfolios include assignments, projects, and self-assessments. They provide a comprehensive view of student development, highlight strengths and areas for improvement, and support reflective learning (experiential learning)



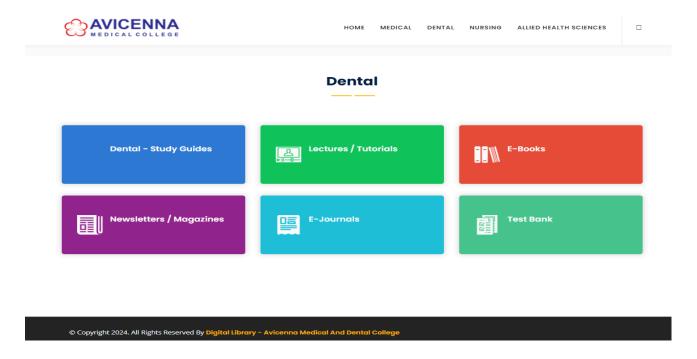
Flipped Classroom

Infrastructure Resources

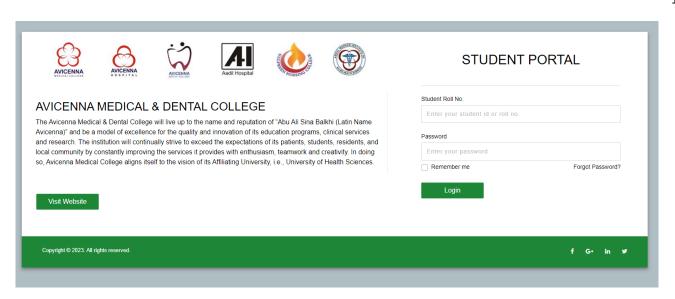


<u>Digital Library & Learning Management System (LMS)</u>

- The COVID-19 pandemic highlighted the necessity of interactive online teaching for better retention of topics by students. Strategies like online learning management system (LMS), online discussions, online quizzes, assignment design, and flipped learning enhance student engagement in online education when needed.
- 2. Avicenna Medical & Dental College lays emphasis on the provision of learning material and online video lectures, video tutorials in the e-library and learning resource center, which has a dedicated website of Avicenna Medical College to enable the students to develop concepts and clarify their doubts, if they have not been able to do so in the teaching sessions during college hours. The digital library can be approached on http://digital.avicennamch.com/.



- 3. The institution has also endeavored to link itself with the digital libraries and e-library of the University of Health Science (UHS) and Higher Education Commission (HEC) to enable the students to benefit from the valuable resource material, lectures and knowledge bank at these sites. The links are available with the HEC http://lms.uhs.edu.pk/.
- 4. The Learning Management System (LMS) at Avicenna Medical & Dental College is a comprehensive platform managed by the Department of Student Affairs. It is designed to facilitate effective communication and information exchange between students, parents, faculty, and administrative staff. The LMS portals are specifically tailored to meet the needs of the following stakeholders:
 - a. Students: For academic resources and scheduling.
 - b. **Parents:** For monitoring academic progress and other relevant information.
 - c. Faculty: For managing course content and academic activities.
 - d. **Department of Student Affairs:** For overseeing administrative functions.
 - e. Department of Medical/Dental Education: For overseeing academic functions.



- 5. Students can access a comprehensive range of academic resources and information through the student portal. By logging in with their roll number and password, students can:
 - -__Look at their attendance and results.
 - Review academic activities and weekly timetables/schedules.
 - Access rotation planners and test schedules.
 - -__Check for any notification, assignment or resource material from their teachers.
- 6. The information to the parent is duplicated by the issuance of the password and login to the Students Learning Management System which is dedicated to the Academic Program of the students. The parents can view the following by logging in to the mobile app of Avicenna Student Management System:
 - a) Syllabus
 - b) Table of specifications
 - c) Annual Planner
 - d) Synopsis
 - e) Block Time Table
 - f) Weekly training program
 - g) Allocation of Marks
 - h) Assessment calendar
 - i) Results of tests / exams*
 - j) Students' attendance record
 - k) Fees & fines

Assessment Guidelines

Assessment in dental education is a critical component designed to ensure that dental students acquire the necessary knowledge, skills, and competencies required for effective dental practice.

Assessment drives learning! – George E. Millar

You will encounter a variety of assessment methods, each serving a specific purpose.

