



Institute of Dentistry,
CMH Lahore Medical College
Study Guide 2023/24
PERIODONTOLOGY
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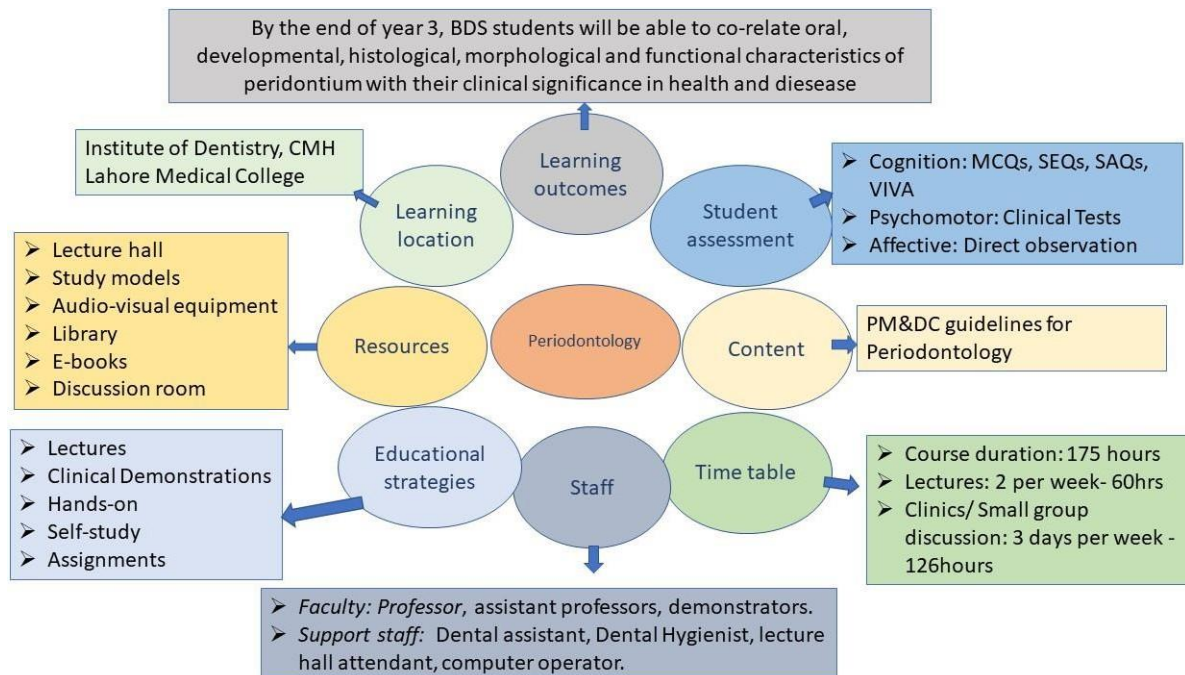
Introduction to Periodontology

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INTRODUCTION TO PERIODONTOLOGY

Periodontology is the specialty of dentistry that studies supporting structures of teeth, as well as diseases and conditions that affect them. The supporting tissues are known as the periodontium, which includes the gingiva (gums), alveolar bone, cementum, and the periodontal ligament.

CURRICULAR MAP OF PERIODONTOLOGY



Resources

- a. Teaching resources
- b. Infrastructure resources

Teaching resources

Sr. #.	Faculty Name	Department as per PM & DC certificate	Qualification
1	Dr. Yousaf Athar	Associate professor	BDS, MSc
2	Dr. Aneela Shabbir	Senior Registrar	BDS. MSc
3	Dr. Kashmala Sajid	Demonstrator	BDS
4	Dr. Muhammad Bin Shahid	Demonstrator	BDS
5	Dr. Sana Akhtar	Demonstrator	BDS

Infrastructure resources

Sr. #.	Infrastructure Resources	Quantity
1	Operating Halls	• 1
2	Dental Units <ul style="list-style-type: none">• Periodontology clinic	• 20
3	Dental Stools <ul style="list-style-type: none">• Periodontology	• 20
5	Reception	1
6	Mini Library	1
7	Staff Room	1
8	Dental stores	1

Supporting staff

Serial No.	Name	Designation
1	Najam Ejaz	Dental Hygienist
2	Akif Sajid	Dental Hygienist
3	Farooq Ali	Dental Surgery Assistant
4	Ahmad Raza	Dental Surgery Assistant
5	Zainab Atique	Computer Operator

Teaching and Learning Strategies

Multiple educational methods will be used comprising of self-study, interactive lectures, group discussions, practical, and manual dexterity skill sessions.

(i) Methods for achieving cognitive objectives

- Interactive lectures using audio visual aids on power point presentation
- Group discussions in form of large group and small group
- Collaborative learning
- Self-study and reading from learning resources

(ii) Methods for achieving psychomotor objectives

- Theoretical information provided in lectures
- Clinical demonstrations provided by teaching faculty on models and patients
- Supervised practice on patients

(iii) Methods for achieving affective objectives

- Interaction with peers, group members, teachers, support staff etc.
- Group discussions (small and large)
- Oral presentations by students

Learning Methodologies

The following teaching /learning methods are used to promote better understanding:

- Interactive lectures
- Clinics/ Practical
- Skill sessions
- Small group discussions
- Self-directed learning
- Assignments
- Oral presentations by students

Interactive lectures

In large group, the lecturer introduces a topic which explains the underlying phenomena through questions, pictures, exercise, etc. Students are actively involved in the learning process.

