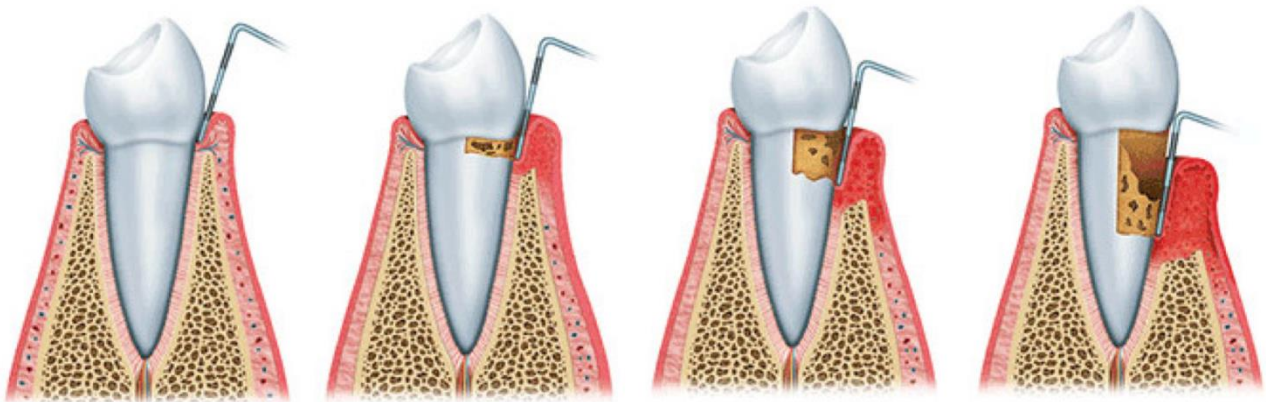




# Study Guide OF PERIODONTOLOGY

## For BDS



## **MESSAGE FROM THE PRINCIPAL**

### **AVICENNA DENTAL COLLEGE**

**Prof.Dr.Sohail Abbas Khan**

**{MDS, Dip Op (Hons) BDS}**



It is a matter of immense honour and privilege as the first Principal of Avicenna Dental College to welcome you to prospectively 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 student in accordance with the latest trends in Medical Education, and to develop them to practice dentistry in the 21<sup>st</sup> century.

While educating dental students to become licensed, empathetic and competent professionals, Avicenna Dental College endeavours 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 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 HOD, DENTAL MATERIALS



### AVICENNA DENTAL COLLEGE



DR.SOHAIB KHURSHID NOOR  
B.D.S.,M.Med.Sc.(RESTORATIVE DENTISTRY)  
ASSISTANT PROFESSOR

Periodontology is the branch of dentistry that deals with the treatment of diseases of all supporting and investing structures of the teeth. This subject forms an integral part of dental training (and is though) in the 3<sup>rd</sup> year of the BDS Programme.

We aim to train students to fully grasp the importance and basics of the healthy Periodontium, as well as diagnose, plan and execute treatment for various periodontal diseases. Students are also taught about the International Protocols for Charting, Classifying and Diagnosing diseases.

Our department is committed to providing neck region while stressing on the various etiological, clinical Radiographical and Histopathological features. Our aim is to equip the prospective dental, clinicians with the core knowledge and understanding of pathological entities of the head and neck region.

optimal non-surgical and surgical periodontal treatment, including Guided Tissue Regeneration (GTR) and Tissue Contouring. We have an active and dedicated clinical department for this purpose. Improving patient awareness regarding periodontal disease is a prime moto of the department.

## **WHAT IS A STUDY GUIDE?**

It is an aid to:

- Inform students how student learning program has been organized according to their learning objectives.
- Help students organize and manage their studies throughout the course.
- Guide students on assessment methods, rules and regulations

### **THE STUDY GUIDE:**

- Communicates information on organization and management of the course. This will help the student to contact the right person in case of any difficulty.
- Defines the objectives which are expected to be achieved at the end of the course.
- Identifies the learning strategies such as lectures, small group teachings, clinical skills, demonstration, tutorial and case-based learning that will be implemented to achieve the course objectives.
- Provides a list of learning resources such as books, computer assisted learning programs, web- links, journals, for students to consult in order to maximize their learning.

### **STUDENT'S OVERALL PERFORMANCE:**

- Includes information on the assessment methods that will be held to determine every student's

### **ACHIEVEMENT OF OBJECTIVES:**

- Focuses on information pertaining to examination policy, rules and regulations.

# **APPROVAL FOR THE COURSE**

This course has been reviewed, revised and approved by:

Pakistan Medical and Dental Council

University of Health Sciences

College Curriculum Committee

# INTRODUCTION

Department of Periodontology AVMDc was established in 2017 with the constitution of Dental Section Avicenna.