- Written examinations, including multiple-choice and essay questions, will test your grasp of theoretical concepts and subject matter.
- Practical assessments will require you to demonstrate your clinical skills and ability to apply knowledge in real-world scenarios.
- Oral exams will evaluate your communication skills and reasoning abilities through case discussions and problem-solving exercises.
- Clinical skills and work-place based assessments will observe your hands-on proficiency and patient management capabilities.

At Avicenna Medical & Dental College, internal assessments are systematically conducted throughout each academic year of the BDS program, as per the guidelines established by the University of Health Sciences (UHS). These assessments, overseen by the Assessment Cell, adhere to either the Annual Subject-Based System or the Integrated/Modular System, depending on the curriculum structure.

Notably, beginning with the 2024-25 academic year, the weightage of internal assessments will be increased from 10% to 20%. The UHS administers professional examinations independently, organizing them at designated neutral sites and appointing external examiners to ensure objectivity and fairness.

Internal Assessment Weightage	10%	100 %
External Assessment Weightage	90%	100 //



Internal Assessment Criteria

Internal Assessment	Paper	Assessment Methods	Percentage Weightage
Grand Tests	Theory	MCQs SEQs	30%
Granu lesis	Practical	Viva	30 /6
Early Socion Even	Theory	MCQs SEQs	
Early Session Exam	Practical	Viva	
Mid Session Exam	Theory	MCQs SEQs	70%
Wild Session Exam	Practical	Viva	
Clinical Assessment	Batch Clinical Assessment	OSCE VIVA	100%
Sand up Evam	Theory	MCQ SEQ	100%
Send-up Exam	Final Clinical Assessment	OSCE VIVA	100%
	400%		

Reference attached on next page.

AVICENNA
Forn
Test
Mode o
Weigh
General Me
General Su
Periodont
Oral Med
Oral Path
ch Clinical As
Form
Test
General Me

Avicenna Dental College **Examination Marks Scheme 2024-2025** 3rd Year BDS BDS-3 Form-4 BDS-3 Form-1 BDS-3 Form-5 BDS-3 Form-6 n No BDS-3 Form-2 **Grand Test** Session Exam Type Send Up of Exam Theory Practical Theory Practical Theory Practical htage (1,2)* 30% (3,4)* 70% 100% edicine 200 MCQ 40, SEQ 30 70 VIVA 30 MCQ 45, SEQ 45 50 MCQ 45, SEQ 45 90 50 90 Viva Viva rgery 200 MCQ 40, SEQ 30 70 VIVA MCQ 45, SEQ 45 50 MCQ 45, SEQ 45 90 30 90 Viva Viva 50 ology 200 MCQ 40, SEQ 30 70 VIVA 30 MCQ 45, SEQ 45 Viva 50 MCQ 45, SEQ 45 90 50 90 Viva licine 100 MCQ 20 SEQ 30 50 OSPE 50 MCQ 21, SEQ 24 45 OSPE 45 45 MCQ 21, SEQ 24 45 OSPE 45 45 MCQ 40, SEQ 30, ology 200 OSPE 25 VIVA 25 50 MCQ 45, SEQ 45 OSPE 45, VIVA 45 MCQ 45, SEQ 45 90 OSPE 45, VIVA 45 Clinical Final Clinical Assessment ssessment (BCA) (FCA) *6 (Late Session & Send up Exam) BDS-3 Form-7 BDS-3 Form-8 BDS-3 Form-9 BDS-3 Form-10 n No **Early Ward Test** Mid Ward Test **Grand Ward Test** Type htage 20% 30% 50% 100% Short Case I 15, Short Case I 15, dicine 200 OSPE 30, VIVA 20 OSPE 40, VIVA 60 Long Case II 30, 90 Long Case II 30, OSPE 45 OSPE 45 Short Case I 30, Short Case I 30, Long Case II 30, OSPE 30, VIVA 20 OSPE 30, VIVA 70 Long Case II 30, **General Surgery 200** 100 0 50 90 OSPE 30 OSPE 30

Batch Clinical	Batch Clinical Assessment (BCA)			ment o Exam)
Weightage	100%			
Periodontology 200	OSCE 45,Viva 45,	90	OSCE 45,Viva 45,	90
Oral Medicine 100	OSCE / OSPE 45	45	OSCE / OSPE 45	45

NON EXAMINABLE SUBJECTS

Operative Dentistry				Viva 50		
Prosthodontics				Viva 50		
OMFS				Viva 50		
			50			