Small group discussions

This format helps students to clarify concepts and acquire skills and attitudes. Students exchange opinions and apply knowledge gained from lectures and self-study. The facilitator role is to ask probing questions, summarize, or rephrase to help clarify concepts.

Practical

In practical sessions students observe demonstrations from faculty members on proper instrument use and handling both inside and outside the patients mouth. The students are trained in diagnosing and treating a periodontal disease as per protocols set by the department.

Skill session

Students are required to practice suturing techniques on inanimate materials.

Self- directed learning

Students' take responsibilities of their own learning through individual study, sharing and discussing with peers, seeking information from Learning Resource Center, teachers and resource persons within and outside the college. Students can utilize the time within the college scheduled hours or afterwards for self-study.

Assignments

Students are given written formative assignments on designated topics. Revision of the topics already covered by anatomy and physiology departments are given to students as oral presentations.

Oral presentations by students

Students are assigned topics during revision session to enhance their communication skills and group learning.

CURRICULUM IMPLEMENTATION

Curriculum implementation refers to putting into practice the official document including course content, objectives, learning and teaching strategies. Implementation process helps the learner to achieve knowledge, skills and attitudes required of the learning tasks. Learners are a pertinent component of the implementation process. Implementation occurs when the learner achieves the intended learning experiences, knowledge, ideas, skills and attitudes which are aimed to make the learner an effective part of the society. Curriculum implementation also refers to the stage at which curriculum is put into effect. There has to be an implementing agent as well. Teacher is an important part of this process and implementation of the curriculum is the way the teacher selects and utilizes various components of the curriculum. Implementation occurs when the teacher's formulated course content, teacher's personality and teaching and learning environment interact with the learners. Therefore, curriculum implementation is how the officially planned course of study is translated and reflected by the teacher into schemes of work, lesson plans, syllabus and resources are effectively transferred to the learners. Curriculum implementation can be affected by certain factors such as teachers, learners, learning environment, resource materials and facilities, culture and ideology, instructional supervision and assessments.

Personnel involved in teaching and facilitation

(i) Lectures delivery by:

Dr Yousaf Athar (Associate Professor)

(ii) DEMONSTRATORS for practical and small group discussion sessions:

Dr Kashmala Sajid

Dr Muhammad Bin Shahid

Dr Sana Akhtar

(iii) Support staff: 3 (2 Dental hygienists, 2 Dental Assistant)

(iv) Computer assistant: 1 as nominated by the college

Time frame

Course duration:

- Lectures: 36 weeks
- Clinical rotations: 9 weeks per rotation

Lectures:

- Tuesday (9:00 to 10:00am)
- Thursday: (8:00 to 9:00 am)

Practical/ clinical visits:

- Tuesday and Thursday (10:00 to 3:00 pm)
- Friday (10:00 to 3:00 pm) with 1 pm to 2 pm Prayer break

Course Outline

Section - 1 The Normal Peridontium, Classification and Epidemiology of periodontal disease.

This section deals with the basic anatomy and physiology of the peridontium and gives an overview of how to classify patients into different categories of periodontal disease. The incidence, distribution, and possible control of periodontal diseases and other factors relating to health are also included in this topic.

Section – 2 Etiology of periodontal disease

This subject includes the role of microbiology in periodontal disease and its interaction with the host and its response in return. The influence of iatrogenic and systemic factors an dental deposits and how they contribute towards periodontal disease is also covered here.

Section – 3 Periodontal pathogenesis.

This area deals with the pathogenesis of periodontal pocket, bone loss and explains the detail of the phases of gingival inflammation.

Section – 4 Periodontal diseases.

This domain discusses in detail the diagnosis, pathogenesis, management and complications of various periodontal diseases including autoimmune and acute periodontal conditions.

Section – 5 Periodontal Examination, Diagnosis and Therapy

This subject deals with the details of history taking, periodontal investigations and diagnosis. The instruments, procedures and chemotherapeutic agents used to manage the periodontal diseases non surgically are also covered under this topic.

Section – 6 Surgical Periodontology

This subject deals with the details of periodontal surgery, which includes the armamentarium, preparation, techniques, and postoperative healing of curettage, gingivectomy, gingivoplasty and various flap and bone surgeries. It also includes regenerative and periodontal plastic and esthetic surgeries.

Section – 7 Dental Implants

This topic involves the basic knowledge of dental implants for students at an undergraduate level teaching then the basic introduction, rationale , treatment planning and complications of implants.

Section – 8 Supportive Periodontal Care

This subject deals with the explaining management of patient with periodontal disease post surgical and non-surgical treatment and maintaining their oral hygiene. Details of patient referral are also discussed is also covered under this domain.