The main goal of Department is offering undergraduate study in periodontology. Since its inception it has been engaged in teaching and patient care. The faculty has contributed greatly to the development of dentistry's oldest specialty

**LOCATION:** The Department is located on the third floor of the Dental College building on campus.

**SECTIONS:** Facilities include a modern periodontal clinic fully equipped with state of the art technology and equipment, a waiting area and faculty offices

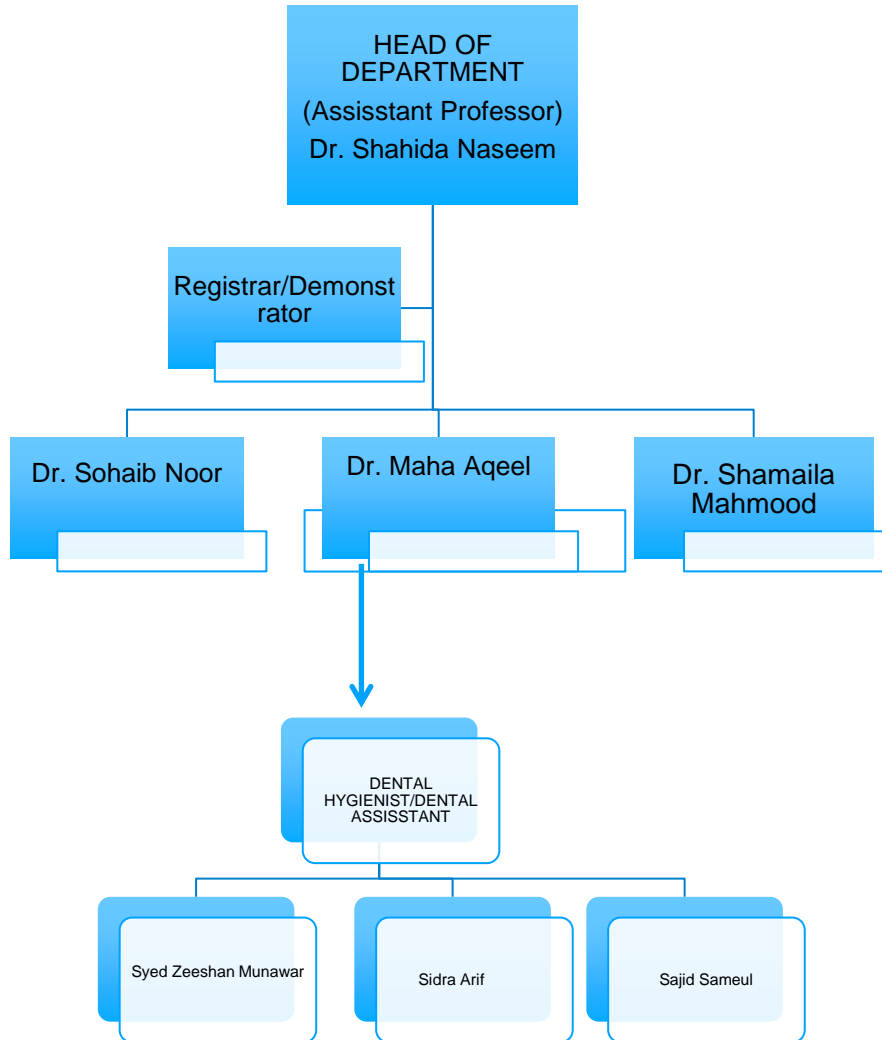
The Department aims at providing the highest level of periodontal treatment care using latest approach in a comfortable setting. The faculty aims to offer detailed and complete information to patients in a relaxed and exclusive setting. Along with training dental graduates to assess, examine and provide periodontal care for patients.

The department is currently involved in delivering undergraduate training.

## GOALS AND OBJECTIVES

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.

# ORGANOGRAM OF DEPARTMENT





# **CURRICULUM**

# AVICENNA MEDICAL & DENTAL COLLEGE

## DEPARTMENT OF PERIODONTOLOGY

### CURRICULUM

### 3RD YEAR BDS

#### PART I: BIOLOGICAL BASIS OF PERIODONTOLOGY

SERIAL NO	THEMES	LEARNING OUTCOMES
1	ANATOMY AND PHYSIOLOGY OF PERIODONTIUM	<ol style="list-style-type: none"><li>1. Describe, Label and Identify diverse anatomical features of periodontium.</li><li>2. Identify microscopic features of periodontium.</li><li>3. Describe physiology of saliva and Gingival crevicular fluid.</li><li>4. Memorise protective role of gingiva.</li><li>5. Identify and memorise blood supply, nerve supply and lymphatic drainage of periodontium of each tooth.</li></ol>
2	CLASSIFICATION OF PERIODONTAL DISEASES	<ol style="list-style-type: none"><li>1. Define gingival diseases.</li><li>2. Define periodontal diseases.</li><li>3. Tabulate gingival diseases.</li><li>4. Tabulate periodontal diseases.</li></ol>
3	AETIOLOGY OF PERIODONTAL DISEASE: PLAQUE	<ol style="list-style-type: none"><li>1. Define Plaque.</li><li>2. Describe composition, chemical and microbial structure of Plaque</li><li>3. Recall role of plaque accumulation in aetiology of periodontal disease.</li></ol>
4	PERIODONTAL MICROBIOLOGY	<ol style="list-style-type: none"><li>1. Interpret the role of bacteria in the pathogenesis of periodontal tissue destruction.</li><li>2. Identify various colonies of bacteria responsible for periodontal tissue destruction.</li><li>3. Distinguish between various coloured complexes of periodontal pathogens.</li></ol>
5	HOST RESPONSE AND HOST BACTERIAL INTERACTIONS IN PERIODONTAL DISEASE	<ol style="list-style-type: none"><li>1. Define Host Modulation.</li><li>2. Express risk factors for periodontal disease.</li><li>3. Describe Host response in Periodontal Disease.</li></ol>
6	SMOKING AND PERIODONTAL DISEASE	<ol style="list-style-type: none"><li>1. Enlist effects of smoking on aetiology and pathogenesis of periodontal disease.</li></ol>