NOTE: * If Viva/OSPE is held along with Theory test, The Theory test will get 15% weightage & VIVA / OSPE will get 15% Weightage in Grand Test

NOTE 2: *If Viva/OSPE is not held for any reason Theory test will get full 30% weightage in Grand Test

NOTE 3: *If Viva/OSPE is held along with Theory test , The Theory test A20:Q21 will get 30% weightage & VIVA / OSPE will get 30% Weightage in Session Exam

NOTE 4: *If Viva/OSPE is not held for any reason Theory test will get full 70% weightage in Session Exam

NOTE 5: * Batch Clinical Assessment(BCA) Clinical exam held at the end of each rotation for each batch

NOTE 6: * Final Clinical Assessment(FCA) Exit exam at the end of Late Session & Send up exam Before Final Prof for all students

HOD Assessment Cell		Principal Avicenna Dental College		Chairman Avicenna Medical College		
HOD General Medicine	HOD General Surgery	HOD Periodontology	HOD Operative Dentistry	HOD Prosthodontics	HOD OMFS	HOD Oral Medicine

External Assessment

Paper Details		Assessment Methods	Total Marks	Percentage Weightage	
Thoon	External	45 MCQs (1 mark each)	45 marks		
Theory • 100 marks	Assessment	15 SEQs (3 marks each)	45 marks	50 %	
• 3 hrs	Internal Assessment	See Internal Assessment Criteria	10 marks		
Practical • 100 marks	External Assessment	Viva & OSCE	90 marks	509/	
• 3 hrs	Internal Assessment	See Internal Assessment Criteria	10 marks	50%	
	200 Marks	100%			

Sample Paper

MCQ

AUTHOR: Dr. Resham Hafeez

DATE: 06-08-2024 Periodontology

TOPIC: AIDs and Periodontium

LEVEL OF STUDENT: Third Year BDS **AREA:** Diagnosis

Item Writing Template

Stem: A 36-years old Afghani male, working at a brick kiln, presents with a complaint of pain and bleeding from gums. He has had a continuous fever for 2 months. He has a past history of blood transfusion in Kabul 3 years ago. On examination, he has poor oral hygiene & generalized inflammation of the marginal gingiva, along with swollen regional lymph nodes.

Lead in: What is the most likely diagnosis?

Option:

- a) Acute desquamative gingivitis
- b) Linear gingival erythema***
- c) Necrotizing ulcerative gingivitis
- d) Chronic refractory gingivitis

Mark the key with an Asterix*

COGNITIVE LEVEL: Application

DIFFICULTY LEVEL: Moderate

IMPORTANCE: Student must know how to diagnose various types of periodontal diseases and their clinical presentations in HIV-infected individuals

REFERENCE: Newman and Carranza's Clinical Periodontology, 14th Edition

SEQ/SAQ

AUTHOR: Dr. Resham Hafeez

DATE: 06-06-2024
DISCIPLINE/SUBJECT: Periodontology
TOPIC: Gingival Recession
LEVEL OF STUDENT: Third Year BDS
AREA: Diagnosis

Scenario A 30-year old healthy female patient reports to the periodontics department with a complaint of receding gums.

Questions	Marks
What are the types of gingival recessions according to the P.D Miller's classification?	3

Key	Marks
Class 1: Marginal tissue recession that does not extend to the mucogingival junction without any interdental bone or soft tissue loss.	3
Excellent to good prognosis	
Class 2: Marginal tissue recession that extends to or beyond the mucogingival junction without any interdental bone or soft tissue loss.	
Excellent to good prognosis	
Class 3: Marginal tissue recession that extends to or beyond the mucogingival junction along with the interdental bone and soft tissue loss.	
Only partial prognosis can be expected	
Class 4: Marginal tissue recession that extends to or beyond the mucogingival junction. With severe bone and soft tissue loss interdentally.	
Very poor prognosis	

COGNITIVE LEVEL: Recall DIFFICULTY LEVEL: Easy

IMPORTANCE: Must Know Miller's classification of Recession

REFERENCE: Newman and Carranza's Clinical Periodontology, 14th E

OSCE

	Scenario :
I	A 36-year-old male patient presents with a two-year history of bleeding gums. As a clinician, how would you take a comprehensive medical and dental history and perform a Basic Periodontal Examination (BPE to assess the patient's condition?