Topic and Exam Weightage

Topic	Weightage (%age)
The Normal Peridontium and Classification and Epidemiology of Periodontal diseases	11
Etiology of Periodontal Disease	11
Periodontal Pathogenesis	11
Periodontal Disease	21
Periodontal Examination, Diagnosis and Therapy	11
Surgical Periodontology	11
Dental Implants	11
Supportive Periodontal Care	13

Topic	Lecture	Clinical
	Hour Weightage (hrs)	Hour Weightage (hrs)
The Normal Peridontium and Classification and Epidemiology of Periodontal diseases	6.6	14
Etiology of Periodontal Disease	6.6	14
Periodontal Pathogenesis	6.6	14
Periodontal Disease	12.6	26.5
Periodontal Examination, Diagnosis and Therapy	6.6	14
Surgical Periodontology	6.6	14
Dental Implants	6.6	14
Supportive Periodontal Care	7.8	16.5
Total	60	127

TOPICS AND OBJECTIVES	FACULTY	LEARNING DOMAIN (CPA)	LEARNING STRATEGY	ASSESSMENT				
				Clinical	Viva	OSPE	NUMS MCQs	NUMS SEQs
Periodontology								
1. THE NORMAL PERIODONTIUM, CLASSIFICATION AND EPIDEMIOLOGY OF PERIODONTAL DISEASES						X	3	1
<ul style="list-style-type: none"> Explain development of the tooth supporting apparatus 	Dr. Yousaf Athar	C	Interactive lecture/small group discussion					
<ul style="list-style-type: none"> Explain anatomy of Periodontium 		C	Interactive lecture/small group discussion					
<ul style="list-style-type: none"> Correlate the microscopic features and clinical features of the periodontium 		C	Interactive lecture/small group discussion					
<ul style="list-style-type: none"> Understand the nerve and vascular supply of the periodontium 		C	Interactive lecture/small group discussion					
<ul style="list-style-type: none"> Explain effects of Aging on the normal periodontium 		C	Interactive lecture					
<ul style="list-style-type: none"> Explain gingival diseases (plaque and non plaque induced gingivitis and periodontitis along with classification) 		CPA	Interactive lecture/case-based discussion					
<ul style="list-style-type: none"> Discuss developmental and acquired deformities along with mucogingival deformities around teeth 		C	Interactive lecture/small group discussion					

<ul style="list-style-type: none"> Discuss the definition of epidemiology. 		C	Interactive lecture/small group discussion					
<ul style="list-style-type: none"> Explain how to diagnose periodontal diseases and difference between chronic and aggressive periodontitis 		C	Interactive lecture/small group discussion					
ETIOLOGY OF PERIODONTAL DISEASE						X	3	1
PERIODONTAL MICROBIOLOGY								
<ul style="list-style-type: none"> Discuss diversity of intraoral surfaces for bacterial adhesion and structure and composition of dental plaque 	Dr. Aneela Shabbir	C	Interactive lecture/case-based discussion					
<ul style="list-style-type: none"> Discuss plaque formation at ultrastructural level and growth dynamics of plaque 		C	Interactive lecture/ small group discussion					
<ul style="list-style-type: none"> Discuss different properties of dental plaque and association of plaque micro organisms with periodontal diseases 		C	Interactive lecture/small group discussion					
<ul style="list-style-type: none"> Explain the role of calculus and other predisposing factors 		C	Interactive lecture/case-based discussion					
HOST RESPONSE AND HOST BACTERIAL INTERACTIONS								

<ul style="list-style-type: none"> • Identification of cells of immunity and inflammation. 	Dr. Yousaf Athar	C	Interactive lecture/ small group discussion					
<ul style="list-style-type: none"> • Discuss mechanism of migration and functioning of leucocytes 		C	Interactive lecture/ small group discussion					
<ul style="list-style-type: none"> • Discuss different microbial aspects of microbial host interaction and microbiology and immunology in periodontal diseases 		C	Interactive lecture/ small group discussion					
<ul style="list-style-type: none"> • Discuss toll like receptors and innate immunity response 		C	Interactive lecture/ small group discussion					
<ul style="list-style-type: none"> • Discuss similarities between periodontal diseases and other chronic inflammatory diseases 		C	Interactive lecture/case-based discussion					
<ul style="list-style-type: none"> • Discuss host response and potential targets for host modulation 		C	Interactive lecture/ small group discussion					
<ul style="list-style-type: none"> • Explain host modulatory therapy 		C	Interactive lecture/ small group discussion					
SYSTEMIC FACTORS								
<ul style="list-style-type: none"> • Treatment of medically compromised patients 	Dr. Yousaf Athar	CPA	Interactive lecture/case-based discussion/ Clinics					

<ul style="list-style-type: none"> Influence of systemic disorders and stress on periodontium 	Dr. Aneela Shabbir	CPA	Interactive lecture/case-based discussion/ Clinics					
IATROGENIC AND OTHER FACTORS								
<ul style="list-style-type: none"> Overview of factors predisposing to periodontal disease (local and systemic) 	Dr. Yousaf Athar	CPA	Interactive lecture/case-based discussion/ Clinics					
DENTAL DEPOSITS								
<ul style="list-style-type: none"> Explain origin, composition, formation and mode of attachment of calculus 		C	Interactive lecture/ small group discussion/ Clinics					
<ul style="list-style-type: none"> Classify and differentiate supra and sub-gingival calculus 	Dr. Aneela Shabbir	CPA	Interactive lecture/case-based discussion/ Clinics					
<ul style="list-style-type: none"> Explain theories of mineralization 		C	Interactive lecture/ small group discussion / Clinics					
<ul style="list-style-type: none"> Clinical significance of calculus 		CPA	Interactive lecture/case-based discussion/ Clinics					
<ul style="list-style-type: none"> Dental Stains, Materia Alba, Dental pellicle 		CPA	Interactive lecture/case-based discussion/ Clinics					
PERIODONTAL PATHOGENESIS						X	3	1