SERIAL NO	THEMES	LEARNING OUTCOMES
7	AETIOLOGY OF PERIODONTAL DISEASE: DENTAL CALCULUS	<ol style="list-style-type: none"> <li>1. Define Calculus.</li> <li>2. Classify Calculus.</li> <li>3. Describe chemical and microbial composition of Dental calculus.</li> <li>4. Enlist the steps involved in formation of calculus.</li> <li>5. Recognise clinical significance of calculus.</li> </ol>
8	AETIOLOGY OF PERIODONTAL DISEASE: SYSTEMIC FACTORS SYSTEMIC DISEASES ASSOCIATED WITH PERIODONTAL DISEASE	<ol style="list-style-type: none"> <li>1. Identify the role of systemic diseases/conditions in the aetiology of periodontal disease.</li> <li>2. Describe clinical features of periodontal disease associated with systemic diseases/factors.</li> <li>3. Tabulate common systemic diseases or conditions that have an impact of periodontal health.</li> <li>4. Differentiate between clinical features of various systemic conditions/diseases.</li> <li>5. Recognise the role of AIDS on periodontium.</li> <li>6. Identify treatment options for gingival disease.</li> </ol>
9	GINGIVAL DISEASES	<ol style="list-style-type: none"> <li>1. Identify and Classify the types of gingival diseases.</li> <li>2. Differentiate Acute and Chronic forms of gingivitis.</li> <li>3. Describe clinical and histopathological features of gingival diseases.</li> <li>4. Identify and distinguish between various gingival diseases.</li> <li>5. Identify and Correlate clinical features of common gingival disease: <ol style="list-style-type: none"> <li>A) Acute necrotising ulcerative gingivitis</li> <li>B) Gingival desquamation</li> </ol> </li> <li>6. Recognise gingival enlargement.</li> <li>7. Tabulate types of gingival pigmentation</li> </ol>
10	EPIDEMIOLOGY OF PERIODONTAL DISEASE	<ol style="list-style-type: none"> <li>1. Define indices, including: <ol style="list-style-type: none"> <li>A) Plaque index</li> <li>B) Debris index</li> <li>C) Gingival bleeding index</li> <li>D) Sulcus index</li> <li>E) Periodontal index</li> <li>F) Community periodontal index</li> <li>E) Periodontal destructive index</li> </ol> </li> <li>2. Recognise epidemiological tools to assess periodontal conditions.</li> <li>3. Select appropriate instruments for calculating indices.</li> <li>4. Quote incidence and prevalence of periodontal diseases in the community and worldwide.</li> </ol>

SERIAL NO	THEMES	LEARNING OUTCOMES
11	PERIODONTAL PATHOGENESIS A) GINGIVAL INFLAMMATION B) PERIODONTAL POCKET C) BONE LOSS AND PATTERNS	<ol style="list-style-type: none"> <li>1. Define, Identify and Describe gingival inflammation, periodontal pocket and bone loss patterns.</li> <li>2. Describe pathogenesis of gingival inflammation, pocket formation and bone destruction patterns.</li> <li>3. Calculate clinical attachment loss.</li> <li>4. Demonstrate gingival and periodontal probing.</li> <li>5. Determine pathological signs of periodontal tissues.</li> <li>6. Interpret normal and pathological structures found on dental radiographs.</li> <li>7. Describe histopathological features associated with gingival inflammation.</li> <li>8. Label periodontal pocket</li> <li>9. Point out techniques available for detecting change in bone heights on radiographs.</li> <li>10. Identify and discuss clinical features of gingival inflammation, periodontal pocketing and bone loss patterns.</li> </ol>
12	PERIODONTAL DISEASES	<ol style="list-style-type: none"> <li>1. Enlist causative factors.</li> <li>2. Discuss histopathological changes associated with various periodontal diseases.</li> <li>3. Summarise immune reactions in pathogenesis of periodontal diseases.</li> <li>4. Describe clinical features of Aggressive and Chronic Periodontitis.</li> <li>5. Diagnose Aggressive and Chronic Periodontitis.</li> <li>6. Report differential diagnosis of Periodontal disease.</li> <li>7. Describe Acute necrotising ulcerative periodontitis.</li> <li>8. Identify and describe features of Periodontal abscess.</li> <li>9. Identify Refractory Periodontitis.</li> </ol>
13	TRAUMA FROM OCCLUSION	<ol style="list-style-type: none"> <li>1. Define Trauma from occlusion.</li> <li>2. Identify types.</li> <li>3. Indicate consequences of trauma.</li> <li>4. Examine and recall tissue response of trauma.</li> </ol>