Key: (in the form of rubric) You may use rating scale. (binary/global/analytical/holistic)

CURRICULUM DETAILS

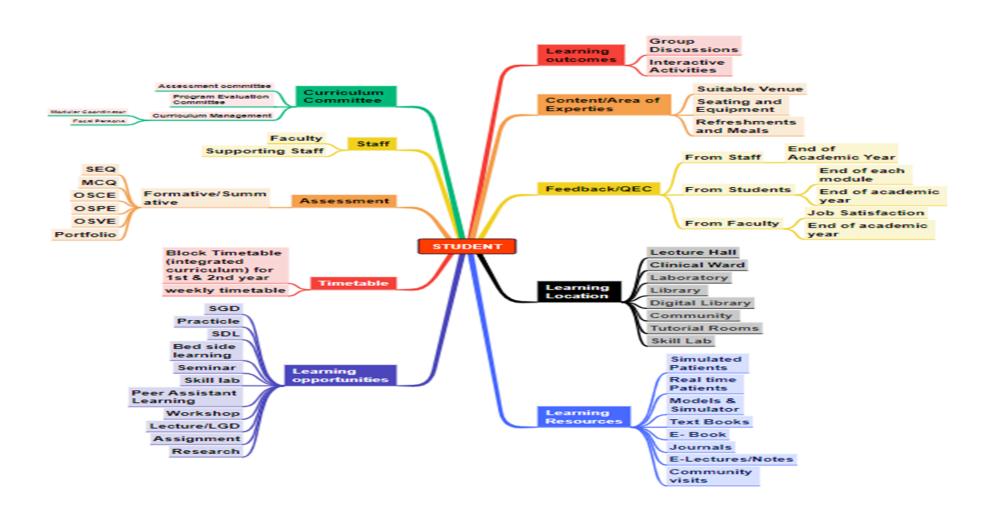
Curricular Framework including allocation of hours (PMDC)

BDS SCHEME OF STUDIES				
Basic Dental Sciences / Preclinical Year		Clinical Dental Sciences / Clinical Years		
1 st Professional Year	2 nd Professional Year	3 rd Professional Year	4 th Professional Year	
Anatomy 300 Hours	General Pathology 220 Hours	General Medicine 180 Hours	Operative Dentistry 250 Hours	
Physiology 300 Hours	Pharmacology 220 Hours	General Surgery 170 Hours	Prosthodontics 250 Hours	
Biochemistry 180 Hours	Science of Dental Materials 300 Hours	Oral Pathology 180 Hours	Orthodontics 250 Hours	
Oral biology & Tooth Morphology 300 Hours	Community Dentistry 200 Hours	Oral Medicine 150 Hours	Oral & Maxillofacial Surgery 250 Hours	
General Education 120 Hours (Islamiat, Pakistan Studies Behavioural Sciences, Research, English, Arts & Humanities)	Preclinical Operative Dentistry 80 Hours	Periodontology 180 Hours	Pediatric Dentistry 100 Hours	
	Pre-clinical Prosthodontics 80 Hours	Clinical Operative 80 Hours	General Education 100 Hours (Research, English, Arts & Humanities, ICT)	

	General Education 100 Hours (Behavioural Sciences, Research, English, Arts & Humanities, ICT)	Clinical Prosthodontics 80 Hours	
		Clinical Oral & Maxillofacial Surgery 80 Hours	
		General Education 100 Hours (Research, English, Arts & Humanities, ICT)	
1200 hours	1200 hours	1200 hours	1200 hours

Curricular Map & Rationale

1. This pictorial, vertical and horizontal presentation of the course content and extent shows the sequence in which various systems are to be covered. Curricular map to cover all the subjects and modules and the time allocated to study of the systems for the undergraduate programs offered at four colleges at campus are as follows:



Rationale 3- Professional Year			
Subjects	Periodontology		
TERM-I	 Introduction to periodontology and normal periodontium Epidemiology of Periodontal Diseases Pathogenesis of Periodontal Diseases Gingival Inflammation Biofilm and Periodontal Microbiology Periodontal Pocket Periodontal Abscess and Cyst Acute Gingival Infections Effects of Periodontal Diseases on Systemic Health Calculus and Other Predisposing Factors Periodontal Treatment Considerations in Medically Compromised Patients Chronic Periodontitis Chemotherapeutic Agents Classification of Periodontal Diseases and Conditions Aggressive periodontitis, Treatment of Atypical Forms of Periodontitis 		