			discussion / Clinics					
<ul style="list-style-type: none"> Factors determining bone morphology in periodontal disease Bone destruction patterns in periodontal disease 			Interactive lecture/ small group discussion / Clinics					
PERIODONTAL DISEASES						X	4	2
GINGIVITIS								
<ul style="list-style-type: none"> Explain clinical findings of gingivitis including gingival bleeding on probing, color changes, changes in consistency and surface texture 	Dr. Aneela Shabbir	CPA	Interactive lecture/case-based discussion/ Clinics					
<ul style="list-style-type: none"> Explain changes in position of gingiva and changes in gingival contour 		CPA	Interactive lecture/case-based discussion/ Clinics					
<ul style="list-style-type: none"> Role of Saliva 		CPA	Interactive lecture/ small group discussion / Clinics					
<ul style="list-style-type: none"> Explain the composition, formation and methods of collection of GCF 		CPA	Interactive lecture/ small group discussion / Clinics					

<ul style="list-style-type: none"> Clinical significance of Sulcular fluid 		CPA	Interactive lecture/case-based discussion/ Clinics					
ACUTE PERIODONTAL CONDITIONS								
<ul style="list-style-type: none"> Explain the clinical features, microbiology involved, diagnosis, treatment and complications of pericoronitits 	Dr. Yousaf Athar	C	Interactive lecture/case-based discussion/ Clinics					
<ul style="list-style-type: none"> Explain the clinical features, microbiology involved, diagnosis and treatment of Primary Herpetic Gingivostomatitis 		C	Interactive lecture/case-based discussion					
<ul style="list-style-type: none"> Explain the etiology, clinical features, microbiology involved, diagnosis and treatment of Necrotizing ulcerative Gingivitis 		C	Interactive lecture/case-based discussion					
DESQUAMATIVE GINGIVITIS								
<ul style="list-style-type: none"> Diagnosis of Desquamative gingivitis 	Dr. Aneela Shabbir		Interactive lecture/case-based					

<ul style="list-style-type: none"> Diagnose, differentiate and treat Lichen Planus, Pemphigoid, Pemphigus Vulgaris, Chronic Ulcerative Gingivitis, Linear IgA disease, Lupus erythmatoses, Dermatitis Herpetiformis and Erythema Multiforme . 		C	discussion					
<ul style="list-style-type: none"> Drug Eruptions 		C						
<ul style="list-style-type: none"> Conditions mimicking Desquamative Gingivitis 		C	Interactive lecture/case-based discussion					
GINGIVAL ENLARGEMENTS								
<ul style="list-style-type: none"> Classify Gingival Enlargements. 	Dr. Yousaf Athar	CPA	Interactive lecture/case-based discussion/ Clinics					

<ul style="list-style-type: none"> Explain the pathophysiology of different types of gingival enlargements 		C	Interactive lecture/ small group discussion / Clinics					
<ul style="list-style-type: none"> Explain the microscopic and histopathological features. 		C	Interactive lecture/ small group discussion / Clinics					
<ul style="list-style-type: none"> Determine a treatment plan for all types of Gingival Enlargements 		CPA	Interactive lecture/case-based discussion/ Clinics					
<ul style="list-style-type: none"> Management 		CPA	Interactive lecture/case-based discussion/ Clinics					
CHRONIC PERIODONTITIS								
<ul style="list-style-type: none"> Explain and Correlate Clinical and histopathological features of Chronic Periodontitis 	Dr. Aneela Shabbir	CPA	Interactive lecture/case-based discussion/ Clinics					
<ul style="list-style-type: none"> Explain the disease distribution 		CPA	Interactive lecture/case-based discussion/ Clinics					
<ul style="list-style-type: none"> Management of Chronic Periodontitis 		CPA	Interactive lecture/case-based discussion/ Clinics					
<ul style="list-style-type: none"> Risk factors for disease 		CPA	Interactive lecture/case-based discussion/					

			Clinics					
AGGRESSIVE PERIODONTITIS								
<ul style="list-style-type: none"> Clinical features, general characteristics, disease distribution, background and management of aggressive periodontitis 	Dr. Yousaf Athar	CPA	Interactive lecture/case-based discussion/ Clinics					
<ul style="list-style-type: none"> Risk factors for disease 		C	Interactive lecture/case-based discussion/ Clinics					
NECROTISING ULCERATIVE GINGIVITIS AND PERIODONTITIS								
<ul style="list-style-type: none"> Etiology, clinical features, microbiology involved, diagnosis and treatment of Necrotizing Ulcerative Gingivitis 	Dr. Aneela Shabbir	C	Interactive lecture/case-based discussion					
<ul style="list-style-type: none"> Etiology, clinical features, microbiology involved, diagnosis and treatment of Necrotizing Ulcerative Periodontitis 			Interactive lecture/case-based discussion					
TRAUMA FROM OCCLUSION								
<ul style="list-style-type: none"> Acute and Chronic Trauma 	Dr. Yousaf Athar	C	Interactive lecture/case-based discussion					