## PART II : CLINICAL PERIODONTOLOGY

SERIAL NO	THEMES	LEARNING OUTCOMES
1	PERIODONTAL DIAGNOSIS	<ol style="list-style-type: none"> <li>1. Appraise the importance of patient's history.</li> <li>2. Express patient's personal, medical and dental history.</li> <li>3. Analyse findings of medical and dental history and correlate with patient's diagnosis.</li> <li>4. Interpret investigation tools such as:               <ol style="list-style-type: none"> <li>A) Vitality tests</li> <li>B) Haematological and microbiological tests</li> <li>C) Sensitivity/Specificity measuring tests</li> <li>D) Radiographs</li> </ol> </li> <li>5. Diagnose and document periodontal disease.</li> <li>6. Recognise own limits and choose appropriately when to ask for help.</li> <li>7. Point out the facts in terms, appropriate to the intellectual capacity of the patient.</li> <li>8. Outline clearly and succinctly the impact of oral health status on quality of life of the patient.</li> </ol>
2	TREATMENT PLANNING AND PROGNOSIS	<ol style="list-style-type: none"> <li>1. Categorise treatment plans.</li> <li>2. Outline clearly and succinctly the impact of proposed treatment on quality of life to the patient.</li> <li>3. Appraise possible and probable outcomes of treatment options as well as the need for future supportive care, prevention and maintenance.</li> <li>4. Recognise types of prognosis</li> </ol>
3	PLAQUE CONTROL	<ol style="list-style-type: none"> <li>1. Identify and Describe various plaque control techniques.</li> <li>2. Explain chemical and mechanical plaque control techniques.</li> <li>3. Identify and Describe Oral hygiene instructions.</li> <li>4. Employ various adjuncts to non-surgical therapy to show rationale for use.</li> <li>5. Classify interdental cleaning aids.</li> <li>6. Identify the importance of:               <ol style="list-style-type: none"> <li>A) Toothbrush brushing techniques</li> <li>B) Oral irrigation techniques</li> <li>C) Disclosing agent</li> </ol> </li> </ol>
4	PERIODONTAL INSTRUMENTATION	<ol style="list-style-type: none"> <li>1. Classify periodontal instruments.</li> <li>2. Identify periodontal instruments</li> <li>3. Describe the use of the various periodontal instruments.</li> <li>4. Demonstrate chair side manners and techniques.</li> <li>5. Demonstrate various hand grasp techniques for instruments.</li> </ol>

SERIAL NO	THEMES	LEARNING OUTCOMES
5	CHEMOTHERAPEUTIC AGENTS	<ol style="list-style-type: none"> <li>1. Define antimicrobial agent.</li> <li>2. Classify antimicrobial agents used in Periodontal disease.</li> <li>3. Identify commonly used antimicrobial agents in Periodontal disease.</li> <li>4. Differentiate between the use of Systemic and Local antimicrobial agents.</li> <li>5. Label serial and combination antibiotic therapy.</li> </ol>
6	PERIODONTAL-ENDODONTIC LESION RESTORATIVE-PERIODONTAL INTERACTION	<ol style="list-style-type: none"> <li>1. Define and classify periodontal-endodontic lesions.</li> <li>2. Describe clinical features of each type.</li> <li>3. Outline treatment options for each type of lesion.</li> </ol>
7	GENERAL PRINCIPLES OF PERIODONTAL SURGERY	<ol style="list-style-type: none"> <li>1. Identify indications and contraindications for periodontal surgery.</li> <li>2. Identify appropriate instruments.</li> <li>3. Identify steps for patient preparation before surgery.</li> </ol>
8	SURGICAL CURETTAGE	<ol style="list-style-type: none"> <li>1. Identify Rationale for treatment.</li> <li>2. Describe procedure.</li> <li>3. Memorise steps of healing after surgical procedure.</li> </ol>
9	GINGIVECTOMY	<ol style="list-style-type: none"> <li>1. Identify rationale or treatment.</li> <li>2. Describe techniques.</li> </ol>
10	SUTURES PERIODONTAL DRESSING	<ol style="list-style-type: none"> <li>1. Recognise types of sutures.</li> <li>2. Describe suturing techniques.</li> <li>3. Identify various types of periodontal dressing.</li> <li>4. Demonstrate the use of periodontal dressing.</li> </ol>
11	FLAP SURGERY OSSEOUS SURGERY FURCATION INVOLVEMENT	<ol style="list-style-type: none"> <li>1. Identify and classify types of flaps.</li> <li>2. Describe flap designs and techniques.</li> <li>3. Recognise Epulis removal procedure.</li> <li>4. Discuss indications and contraindications of flap surgery.</li> <li>5. Identify rationale for osseous surgery.</li> <li>6. Discuss indications and contraindications of osseous surgery.</li> <li>7. Discuss healing after periodontal surgery.</li> </ol>
13	GUIDED TISSUE REGENERATION (GTR)	<ol style="list-style-type: none"> <li>1. Describe the rationality of the procedure.</li> <li>2. Describe the procedure of GTR.</li> <li>3. Classify graft materials used in periodontal therapy.</li> </ol>
14	PERIODONTAL CONSIDERATION WITH: ORTHODONTICS ENDODONTICS PROSTHODONTICS IMPLANTS	<ol style="list-style-type: none"> <li>1. Identify local factors affecting periodontium.</li> <li>2. Express the importance of: <ol style="list-style-type: none"> <li>A) Biological width violation consequences</li> <li>B) Aesthetic tissue management</li> <li>C) Occlusal considerations in restorative therapy</li> </ol> </li> </ol>

# **STANDARD OPERATING PROCEDURES**

## **Educational Activities**

Lectures delivered to 3rd year BDS following syllabus recommended by the PM&DC and UHS and curriculum designed as per table of specification.