	Gingival Enlargement
	Bone Loss and Patterns of Bone Destruction
	Trauma from Occlusion
	Gingival Recession
	Scaling and Root Planing
	Smoking and Periodontal Diseases
	Periodontal Flaps
	Gingivectomy
	Plaque Control and Breath Malodour
TEDM III	AIDs and Periodontium
TERM- II	Periodontal Regeneration and Reconstructive Surgery
	Gingival Diseases in Childhood
	Furcation Involvement and Treatment
	Desquamative Gingivitis
	Treatment Planning and Prognosis
	Clinical Diagnostic Protocols
	Endodontic- Periodontic Lesions

TERM-III	 Periodontal Splints Phase 2 Periodontal Therapy and General Principles of Periodontal Surgery Resective Osseous Surgery Perio- Restorative Interrelationships Periodontal Treatment in Female Patients Periodontal Plastic and Aesthetic Surgery Host Response and Host Bacterial Interaction, Host Modulation Supportive Periodontal Therapy and Results of Periodontal Treatment Dental Implants
----------	--

Learning Outcomes

Unit/ Chapt er	Topic/ Content	Student Learning Outcomes	Mode of Information (MOIT)	Learning Domain (KSA-Model)
	ANATOMY AND PHYSIOLOGY OF PERIODONTIUM	 Describe, Label and Identify diverse anatomical features of periodontium. Identify microscopic features of periodontium. Describe physiology of saliva and Gingival crevicular fluid. Memorize the protective role of gingiva. Identify and memorize blood supply, nerve supply and lymphatic drainage of periodontium of each tooth. 		
	CLASSIFICATION OF PERIODONTAL DISEASES	 Define gingival diseases. Define periodontal diseases. Tabulate gingival diseases. Tabulate periodontal diseases according to 1999 classification Stage and grade periodontal diseases according to 2017 classification 		
	AETIOLOGY OF PERIODONTAL DISEASE: PLAQUE	 Define Plaque biofilm. Describe composition, chemical and microbial structure of Plaque biofilm. Recall role of plaque biofilm accumulation in aetiology of periodontal disease. 		
	PERIODONTAL MICROBIOLOGY	 Interpret the role of bacteria in the pathogenesis of periodontal tissue destruction. Identify various colonies of bacteria responsible for periodontal tissue destruction. Distinguish between various colored complexes of periodontal pathogens 		

HOST RESPONSE AND HOST BACTERIAL INTERACTIONS IN PERIODONTAL DISEASE	 Define Host Modulation. Express risk factors for periodontal disease. Describe Host response in Periodontal Disease. 	
SMOKING AND PERIODONTAL DISEASE	Enlist effects of smoking on aetiology and pathogenesis of periodontal disease.	
AETIOLOGY OF PERIODONTAL DISEASE: DENTAL CALCULUS	 Define Calculus. Classify Calculus. Describe chemical and microbial composition of Dental calculus. Enlist the steps involved in formation of calculus. Recognize clinical significance of calculus. 	
AETIOLOGY OF PERIODONTAL DISEASE: SYSTEMIC FACTORS SYSTEMIC DISEASES ASSOCIATED WITH PERIODONTAL DISEASE	 Identify the role of systemic diseases/conditions in the aetiology of periodontal disease. Describe clinical features of periodontal disease associated with systemic diseases/factors. Tabulate common systemic diseases or conditions that have an impact on periodontal health. Differentiate between clinical features of various systemic conditions/diseases. Recognize the role of AIDS on periodontium. Identify treatment options for gingival disease. 	
GINGIVAL DISEASES	 Identify and Classify the types of gingival diseases. Differentiate Acute and Chronic forms of gingivitis. Describe clinical and histopathological features of gingival diseases. Identify and distinguish between various gingival diseases. Identify and Correlate clinical features of common gingival disease: 	

		i e
	A) Acute necrotizing ulcerative gingivitis B) Gingival desquamation Recognize gingival enlargement. 7. Tabulate types of gingival pigmentation	
EPIDEMIOLOGY OF PERIODONTAL DISEASE	1. Define indices, including: A) Plaque index B) Debris index C) Gingival bleeding index D) Sulcus index E) Periodontal index F) Community periodontal index E) Periodontal destructive index 2. Recognize epidemiological tools to assess periodontal conditions. 3. Select appropriate instruments for calculating indices. 4. Quote incidence and prevalence of periodontal diseases in the community and worldwide.	
PERIODONTAL PATHOGENESIS A) GINGIVAL INFLAMMATION B) PERIODONTAL POCKET C) BONE LOSS AND PATTERNS	 Define, Identify and Describe gingival inflammation, periodontal pocket and bone loss patterns. Describe pathogenesis of gingival inflammation, pocket formation and bone destruction patterns. Calculate clinical attachment loss. Demonstrate gingival and periodontal probing. 	