<ul style="list-style-type: none"> Primary and Secondary Trauma 			Interactive lecture/case-based discussion					
<ul style="list-style-type: none"> Consequences of trauma 		C	Interactive lecture/case-based discussion					
<ul style="list-style-type: none"> Tissue Response of trauma 			Interactive lecture/ small group discussion					
<ul style="list-style-type: none"> Diagnosis of Occlusal trauma 		C	Interactive lecture/case-based discussion					
<ul style="list-style-type: none"> Occlusal adjustment 		C	Interactive lecture/case-based discussion					
<ul style="list-style-type: none"> Splinting 		C	Interactive lecture/case-based discussion					
PERIODONTAL MANIFESTATION OF SYSTEMIC DISEASES								
<ul style="list-style-type: none"> Different systemic diseases are discussed with reference to their periodontal manifestations 	Dr. Aneela Shabbir	CPA	Interactive lecture/case-based discussion/ Clinics					
PERIODONTAL EXAMINATION DIAGNOSIS AND THERAPY						X	3	1
PERIODONTAL EXAMINATION								
<ul style="list-style-type: none"> History taking and Diagnosis 	Dr. Yousaf Athar	CPA	Interactive lecture/case-based discussion/ Clinics					

<ul style="list-style-type: none"> Periodontal screening and complete examination of oral cavity. 		CPA	Interactive lecture/case-based discussion/ Clinics					
PERIODONTAL DIAGNOSIS								
<ul style="list-style-type: none"> First and second visit of patient 	Dr. Yousaf Athar	CPA	Interactive lecture/case-based discussion/ Clinics					
<ul style="list-style-type: none"> Differential diagnosis along with laboratory aids to clinical diagnosis 		CPA	Interactive lecture/case-based discussion/ Clinics					
TREATMENT PLANNING AND PLAQUE CONTROL								
<ul style="list-style-type: none"> Phases of periodontal treatment , retreatment of patient in case of reoccurrence 	Dr. Aneela Shabbir	CPA	Interactive lecture/case-based discussion/ Clinics					
<ul style="list-style-type: none"> Mechanical control of dental plaque 		CPA	Interactive lecture/case-based discussion/ Clinics					
<ul style="list-style-type: none"> Motivation , education and instruction 	Dr. Aneela Shabbir	CPA	Interactive lecture/case-based discussion/ Clinics					
<ul style="list-style-type: none"> Interdental cleaning 		CPA	Interactive lecture/case-based discussion/ Clinics					
<ul style="list-style-type: none"> Scaling and root planning with advantages and disadvantages 		CPA	Interactive lecture/case-based discussion/ Clinics/					

			Skills session					
<ul style="list-style-type: none"> Chemical control of dental plaque 		CPA	Interactive lecture/case-based discussion/ Clinics					
<ul style="list-style-type: none"> Chemotherapeutic agents for topical and systemic administration 		CPA	Interactive lecture/case-based discussion/ Clinics					
INSTRUMENTATION								
<ul style="list-style-type: none"> Manual scaling instruments 	Dr. Yousaf Athar	CPA	Interactive lecture/case-based discussion/ Clinics/ Skills session					
<ul style="list-style-type: none"> Ultrasonic scalers 		CPA	Interactive lecture/case-based discussion/ Clinics					
<ul style="list-style-type: none"> Surgical instruments 		CPA	Interactive lecture/case-based discussion/ Clinics					
CHEMOTHEURAPEUTIC AGENTS								
<ul style="list-style-type: none"> Definitions 	Dr. Aneela Shabbir	C	Interactive lecture/case-based discussion					
<ul style="list-style-type: none"> Antibiotics in Periodontal Diseases 		CPA	Interactive lecture/case-based discussion/ Clinics					
<ul style="list-style-type: none"> Local Drug Delivery 		C	Interactive lecture/case-					

			based discussion/ Clinics					
PERIODONTAL THERAPY (NON SURGICAL)								
<ul style="list-style-type: none"> Proper history diagnosis and examination of patient 	Dr. Yousaf Athar	CPA	Interactive lecture/case-based discussion/ Clinics					
<ul style="list-style-type: none"> Complete periodontal charting 		CPA	Interactive lecture/case-based discussion/ Clinics/ Skills session					
<ul style="list-style-type: none"> Scaling and Root planing 		CPA	Interactive lecture/case-based discussion/ Clinics/ Skills session					
<ul style="list-style-type: none"> Follow up 		CPA	Interactive lecture/case-based discussion/ Clinics					
SURGICAL PERIODONTOLOGY						X	3	1
GENERAL PRINCIPLES OF PERIODONTAL SURGERY								
<ul style="list-style-type: none"> Equipment, Pre op management, Anesthesia 	Dr. Aneela Shabbir	C	Interactive lecture/case-based discussion					
<ul style="list-style-type: none"> Periodontal dressings 		C	Interactive lecture/case-based discussion					
<ul style="list-style-type: none"> Post op instructions, complications and Management 		CPA	Interactive lecture/case-based discussion/ discussion/					