### **Lectures**

Delivered by senior faculty members (Assistant Professor) using all types of audio-visual aids and covering all aspects of the university syllabus.

### **Clinical demonstrations**

- Detailed History taking.
- Dental chair side extra oral & Intra Oral Examination.
- Managing Basic periodontology related cases under supervision of Registrar and Consultant.
- Developing Differential Diagnosis.
- Assisting the Consultant with complex cases.
- Running the Periodontology Department under supervision of Demonstrators.

### **Faculty Level**

- Lectures by Assistant Professors
- Clinical Demonstrations and Supervision by Registrar supervised by consultants

### **Assessments**

- Structured assessment will be carried out in the form of monthly tests, Term tests (Summative Assessment) and Send up (Formative Assessment)

Internal assessment based on

- a.Lecture attendance and Clinical assessments,
- b.Test Records both theory and clinical work

Test pattern follows UHS protocol

- a) SEQs
- a) MCQs
- a) Viva Voce
- a) OSCE

### **Feedback System**

- Meeting with parents of the students.
- Periodic filling of feedback Performa by the students.
- Encouraging the students to meet the HOD in person for their problems

### **Maintenance of record**

- In the departmental attendance, academic registers and departmental computer (to be maintained by the HOD)
  - Attendance will be marked during lectures, demonstrations and clinical rotations.
  - Patient records will be maintained in the department.

### **Strategies to tackle weak students**

- Special assignments and group discussions will be developed for weak students.
  - Monthly assessment will be followed to assess student performance and develop remedial programs.
  - Parents Teacher meetings will be held
  - Counseling.



## **RECOMMENDED BOOKS**

1. Clinical periodontology by Glickman
2. Clinical Periodontology by Manson
3. Colour Atlas of Clinical and Surgical Periodontology by Strahan & Waite
4. A Textbook of Clinical Periodontology by Jan Lindhe
5. Fundamentals of Periodontic by Thomas G. Wilson, Kenneths Kornman
6. Periodontology and Periodontics, Modern Theory and Practice by Sigurd P. Ramford Major M. Ash.

# **Innovative teaching methodology**

## **A) Online Resources**

**A)**Periodontology WhatsApp group

**B)**YouTube channels

**C)**Websites

A.Hackdentistry.com

B.Peribasics.com

## **B) Leadership program**

Student leadership activities focus on improving the quality of learning within each subject. The Head of department has therefore decided to give students the opportunity to lead. Head of department will oversee and quality assure the activities assigned to the students.

In regard to this, the entire class is divided into 10 groups of 5-6 students each. Each group has been designated a particular topic on which they are going to prepare and deliver a power point presentation as per the schedule attached with this notice. This is a compulsory activity, the marks of which are going to be added in the internal assessment of each student.

Every group is allotted a Group Leader (**GL**). The following leadership skills will be evaluated in each group;

- Initiative
- Decision Making
- Communication Skills
- Teamwork
- Problem Solving

- Time management
- Independent thinking.

## ONLINE STUDY GUIDES

← Periodontology

Periodontology  
Qunoot Tariq

18 videos · Sort

Microscopic Anatomy of Alveolar Bone  
10:14

Perio Week 1 Ch 1-4 Part 3 Periodontal...  
Edilia Marshall, DMD,...

ANATOMY OF GINGIVA  
PERIO CLASSROOM  
9:24

Periodontal Ligament  
13:03

Treatment of periodontal diseas...  
Clínica Médico Dental...

Home Trending Subscriptions Inbox Library

periobasics.com

home contents mcq's discussions

Welcome to periobasics.com  
(Everything you want to know about periodontics and implantology)

Basic Sciences  
Basic Periodontology  
Clinical Periodontology  
Implantology  
Recent Research  
Short Notes  
Videos  
Recent Posts

Textbook of Basic Sciences for MDS Students  
Author: Dr. Nitin Saroch  
Edition: First  
Total number of pages: 514  
Dimensions: (12L X 10B X 1.5H) in inches

For India Users: (INR 1050 Including Shipping Charges)  
Checkout With Instamojo

For International Users: USD 70 including Shipping

YouTube

periodontology channels

Gingivitis and periodontitis - causes, symptoms, diagnosis, treatment, pathology  
65K views · 1 year ago

Periodontics | Diagnosis & Periodontal Exam | NBDE Part II  
6.9K views · 4 months ago

MCQs on Periodontal  
World of Dentistry · 3.9K views · 1 year ago

hackdentistry.com

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Read smart,  
Comprehend better and  
have Fun Learning

