FOUNDATION UNIVERSITY COLLEGE OF DENTISTRY
ISLAMABAD

STUDY GUIDE

ORAL PATHOLOGY

3rd YEAR BDS

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Department Mission

The department of Oral Pathology aspires to enable and equip our undergraduate dentistry students to familiarize with the pathological basis of oro-dental pathologies and be able to apply the concepts to generate differential diagnosis / definitive diagnoses through provision of a learning environment which fosters active learning and lateral thinking.

Learning Outcomes of Oral Pathology

By the end of session, the students should be able to;

1. Familiarize with most of the lesions of the oral cavity.
2. Identify the etiology and pathogenesis of oral diseases.
3. Classify various pathologies of the oral cavity and head & neck region.
4. Generate differential diagnosis based on clinical, radiographical and histopathological findings.
5. Differentiate between benign and malignant lesions of oral cavity.
6. Determine the diagnostic tests most suitable for a particular disease.
7. Justify management protocol and determine appropriate/specialist referral.

Teaching & Learning Methodologies

1. Large Group Interactive Sessions
2. Small Group Interactive Sessions
3. Laboratory Demonstration & Tutorials
4. Case Based Learning (CBLs)
5. Self-Directed Learning

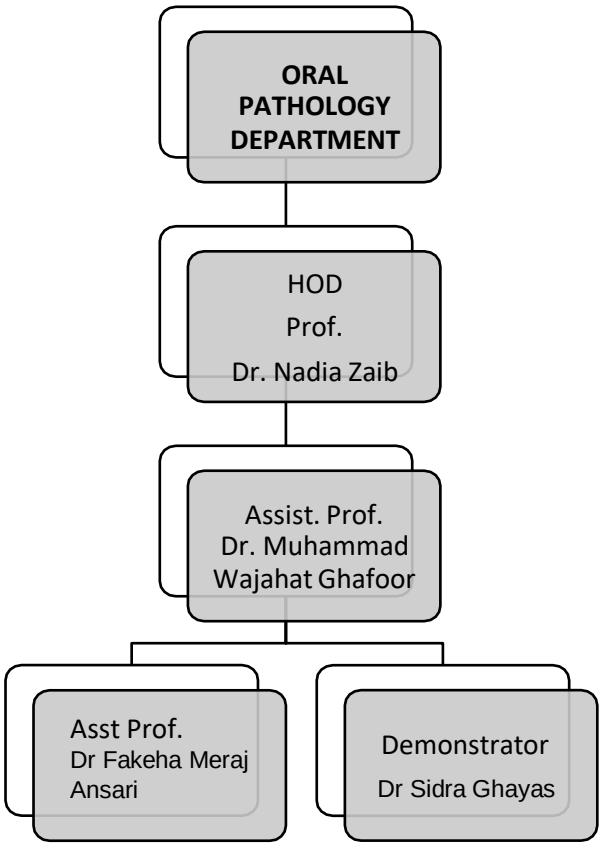
Learning Resources:

1. Oral and Maxillofacial Pathology. 4 th Edition by BW Neville, DD Damn,CA Allen, A Chi.
2. Oral Pathology Soams, J.V. 4th Edition
3. Cawsons Essentials of Oral Pathology & Oral Medicine 9th Edition.
4. Oral Pathology Clinical Pathological Correlation Regezi , Joseph A, 7th Edition
5. Shafers Textbook of Oral Pathology 7th Edition.