			Clinics						
<ul style="list-style-type: none"> • Indications and Contraindications 		C	Interactive lecture/case-based discussion						
SURGICAL PROCEDURES									
<ul style="list-style-type: none"> • Curettage – Rationale, indication, procedure, post treatment healing 	Dr. Yousaf Athar	CPA	Interactive lecture/case-based discussion/ Clinics/ Skills session						
<ul style="list-style-type: none"> • Gingivectomy – indication, contraindications, procedure, types 		C	Interactive lecture/case-based discussion						
<ul style="list-style-type: none"> • Gingivoplasty - indication, contraindications, procedure 		C	Interactive lecture/case-based discussion						
<ul style="list-style-type: none"> • Flap surgery – Classification, designs, incisions, suturing, post treatment healing, flap techniques, sutures 		C	Interactive lecture/case-based discussion						
<ul style="list-style-type: none"> • Osseous surgery – Rationale, Factors, Technique, steps involved, armamentarium, post op maintenance 		Dr. Yousaf Athar	C	Interactive lecture/case-based discussion					
<ul style="list-style-type: none"> • Regenerative Periodontal Therapy- GTR, GBR, grafts 		C	Interactive lecture/case-based discussion						
<ul style="list-style-type: none"> • Furcation Involvement – Anatomy, Diagnosis, Factors 		CPA	Interactive lecture/case-based discussion/						

affecting, Classification, Treatment Options, prognosis			Clinics/ Skills session						
<ul style="list-style-type: none"> Esthetic and Plastic Periodontal Surgery – objectives, factors affecting outcome, techniques to remove frenum, deepen vestibule, increase attached gingiva. 		C	Interactive lecture/case-based discussion						
DENTAL IMPLANTS						X	3	1	
<ul style="list-style-type: none"> Basic Introduction and Rationale of Dental implants 		C	Interactive lecture/case-based discussion						
<ul style="list-style-type: none"> Treatment Planning 	Dr. Aneela Shabbir	C	Interactive lecture/case-based discussion						
<ul style="list-style-type: none"> Complications 		C	Interactive lecture/case-based discussion						
SUPPORTIVE PERIODONTAL CARE						X	3	1	
<ul style="list-style-type: none"> Rationale for supportive periodontal treatment 	Dr. Yousaf Athar	C	Interactive lecture/case-based discussion						
<ul style="list-style-type: none"> Maintenance Program 		CPA	Interactive lecture/case-based discussion/ Clinics						
<ul style="list-style-type: none"> Classification of post treatment patients 		C	Interactive lecture/case-based discussion						

<ul style="list-style-type: none"> Referral of patient to the periodontist 		CPA	Interactive lecture/case-based discussion/ Clinics					
<ul style="list-style-type: none"> Splinting of the teeth 		C	Interactive lecture/case-based discussion					

Learning resources

Topics	Resources
<p>The Normal Peridontium Classification of Periodontal Disease and Epidemiology</p>	<ul style="list-style-type: none"> • Clinical periodontology by Glickman • Clinical Periodontology by Manson • Colour Atlas of Clinical Surgical Periodontology by Strahan & White • A text book of clinical periodontology by Jan Lindhe • Fundamentals of Periodontics by Thomas G Wilson, Kenneths Komman • Periodontology and Periodontics, Modern Theory and Practice by Sigurd P. Ramford Major M. Ash
<p>Etiology of Periodontal disease</p>	<ul style="list-style-type: none"> • Clinical periodontology by Glickman • Clinical Periodontology by Manson • Colour Atlas of Clinical Surgical Periodontology by Strahan & White • A text book of clinical periodontology by Jan Lindhe • Fundamentals of Periodontics by Thomas G Wilson, Kenneths Komman • Periodontology and Periodontics, Modern Theory and Practice by Sigurd P. Ramford Major M. Ash
<p>Periodontal Pathogenesis</p>	<ul style="list-style-type: none"> • Clinical periodontology by Glickman • Clinical Periodontology by Manson • Colour Atlas of Clinical Surgical Periodontology by Strahan & White • A text book of clinical periodontology by Jan Lindhe • Fundamentals of Periodontics by Thomas G Wilson, Kenneths Komman • Periodontology and Periodontics, Modern Theory and Practice by Sigurd P. Ramford Major M. Ash
<p>Periodontal Disease</p>	<ul style="list-style-type: none"> • Clinical periodontology by Glickman • Clinical Periodontology by Manson • Colour Atlas of Clinical Surgical Periodontology by Strahan & White • A text book of clinical periodontology by Jan Lindhe • Fundamentals of Periodontics by Thomas G Wilson, Kenneths Komman • Periodontology and Periodontics, Modern

	<p>Theory and Practice by Sigurd P. Ramford Major M. Ash</p>
<p>Periodontal Examination, Diagnosis and Therapy</p>	<ul style="list-style-type: none"> • Clinical periodontology by Glickman • Clinical Periodontology by Manson • Colour Atlas of Clinical Surgical Periodontology by Strahan & White • A text book of clinical periodontology by Jan Lindhe • Fundamentals of Periodontics by Thomas G Wilson, Kenneths Komman • Periodontology and Periodontics, Modern Theory and Practice by Sigurd P. Ramford Major M. Ash
<p>Surgical Periodontology</p>	<ul style="list-style-type: none"> • Clinical periodontology by Glickman • Clinical Periodontology by Manson • Colour Atlas of Clinical Surgical Periodontology by Strahan & White • A text book of clinical periodontology by Jan Lindhe • Fundamentals of Periodontics by Thomas G Wilson, Kenneths Komman • Periodontology and Periodontics, Modern Theory and Practice by Sigurd P. Ramford Major M. Ash
<p>Dental Implantology</p>	<ul style="list-style-type: none"> • Clinical periodontology by Glickman • Clinical Periodontology by Manson • Colour Atlas of Clinical Surgical Periodontology by Strahan & White • A text book of clinical periodontology by Jan Lindhe • Fundamentals of Periodontics by Thomas G Wilson, Kenneths Komman • Periodontology and Periodontics, Modern Theory and Practice by Sigurd P. Ramford Major M. Ash
<p>Supportive Periodontal Care</p>	<ul style="list-style-type: none"> • Clinical periodontology by Glickman • Clinical Periodontology by Manson • Colour Atlas of Clinical Surgical Periodontology by Strahan & White • A text book of clinical periodontology by Jan Lindhe • Fundamentals of Periodontics by Thomas G Wilson, Kenneths Komman • Periodontology and Periodontics, Modern Theory and Practice by Sigurd P. Ramford Major M. Ash