# **INTERNAL ASSESSMENT**

## **POLICY OF INTERNAL ASSESSMENT OF PERIODONTOLOGY**

- 1) Continuous internal assessment consists of appropriate evaluation at the end of each assignment, term, major/monthly test or course of the curriculum. Proper records of internal evaluations should be maintained and the scores obtained in these tests should contribute 10% to the final total score of the candidates; that 10% may include class tests, monthly test, send-up, assignment, presentations and OSCE/VIVA which all have specific marks allocation.
- 2) Final university examination of each subject should contribute 90% to the total score, and the students should secure passing marks on the aggregate of the total marks.
- 3) 10% marks of internal evaluation will be added in theory of semester exam. Students should know what is expected of them. They should be able to identify the characteristics of a satisfactory answer and understand the relative importance of those characteristics. This can be achieved in many ways; you can provide feedback on assignments, describe your expectations in class, or post model solutions.
- 4) No grace marks should be allowed in any examination.
- 5) Written examinations consist of MCQ's, short structured essays, (according to curriculum) and questions.
- 6) During the course, students will be assessed to determine achievement of course objectives. The test will be scheduled on completion of each chapter. The method of examination comprises of theory exam, which includes SEQs, MCQS, practical (Objective Structured Practical Examination) and viva voce.

## INTERNAL ASSESSMENT OF 3<sup>RD</sup> YEAR

The internal assessment of 3<sup>rd</sup> year consist of the following pattern:

SR.NO	MARKS DISTRIBUTION
CLASS TEST	2.5
MAJOR TEST	5
OSCE AND VIVA	5
ASSIGNMENT/PRESENTATION	2.5
TERM EXAM	5
<b>TOTAL MARKS</b>	<b>20</b>

# STUDENT INTERNAL ASSESSMENT REPORT

1. Name of the Student: \_\_\_\_\_
2. Roll No. \_\_\_\_\_
3. Father Name: \_\_\_\_\_
4. Session: \_\_\_\_\_

## I. Subject of PERIODONTOLOGY Attendance

- a) Theory \_\_\_\_\_
- b) Clinical Rotation \_\_\_\_\_

## II. Academic Performance: -

TESTS	Total Marks	Marks Obtained	Percentage	Remarks
<b>Class Tests</b>	1.			
	2.			
	3.			
	4.			
	5.			
<b>Monthly Assessment</b>	1.			
	2.			
	3.			
	4.			
	5.			
<b>Term Tests</b> 1 <sup>st</sup> Term				
	2 <sup>nd</sup> Term			
	3 <sup>rd</sup> Term			
<b>OSCE</b>				
1.				
2.				
3.				
<b>VIVA</b>				
1.				
2.				
3.				
<b>POWERPOINT PRESENTATION BY STUDENTS</b>				
<b>SEND UP EXAMINATION</b>				
<b>INTERNAL ASSESSMENT SCORE</b>				
<b>GENERAL CONDUCT</b>				

**III. ATTENDANCE RECORD:**

	Total	Attendance	Percentage
<b>LECTURES &amp; DEMONSTRATIONS</b>			
<b>CLINICAL ROTATION</b>			

REMARKS:

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Dr Shahida Naseem  
Head of Periodontology Department  
Avicenna Medical & Dental College, Lahore.

**DISTRIBUTION OF MARKS FOR THIRD PROFESSIONAL EXAM**



The method of examination and distribution of the 200 marks shall be as follows:

**Written Examination:**

One paper of 100 marks comprising of an MCQ section of 45 marks (45 MCQs of 1 mark each) and SEQ section of 45 marks (comprising of 15 SEQs of 3 marks each and **10 marks of internal assessment**)

**Practical Examination:**

1. The distribution of marks in the clinical and oral examination shall be as follows:

Total Oral and Clinical Examination	Total 100 Marks
<ul style="list-style-type: none"><li>• <b>Internal Assessment</b></li></ul>	<b>10 Marks</b>
<ul style="list-style-type: none"><li>• Structured viva voce</li></ul>	<b>45 marks</b>
	<b>(20 internal examiner)</b>
	<b>(25 external examiner)</b>
<ul style="list-style-type: none"><li>• Clinical long case (OSCE)</li></ul>	<b>45 marks</b>
History taking = 5 marks	
Clinical examination and treatment planning = 15 marks	
Differential diagnosis =5 marks	
Clinical skills, patient instructions, patient motivation, chair side manners, chair positioning = 20 marks	

**CURRICULUM**

**OF**

**B.D.S**

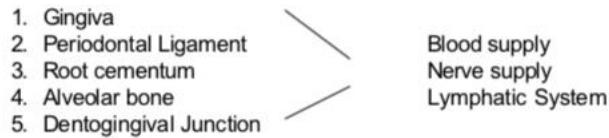


Prepared by:  
**PAKISTAN MEDICAL & DENTAL COUNCIL**  
&  
**HIGHER EDUCATION COMMISSION**  
**ISLAMABAD**

Introduction to Periodontology

1. Knowledge of healthy periodontium macro and micro anatomy and physiology of periodontium.

43



2. Epidemiology of Periodontal diseases.

- a) Plaque index
- b) Debris index
- c) PMA index
- d) Gingival index
- e) Sulcus bleeding index
- f) Periodontal index
- g) Periodontal destructive index
- h) Community Periodontal index of treatment need (CPITN)