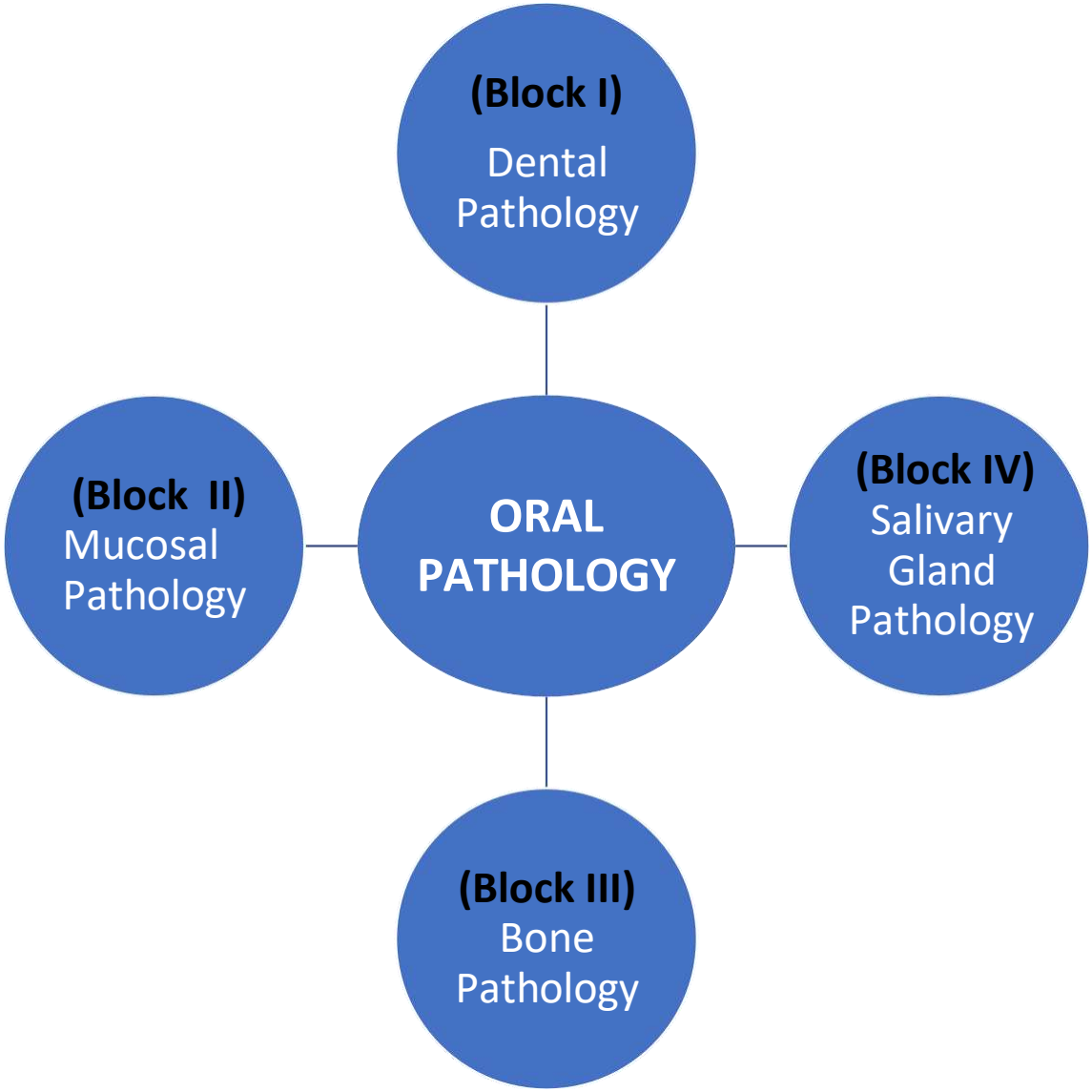
FACULTY MEMBERS OF DEPARTMENT

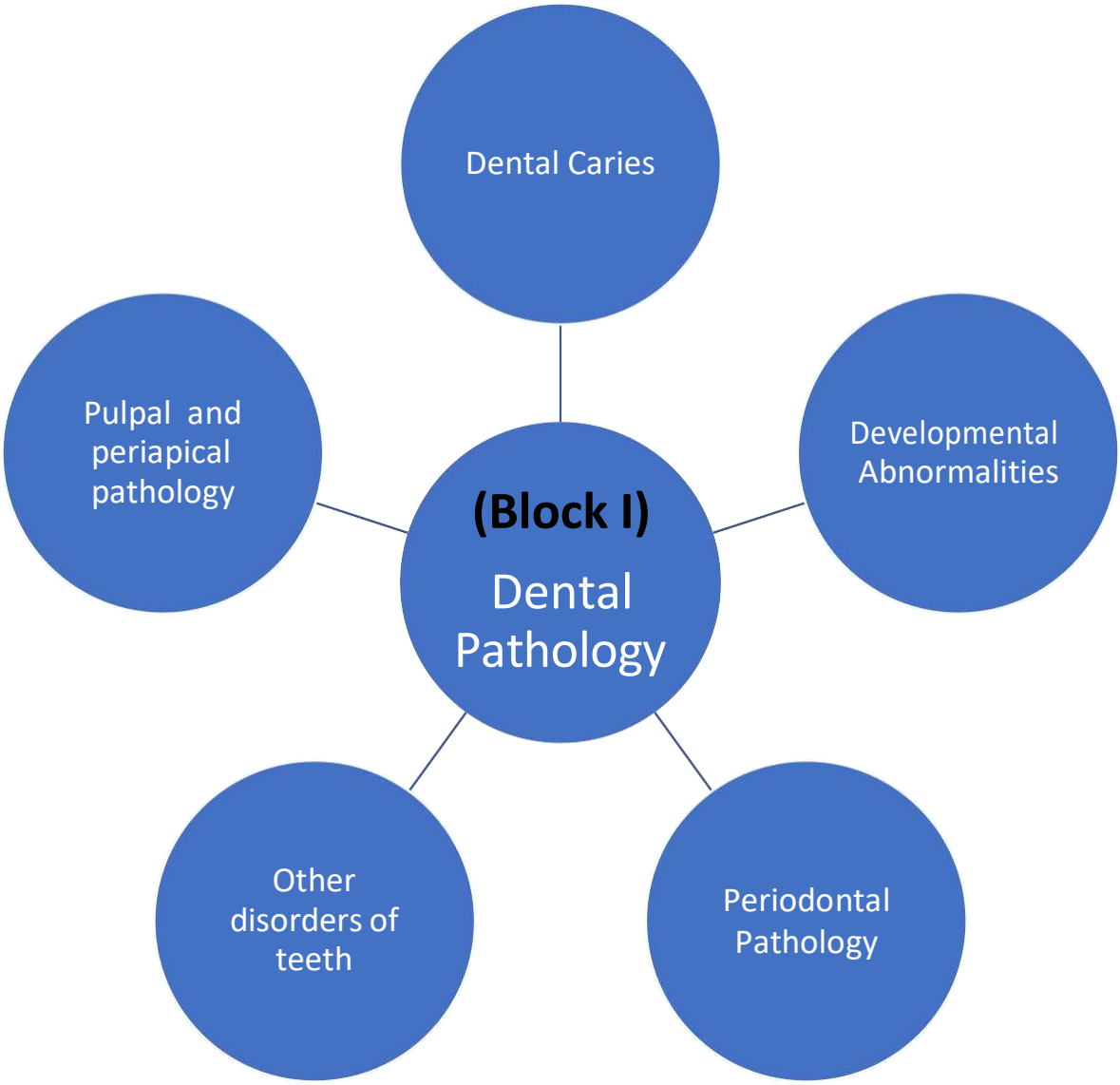
Faculty member	Designation
Dr Nadia Zaib	Prof/ HOD
Dr Muhammad Wajahat Ghafoor	Asst Prof
Dr Fakeha Meraj Ansari	Asst. Prof
Dr Sidra Ghayas	Demonstrator