OTHER LEARNING RESOURCES

Clinics / Practical	Students will be involved in clinical work in the periodontology clinic
Videos	Video familiarize the student with the procedures and protocols to assist patients
Computer Lab/CSs/DVDs/ Internet Resources:	To increase the knowledge, students should utilize the available internet resources and CDs/ DVDs. This will be an additional advantage to increase learning.
Self Learning	Self Learning is scheduled to search for information to solve cases, read through different resources and discuss among the peers and with the faculty to clarify the concepts.

ASSESSMENT METHODS:

Internal Assessment

- a. Weightage of internal assessment shall be 10 %, each for theory and practical, in BDS Professional Examination.
- b. The Internal Assessment shall comprise of monthly test / PBL / assignments / Clinical tests / clinical vivas etc
- c. The Internal Assessment record shall be kept in the respective department of the College / Institute and after approval of Principal, a summary as per University registration number shall be furnished to the Controller of Examinations, at least two weeks before the commencement of final examination.
- d. The result of all the class tests / tools which contribute towards IA will be displayed to the students during an academic year.
- e. The same internal assessment shall be counted both for annual and supplementary examinations. The students who are relegated, however, can improve the internal assessment during subsequent year
- f. Internal assessment tools of any subject may be changed after the approval of respective FBS

3rd Professional BDS – 2023 Periodontology

- **Theory**

Marks of theory paper = 80

Time Allowed = 03 hrs

Internal assessment (20%) = 20

- **Total Marks** (MCQs:40%+SEQs:40%+IA:20%) = 100

Pass Marks = 50

- **Paper-1:** (*Marks of MCQ component shall be rationalized to 40% weightage)

60 x MCQs (1 mark each) (60 Marks) Time =60 min

- **Paper-2:**

8x SEQs/SAQs (05 Marks Each) (40 Marks) Time = 120 min

*If a candidate obtains 50 marks in MCQs it will be rationalized as: $(50/60 \times 40 = 33.33)$

S. No	TOPIC	Sub Topics	Number. of MCQs (60)		No. of SEQs/SAQs (08) (5 Marks each)
			Recall:30	Application:30	
1	BIOLOGICAL BASIS OF PERIODONTOLOGY	Anatomy & physiology of periodontium	4	0	1
2		Classification of periodontal disease & epidemiology.	2	2	0
3		Etiology of periodontal disease 1. Periodontal microbiology 2. Host response and host bacterial interactions 3. Local factors; Dental deposits 4. Systemic factors	2	2	1
4		Periodontal pathogenesis 1. Gingival inflammation 2. Periodontal pocket 3. Bone loss and patterns of bone loss 4. Effect of Smoking on periodontium 5. Halitosis	10	3	2
5		Perio-ndo/prostho/restorative considerations	0	2	0
6	CLINICAL PERIODONTOLOGY & NON SURGICAL THERAPY	Periodontal diseases 1. Gingival conditions a. Gingivitis b. Acute gingival infections c. Desquamative gingivitis d. Gingival enlargement 2. Periodontal conditions a. Chronic Periodontitis	3	10	2

		<ul style="list-style-type: none"> b. Aggressive periodontitis c. Necrotizing ulcerative periodontitis d. Trauma from occlusion 			
7		Periodontal Non-Surgical Therapy <ul style="list-style-type: none"> 1. Periodontal examination and diagnosis 2. Treatment planning and prognosis 3. Periodontal instruments/Instrumentation 4. Plaque control (Mechanical and Chemical) 	6	6	1
8	PERIODONTAL SURGERY & SUPPORTIVE THERAPY	<ul style="list-style-type: none"> 1. General principles of periodontal surgery 2. Gingival curettage 3. Gingivectomy andGingivoplasty 4. Flap surgery 5. Osseous surgery 6. Furcation involvement 7. Regenerative Periodontal Therapy 8. Esthetic and periodontal plastic surgery 	1	2	1
9		Supportive Periodontal care <ul style="list-style-type: none"> 1. Rationale for supportive periodontal treatment 2. Maintenance recall procedure 3. Referral of patient to the periodontist 4. Splinting of Teeth 	1	2	0
10	Oral Implantology	Dental implants – basic intro, Rationale & Rx Planning, Dental implants complication	1	1	0
Total			60 (60 Marks)		08 (40 Marks)

Table of Specification for Annual Practical Examination

VIVA 40 Marks		PRACTIC AL 40 Marks				
Examiner 1	Examiner 2	Oral examination and diagnosis	History taking	Scaling of teeth	Identification of clinical slides and instruments	Total
20 Marks	20 Marks	10 Marks	5 Marks	15 Marks	10 Marks	80

Multiple Choice Question (MCQs)

- A multiple choice question (MCQ) consist of a stem that states the question or problem followed by a set of possible answers that contain an option that is best answer to the question.
- After reading the questions students should select the appropriate option from the given possible answers.
- The correct answer carries one mark and incorrect carries zero. There is no negative marking.