3. Etiology of periodontal diseases

- A) Dental plaque
  - a) Definition
  - b) Composition
  - c) Maturation
  - d) Structure
  - e) Plaque microbiology

	Classification
	a) Supragingival
	b) Subgingival
- B) Dental Calculus
  - a) Origin and composition
  - b) Mode of attachment
  - c) Mineralization
  - d) Clinical significance of calculus

4. Microbiology of Plaque associated Periodontal diseases.
  5. Histopathogenesis of Plaque associated Periodontal diseases.
  6. Host response in Periodontal Disease  
Hypersensitivity reaction cell mediated and Humoral immunity.
  7. Classification of Periodontal Diseases  
Clinical significance of Dental Plaque in the formation of gingivitis
- A) Acute Gingivitis  
Signs and symptoms of acute gingivitis and different types of gingivitis.
    - a) Traumatic gingivitis
    - b) Acute Necrotizing gingivitis

44

- c) Acute Herpetic - gingivo stomatits
- d) Circum coronitis
- e) Streptococcal gingivitis

(With their etiological factors and treatment)

- B) Chronic Gingivitis  
 Specific and Non-specific gingivitis  
 Specific Gingivitis
- |    |             |  |            |
|----|-------------|--|------------|
| ?? | T.B.        |  | gingivitis |
| ?? | Syphilitic  |  |            |
| ?? | Plasma cell |  |            |
| ?? | Allergic    |  |            |

Emphasis should be given towards.

- a) Gingival Bleeding
- b) Gingival texture
- c) Gingival consistency
- d) Gingival swelling (Hyperplasia)
- e) Gingival Recession
- f) Gingival Pigmentation

8. Desquamative Gingivitis.

- a) Definition, clinical features in the form of
- b) Mild, moderate and severe form of Desquamative Gingivitis.
  - i. Nutritional factors
  - ii. Hormonal factors
  - iii. Dermatological condition
  - iv. Chemotherapeutic agents
  - v. Fungal infection

9. Periodontal Pocket.

- A)
  - a) Definition
  - b) Soft tissue wall of Periodontal pocket
  - c) Hard tissue wall of Periodontal pocket
  - d) Pocket content.
- B) Classification of periodontal pocket
  - a) Suprabony pocket
  - b) Infrabony pocket
- C) Bone loss and pattern of bone loss in periodontal disease.

10. Periodontitis
  - A) Adult onset periodontitis (Slowly Progressional Periodonitits)
  - B) Rapidly Progressive Periodontitis
    - a) Early onset Periodontitis
      - i. Prepubertal Periodontitis
      - ii. Juvenile Periodontitis
    - b) Adult onset rapidly Progressional Periodontitis.
  - C) Necrotizing Periodontitis
    - i. AIDs Related
    - ii. Non AIDs Related
  - D) Refractory Periodontitis
  - E) Trauma from Occlusion  
Definition
    - i. Acute & Chronic trauma
    - ii. Primary & Secondary trauma
    - iii. Consequences of trauma
    - iv. Tissue Response of trauma
  - F) Periodontal manifestation of Systemic diseases.  
  
(Different systemic diseases are discussed with respect to periodontal manifestation)
11. Tumour and Tumour like lesions of the Periodontium.
12. Periodontal Abscess and treatment  
Acute Chronic
13. Periodontium and AIDs
14. Furcation involvement in Periodontal disease  
Classification  
Management
15. Periodontal Consideration with:
  1. Orthodontics
  2. Endodontics
  3. Removable Prosthodontics
  4. Fixed Prosthodontics
  5. Implants

16. GTR (Guided Tissue Regeneration)  
Introduction, knowledge and the techniques.
17. Diagnosis of Cause Related Disease.
  - a) History taking
  - b) Examination of the Oral Cavity
  - c) Importance should be given to the periodontitis.
  - d) Differential Diagnosis
  - e) Plaque Recognition
    - i. Visualization with naked eyes.
    - ii. Visualization with disclosing agents.
  - f) Treatment Planning
    - i. Mechanical control of Dental Plaque
      - Motivation, education and instruction.
      - Interdental cleaning (AIDs)
      - Scaling and root palning with advantages and disadvantages.
  - g) Chemical control of dental Plaque
    - i. Chemotherapeutic agents for topical and systemic administration.
18. Re-evaluation of the cause related therapy, surgical control of dental Plaque.
  - A) Aims and objectives of periodontal therapy.
    - i. Local Anaesthesia in Periodontal Surgery
    - ii. Instruments for periodontal surgery procedures
    - iii. Periodontal probing impact and radiographic interpretation.
    - iv. Sterilization, universal precautionary measures
  - B) Indications and contra indications of periodontal surgery.
 