	 Determine pathological signs of periodontal tissues. Interpret normal and pathological structures found on dental radiographs. Describe histopathological features associated with gingival inflammation. Label periodontal pocket Point out techniques available for detecting change in bone heights on radiographs. Identify and discuss clinical features of gingival inflammation, periodontal pocketing and bone loss patterns.
PERIODONTAL DISEASES	 Enlist causative factors. Discuss histopathological changes associated with various periodontal diseases. Summarize immune reactions in pathogenesis of periodontal diseases. Describe clinical features of Aggressive and Chronic Periodontitis. Diagnose Aggressive and Chronic Periodontitis. Report differential diagnosis of Periodontal disease. Describe Acute necrotizing ulcerative periodontitis. Identify and describe features of Periodontal abscess. Identify Refractory Periodontitis.
TRAUMA FROM OCCLUSION	 Define Trauma from occlusion. Identify types. Indicate consequences of trauma. Examine and recall tissue response to trauma.
PERIODONTAL DIAGNOSIS	 Appraise the importance of a patient's history. Express patient's personal, medical and dental history. Analyze findings of medical and dental history and correlate with patient's diagnosis. Interpret investigation tools such as:

	A) Vitality tests	
	B) Hematological and microbiological tests	
	C) Sensitivity/Specificity measuring tests	
	D) Radiographs	
	 Diagnose and document periodontal disease. Recognize your own limits and choose appropriately when to ask for help. Point out the facts in terms, appropriate to the intellectual capacity of the patient. Outline clearly and succinctly the impact of oral health status on quality of life of the patient. 	
TREATMENT PLANNING AND PROGNOSIS	 Categorize treatment plans. Outline clearly and succinctly the impact of proposed treatment on quality of life to the patient. Appraise possible and probable outcomes of treatment options as well as the need for future supportive care, prevention and maintenance. Recognize types of prognosis 	
PLAQUE CONTROL	 Identify and describe various plaque control techniques. Explain chemical and mechanical plaque control techniques. Identify and Describe Oral hygiene instructions. Employ various adjuncts to non-surgical therapy to show rationale for use. 	
	5. Classify interdental cleaning aids.	
	6. Identify the importance of:	
	A) Toothbrush brushing techniques	
	B) Oral irrigation techniques	
	C) Disclosing agent	