Sample MCQ

The tooth supporting tissues are derived from

- a) Dental papilla
- b) Dental follicle
- c) Dental lamina
- d) Hertwigs epithelial root sheath
- e) Enamel knot

key: b

Short essay question (SEQs)

- Short essay questions require students to present written answers that are used to asses basic knowledge of key facts and provide students with an opportunity to demonstrate reasoning and explain their understanding of the subject.

Sample SEQ

A 29-year-old woman, medically fit and healthy, presented to your clinic with the complaint of food impaction in upper right jaw. On probing, you find a deep periodontal pocket between tooth # 14 and 15.

- a) Classify Periodontal Pockets. (2)
- b) Correlate the Clinical and Histo-pathological features of periodontal pocket. (5)

Key:

a) True and false/pseudo pocket
Supra and infra bony pockets
Gingival and periodontal pockets
Simple, compound and complex pockets

b)

	Clinical Features	Histopathologic features
1	Gingival wall of pocket presents various degrees of bluish red discoloration; flaccidity; a smooth, shiny surface; and pitting on pressure.	The discoloration is caused by circulatory stagnation; the flaccidity, by destruction of gingival fibres and surrounding tissues; the smooth, shiny surface. By atrophy or epithelium and edema; and the pitting on pressure, by edema and degeneration
2	Less frequently, gingival wall may be pink and firm.	In such cases, fibrotic changes predominate over exudation and degeneration, particularly in relation to outer surface of pocket wall. However, despite external appearance of health, inner wall of pocket invariably presents some degeneration and is often ulcerated (see figure 27-15)
3	Bleeding is elicited by gently probing soft tissue wall of pocket	Ease of bleeding results from increased vascularity, thinning and degeneration of epithelium and proximity of engorged vessels to inner surface
4	When explored with a probe, inner aspect of pocket is generally painful	Pain on tactile stimulation is caused by ulceration of inner aspect of pocket wall
5	In many cases, pus may be expressed by applying digital pressure	Pus occurs in pockets with supportive inflammation of inner wall

Internal Examiner

He/she shall be Professor and Head of Department who has been involved in teaching of the class being examined for at least six months and has delivered 50% of the total lectures. Second preference shall be Associate/Assistant Professor who is involved in teaching of the class and posted there for one year. Third preference shall be a recognized Professor of the subject.

External Examiner

He/she shall be a Professor/Associate Professor of a recognized Medical/Dental College or at least an Assistant Professor with three years teaching experience in the relevant subject.

Conflict of Interest

No person shall serve as an examiner whose close relative (wife, husband, son, daughter, adopted son, adopted daughter, grand-son, grand-daughter, brother, sister, niece /nephew, son and daughter- in-law brother and sister- in-law, parental and maternal uncle and aunt etc) is appearing in the examination. All examiners likely to serve as an examiner shall render a certificate in compliance to this para.

Paper Setting

- a. Each College / Institute shall forward a set of two question papers as per TOS along with the key for each subject to the Controller of Examinations, at least three months in advance of the annual examination. The question paper as a whole / a question without a comprehensive key shall not be considered towards final paper setting.
- b. The set of question papers shall be prepared by the respective Head of Department (HoD) and furnished to Controller of Examinations through Head of Institution (HoI)
- c. The Controller of Examinations shall approve the faculty for the final paper setting having fair representation of each college / institute.

Paper Assessment

- a. The Controller of Examinations shall approve the faculty for the theory paper marking, to be undertaken in the manner as deemed appropriate.
- b. The Examination Directorate shall coordinate directly with the faculty, earmarked for the paper marking
- c. A student who scores 85% and above marks in any subject shall qualify for distinction in that particular subject.
- d. A fraction in aggregate marks of a subject shall be rounded off to whole number. If it is less than 0.5 then it will be rounded off to the previous whole number while 0.5 or more will be rounded off to the next whole number.

Practical / Clinical Examinations

- a. The Controller of Examiners shall approve the faculty to serve as the internal & external examiners.
- b. The number of external and internal examiners shall be equal.
- c. One external & internal examiner each shall be marked for a group of 100 students.
- d. Candidates may be divided into groups in the clinical and practical examinations and be standardized by incorporating clinical exam
- e. Practical/clinical examination shall be held after the theory examination of the subject but in special cases, it may be held before the theory examination with the approval of the Controller of Examinations. For the purpose of practical/clinical examination, the candidates may be divided into sub groups by the examiners.
- f. The assessment of the practical / clinical examination duly signed by internal & external examiner shall be furnished to the Controller of Examinations within one week of the conclusion of examination

Pass Marks

- a. Pass marks for all subjects less Islamic / Pakistan Studies, shall be 50 % in theory and practical, separately.
- b. Pass marks for Islamic / Pakistan Studies shall be 33 % which, however, shall not be counted towards final scoring of the professional examination.
- c. No grace marks shall be allowed to any student in any examination.

Declaration of Result.

Every effort shall be made to declare the result of each examination within one month of the last practical examination or earlier.

Promotion.

No student shall be promoted to the higher classes unless he/she passes all the subjects of the previous class

Re-Totaling.

Any student may apply to the Controller of Examinations on a prescribed form along with the specified fee.

Supplementary Examination.

The interval between a supplementary examination and the previous professional examination shall not be more than two months. There shall be no special supplementary examination.