ORGANOGRAM



Oral Pathology
Learning Outcomes



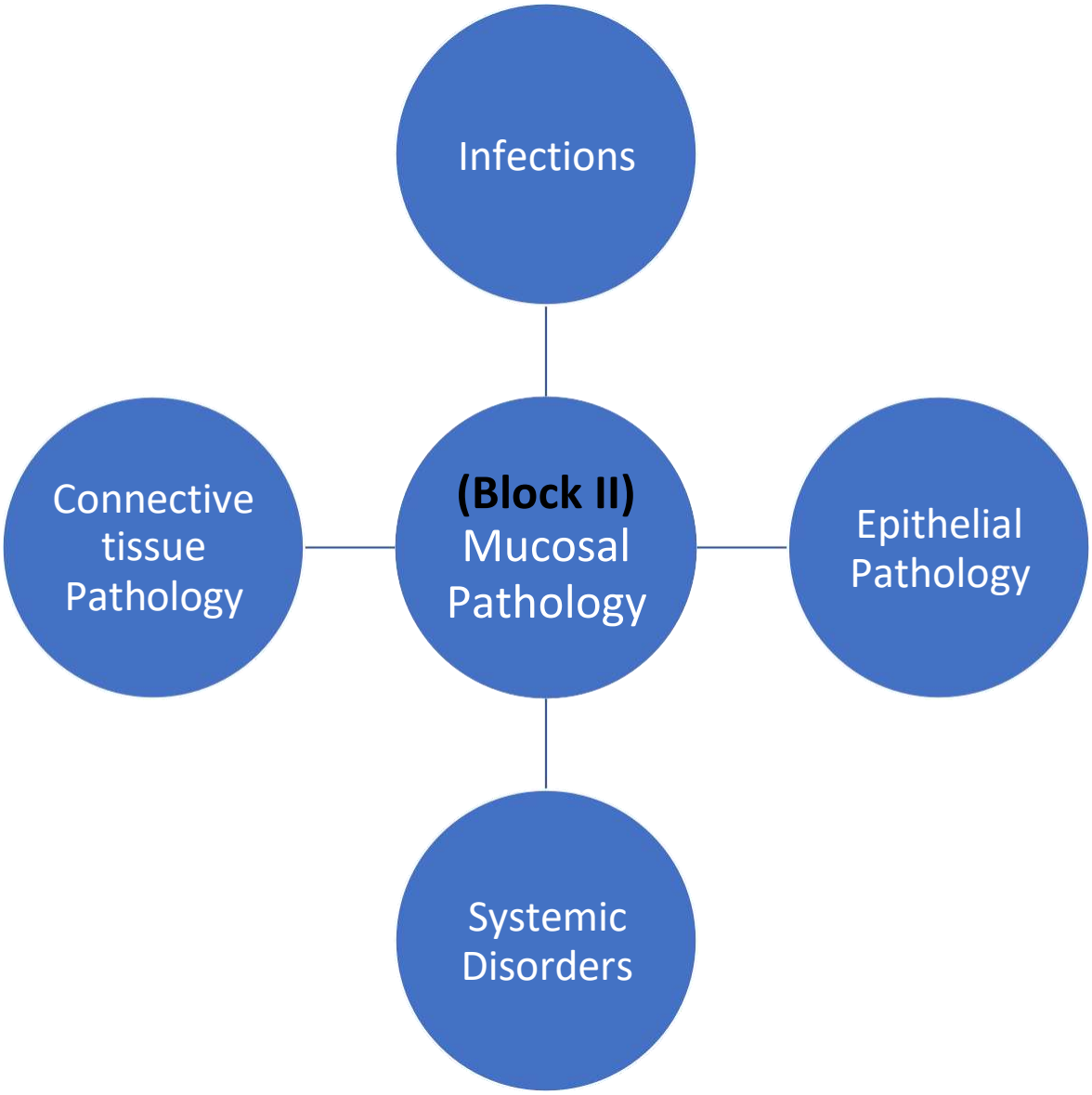

Dental Caries
Pulpal and periapical pathology
Developmental Abnormalities
(Block I)
Dental Pathology
Other disorders of teeth
Periodontal Pathology