PERIODONTAL INSTRUMENTATION 1. Classify periodontal instruments. 2. Identify periodontal instruments. 3. Describe the use of the various periodontal instruments. 4. Demonstrate chair side manners and techniques. 5. Demonstrate various hand grasp techniques for instruments. CHEMOTHERAPEUTIC AGENTS 1. Define antimicrobial agent. 2. Classify antimicrobial agents used in periodontal disease. 3. Identify commonly used antimicrobial agents in periodontal disease. 4. Differentiate between the use of Systemic and Local antimicrobial agents. 5. Label serial and combination antibiotic therapy. PERIODONTAL-ENDODONTIC LESION PERIODONTAL-ENDODONTIC 1. Define and classify periodontal-endodontic lesions. 2. Describe clinical features of each type. RESTORATIVE-PERIODONTAL 3. Outline treatment options for each type of lesion. GENERAL PRINCIPLES OF PERIODONTAL 1. Identify indications and contraindications for periodontal surgery. PERIODONTAL 2. Identify appropriate instruments. 3. Identify steps for patient preparation before surgery.			
3. Describe the use of the various periodontal instruments. 4. Demonstrate chair side manners and techniques. 5. Demonstrate various hand grasp techniques for instruments. CHEMOTHERAPEUTIC AGENTS 1. Define antimicrobial agent. 2. Classify antimicrobial agents used in periodontal disease. 3. Identify commonly used antimicrobial agents in periodontal disease. 4. Differentiate between the use of Systemic and Local antimicrobial agents. 5. Label serial and combination antibiotic therapy. PERIODONTAL-ENDODONTIC LESION 2. Describe clinical features of each type. RESTORATIVE-PERIODONTAL INTERACTION 3. Outline treatment options for each type of lesion. GENERAL PRINCIPLES OF PERIODONTAL Surgery 2. Identify indications and contraindications for periodontal surgery. 2. Identify appropriate instruments. 3. Identify steps for patient preparation before surgery.			
4. Demonstrate chair side manners and techniques. 5. Demonstrate various hand grasp techniques for instruments. CHEMOTHERAPEUTIC AGENTS 1. Define antimicrobial agent. 2. Classify antimicrobial agents used in periodontal disease. 3. Identify commonly used antimicrobial agents in periodontal disease. 4. Differentiate between the use of Systemic and Local antimicrobial agents. 5. Label serial and combination antibiotic therapy. PERIODONTAL-ENDODONTIC LESION PERSTORATIVE-PERIODONTAL INTERACTION GENERAL PRINCIPLES OF PERIODONTAL SURGERY 1. Identify indications and contraindications for periodontal surgery. 2. Identify steps for patient preparation before surgery.		Identify periodontal instruments	
CHEMOTHERAPEUTIC AGENTS 1. Define antimicrobial agent. 2. Classify antimicrobial agents used in periodontal disease. 3. Identify commonly used antimicrobial agents in periodontal disease. 4. Differentiate between the use of Systemic and Local antimicrobial agents. 5. Label serial and combination antibiotic therapy. PERIODONTAL-ENDODONTIC LESION PERIODONTAL-ENDODONTIC 1. Define and classify periodontal-endodontic lesions. 2. Describe clinical features of each type. RESTORATIVE-PERIODONTAL 3. Outline treatment options for each type of lesion. GENERAL PRINCIPLES OF PERIODONTAL SURGERY 1. Identify indications and contraindications for periodontal surgery. 2. Identify appropriate instruments. 3. Identify steps for patient preparation before surgery.		4. Demonstrate chair side manners and techniques.5. Demonstrate various hand grasp techniques for	
5. Label serial and combination antibiotic therapy. PERIODONTAL-ENDODONTIC LESION 1. Define and classify periodontal-endodontic lesions. 2. Describe clinical features of each type. RESTORATIVE-PERIODONTAL INTERACTION 3. Outline treatment options for each type of lesion. GENERAL PRINCIPLES OF PERIODONTAL SURGERY 1. Identify indications and contraindications for periodontal surgery. 2. Identify appropriate instruments. 3. Identify steps for patient preparation before surgery.	CHEMOTHERAPEUTIC AGENTS	 Classify antimicrobial agents used in periodontal disease. Identify commonly used antimicrobial agents in periodontal disease. Differentiate between the use of Systemic and Local 	
LESION 2. Describe clinical features of each type. RESTORATIVE-PERIODONTAL INTERACTION 3. Outline treatment options for each type of lesion. GENERAL PRINCIPLES OF PERIODONTAL SURGERY 1. Identify indications and contraindications for periodontal surgery. 2. Identify appropriate instruments. 3. Outline treatment options for each type of lesion.		-	
RESTORATIVE-PERIODONTAL INTERACTION 3. Outline treatment options for each type of lesion. GENERAL 1. Identify indications and contraindications for periodontal surgery. PERIODONTAL 2. Identify appropriate instruments. SURGERY 3. Identify steps for patient preparation before surgery.			
GENERAL PRINCIPLES OF PERIODONTAL SURGERY 1. Identify indications and contraindications for periodontal surgery. 2. Identify appropriate instruments. 3. Identify steps for patient preparation before surgery.		2. Describe clinical features of each type.	
PRINCIPLES OF surgery. PERIODONTAL 2. Identify appropriate instruments. SURGERY 3. Identify steps for patient preparation before surgery.		Outline treatment options for each type of lesion.	
SURGICAL CURETTAGE 1. Identify Rationale for treatment.	PRINCIPLES OF PERIODONTAL	surgery. 2. Identify appropriate instruments.	
	SURGICAL CURETTAGE	Identify Rationale for treatment.	
2. Describe procedure.		Describe procedure.	
3. Memorize steps of healing after surgical procedure.		Memorize steps of healing after surgical procedure.	

GINGIV		. Identify rationale or treatment. 2. Describe techniques.	
SUTURI	DONTAL DRESSING 3	Recognize types of sutures. Describe suturing techniques. Identify various types of periodontal dressing. Demonstrate the use of periodontal dressing.	
FLAP SURGE OSSEO SURGE FURCA	RY 2 US 3 RY 4 TION INVOLVEMENT 6	 Identify and classify types of flaps. Describe flap designs and techniques. Classify furcation defects Recognize Epulis removal procedure. Discuss indications and contraindications of flap surgery. Identify rationale for osseous surgery. Discuss indications and contraindications of osseous surgery. Discuss healing after periodontal surgery. 	
	ERATION (GTR)	Describe the rationality of the procedure. Describe the procedure of GTR. Classify graft materials used in periodontal therapy.	