Surgical Procedures

    - i. Curattage
    - ii. Gingivectomy with different modalities
    - iii. Flap Surgery with different modalities
    - iv. Muco gingival Problem
      - Soft tissue graft
      - Pedical graft or displaced flap
      - Free gingival graft
      - Crown lengthening procedure
      - Vestibular widening procedure
      - Frenectomy
19. Periodontal dressing

20. Periodontal Suturing
21. Periodontal treatment of medically compromised patients
22. Occlusal Analysis
  - i. Diagnosis of Occlusal trauma
  - ii. Occlusal Adjustment
  - iii. Splinting

**Clinical & Practical Work**

1. Knowledge of the objectives of Periodontal therapy.
  - ?? Elimination of local etiological factor
  - ?? Elimination of periodontal pocket
  - ?? Establishment of normal Physiolocal architecture of periodontium
  - ?? To be able to interpret Findings of medical and dental history and relate this to periodontal diagnosis and treatment
2. To be able to secure a good dental history pertaining to:
  - a) Past Periodontal treatment.
  - b) Present oral hygiene habits
  - c) Past present oral habits
  - d) Presence of Hypersensitive teeth
  - e) Past extraction (Reason)
  - f) Past Restorative treatment, filling types, fixed/removal restoration.
  - g) Past orthodontic treatment
  - h) Family Dental history
3. Detailed clinical examination and charting of the Periodontium i.e. accurate probing.
  - ?? To be able to recognize problems of an inadequate width and attached gingival .
4. Shallow vestibule
  - ?? High muscle frenum attachment
    - a) Scaling manual
    - b) Root Planning
    - c) Polishing

**BDS THIRD PROFESSIONAL EXAMINATION  
PERIODONTOLOGY  
(MCQs + SEQs)  
TABLE OF SPECIFICATIONS (TOS)**

Sr. No	Topics	No. of SEQs	% (x)	No. of MCQs	% (y)	Combined % (x + y)
1.	Periodontium in health epidemiology	-	-	2	5%	5 %
2.	Classification of periodontal diseases	-	-	1	2.5%	2.5%
3.	Etiology of periodontal disease:  I. Periodontal microbiology; dental calculus II. Host response and host bacterial interactions III. Iatrogenic and other local factors IV. Systemic factors	4	26%	10	22%	24 %
4.	Periodontal pathogenesis  I. Gingival inflammation II. Periodontal pocket III. Bone loss and patterns	1	6.7%	4	9%	7 %
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 manifestations IX. Trauma from occlusion	5	34%	12	26.5 %	30 %
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	13%	5	11%	12%
7.	Surgical Periodontology:  I. Surgical curettage II. Gingivectomy III. Flap surgery	3	20%	11	24%	22 %



	IV. Osseous surgery V. Furcation involvement VI. Esthetic & plastic periodontal surgery					
	<b>Total</b>	<b>15</b>	<b>100%</b>	<b>45</b>	<b>100</b>	<b>100% app.</b>

**BDS THIRD PROFESSIONAL EXAMINATION 2007**  
**PERIODONTOLOGY**  
**Table of Specifications**

<b>Sl. No.</b>	<b>Contents</b>	<b>No. of SEQs</b>	<b>No. of MCQs</b>
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 Curettage. ii. Gingivectomy. iii. Flap Surgery. iv. Osseous Surgery. v. Furcation Involvement vi. Esthetic & Plastic Periodontal Surgery	3	11
<b>Total SEQs</b>		<b>15</b>	<b>45</b>

# UNIVERSITY OF HEALTH SCIENCES

## SYLLABUS FOR PERIODONTOLOGY

Revised Curriculum of BDS - 2003

### PERIODONTOLOGY

Historical background of Periodontology  
The normal Periodontium  
Classification and epidemiology of periodontal disease  
Etiology of periodontal disease  
Periodontal microbiology  
Host response and host-bacterial interactions in periodontal disease  
Dental calculus  
Systemic diseases and the Periodontium  
Gingival inflammation  
Acute gingival infections  
Gingival abscess  
AIDS and the periodontium  
Gingival enlargements  
Desquamative gingivitis  
Periodontitis: classification, presentation and diagnosis  
Periodontal abscess  
Periodontal pockets  
Bone loss and patterns of bone loss  
Diagnosis and treatment planning:

- Clinical diagnosis
- Radiographic diagnosis
- Advanced diagnostic aids

Treatment planning and determining prognosis of periodontal disease  
Plaque control  
Periodontal instrumentation  
Principles of oral prophylaxis, root planning and curettage  
Antimicrobials and other chemotherapeutic agents in periodontal therapy  
Surgical periodontal therapy

- Surgical curettage
- Gingivectomy
- Flap surgery
- Osseous surgery

Supportive periodontal therapy  
Periodontal-restorative inter-relationships

### Clinical Assignments:

Clinics in Periodontology

### Recommended Books

Clinical Periodontology (Glickman) Caranza & Newman  
*Outline of Periodontics*, Manson & Eley (4th Edition) Publisher: Wright  
*Guide to Periodontics*. Jenkins, Allan & Collins Publisher: Heinemann  
Color atlas of clinical and surgical periodontology by Straphang & Waite.  
A text book of clinical periodontology by Jan Lindhe  
Fundamentals of periodontics by Thomas G. Wilson Kenneths Korman.  
Periodontology and Periodontics, Modern Theory and Practice by Sigurd P. Ramford Major  
M. Ash.