PERIODONTAL	Identify local factors affecting periodontium.					
CONSIDERATION WITH: ORTHODONTICS	2. Express the importance of:					
ENDODONTICS PROSTHODONTIC S IMPLANTS	A) Biological width violation consequences					
O IIVII EZAVIO	B) Aesthetic tissue management					
C) Occlusal considerations in restorative therapy						
Total						

Assessment TOS/Blueprint

Sr.			No. of MCQs	Viva	OSCE
No	Topics	No. of SEQs			
1.	Periodontium in health epidemiology	-	2		
2.	Classification of periodontal diseases	-	1		
3.	I. Periodontal microbiology; dental calculus II. Host response and host bacterial interactions III. latrogenic and other local factors IV. Systemic factors	4	10		
4.	Periodontal pathogenesis I. Gingival inflammation				
	II. Periodontal pocket III. Bone loss and patterns	1	4		

5.	Periodontal diseases			
	I. Gingivitis			
	II. Acute gingival infections			
	III. Desquamative gingivitis			
	IV. Gingival enlargement			
	V. Chronic periodontitis	5	12	
	VI. Aggressive periodontitis			
	VII. Necrotizing ulcerative periodontitis			
	VIII. Systemic diseases with periodontal manifestations			
	IX. Trauma from occlusion			

6.	Periodontal diagnosis & therapy I. Periodontal diagnosis II. Treatment planning III. Plaque control IV. Periodontal instrumentation V. Chemotherapeutic agents VI. Periodontal therapy § Perio-endo lesions & treatment § Restorative periodontal interactions	2	5	
7.	Surgical Periodontology: I. Surgical curettage II. Gingivectomy	3	11	

III. Flap surgery IV. Osseous surgery V. Furcation involvement				
VI. Esthetic & plastic periodontal surgery				
Total	15	45	45	45

BDS THIRD PROFESSIONAL EXAMINATION 2007 PERIODONTOLOGY Table of Specifications

SI. No.	Contents	No. of SEQs	No. of MCQs
1.	Periodontium in Health Epidemiology		2
2.	Classification of Periodontal Diseases		1
3.	Etiology of Periodontal Disease: i. Periodontal Microbiology; Dental calculus. ii. Host response and Host Bacterial interactions. iii. Iatrogenic & other local factors. iv. Systemic factors.	4	10
4.	Periodontal Pathogenesis: i. Gingival Inflammation. ii. Periodontal Pocket. iii. Bone Loss & Patterns.	1	4
5.	Periodontal Diseases: i. Gingivitis ii. Acute Gingival Infections iii. Desquamative Gingivitis iv. Gingival Enlargement v. Chronic Periodontitis vi. Aggressive Periodontitis. vii. Necrotising Ulcerative Periodontitis. viii. Systemic Diseases with Periodontal Manifestation ix. Trauma from occlusion	5	12
6.	Periodontal Diagnosis & Therapy: i. Periodontal Diagnosis. ii. Treatment Planning. iii. Plaque Control. iv. Periodontal Instrumentation. v. Chemotherapeutic Agents. vi. Periodontal Therapy - Perio-Endo Lesions & Treatment - Restorative-Periodontal Interactions.	2	5
7.	Surgical Periodontology: i. Surgical Currettage. ii. Gingivectomy. iii. Flap Surgery. iv. Osseous Surgery. v. Furcation Involvement vi. Esthetic & Plastic Periodontal Surgery	3	11
	Total SEQs	15	45

Topic/		Assessment Method (No. of Questions)				
Content	MCQS	SEQs	Viva	OSCE		
Investigations	1	0				
Immunity	1	0				
Oral cancer and Precancer	2	1				
Oral Pigmentation	1	0				
Oral Ulceration	0	1		Observed, 8 unobserved		
Vesiculo-bullous diseases	2	1				
Salivary Gland diseases	2	1	Possible Viva Questions			
Infections	3	1				
TMJ Diseases	1	0				
Orofacial Pain	3	1				
Oral manifestations of systemic diseases	2	1				
Medical Emergencies	3	1				
Total	45		-	10		