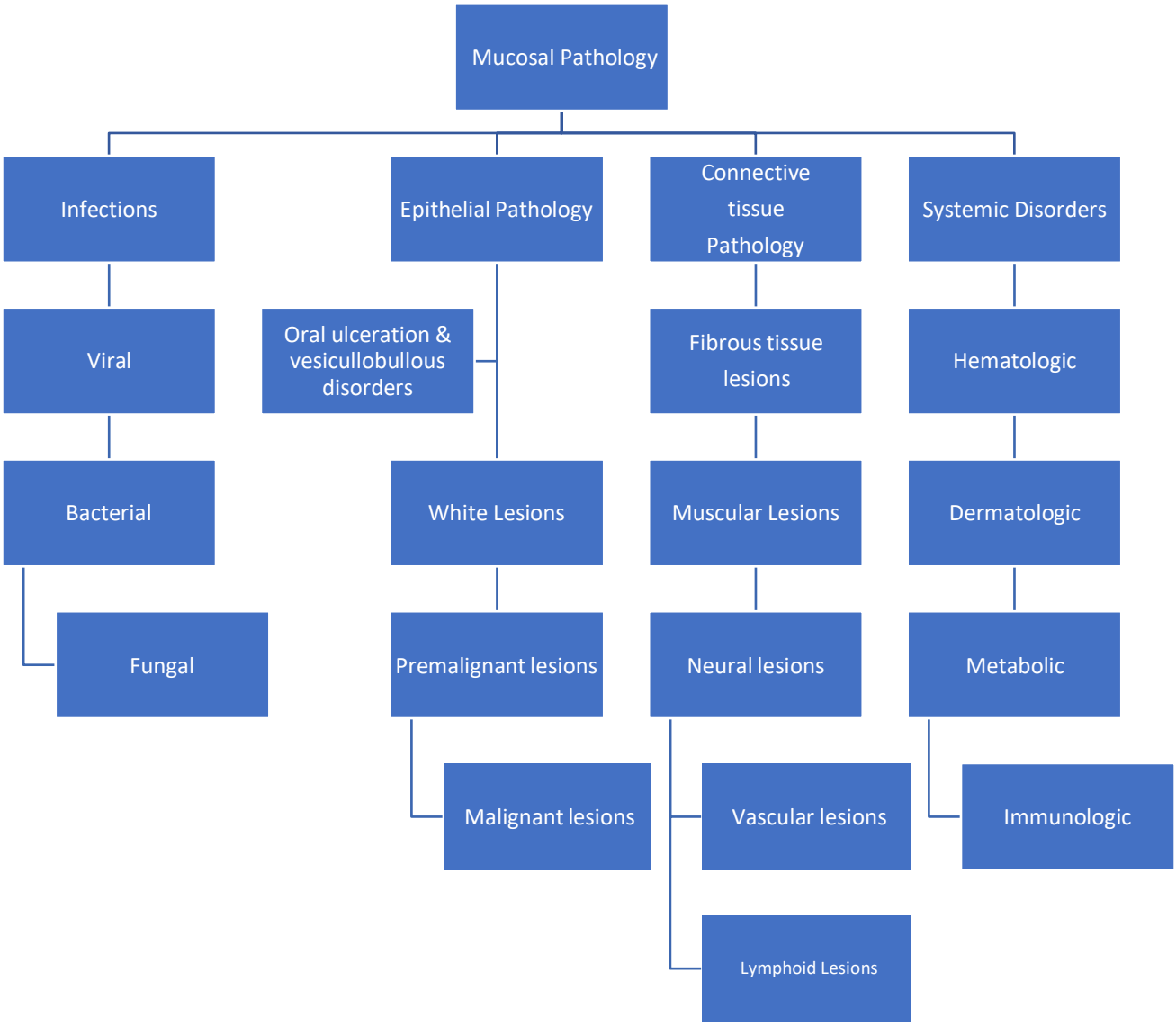
BLOCK I - DENTAL PATHOLOGY

S.No	Topic	Learning Objectives	Instructional Strategy	Assessment Tool
1	**Abnormalities of teeth**	1. Define and enlist all developmental anomalies affecting the number, size shape and structure of teeth. 2. Differentiate between developmental and environmental abnormalities. 3. Describe in detail the pathogenesis, clinical and radiographical presentation of Amelogenesis Imperfecta, Dentinogenesis Imperfecta and Dentine dysplasia. 4. Diagnose common dental pathologies and apply the knowledge in the clinical practice.	**Interactive lecture**	**MCQs** **SEQs** **OSPE** **Viva**

2	**Dental Caries**	1. Define caries and enlist etiological factors. 2. Discuss the etiological factors in detail. 3. Explain the interplay of etiological factors and their role in the pathogenesis of caries in detail. 4. Describe the histopathological features of enamel and dentine caries. 5. Corelate the mechanism of carious lesion with the clinical presentation.	**Interactive lecture** **& SGD**	**MCQs & SEQs** **OSPE** **Viva**
3	**Pulp Pathology**	1. Define and classify pulpitis. 2. Describe the etiology and pathogenesis of pulpitis. 3. Explain the clinical, radiographical and histopathological features of pulpitis. 4. Define and enlist causes of periapical periodontitis. 5. Briefly discuss sequelae of periapical periodontitis. 6. Explain the spread of periapical inflammation with emphasis on details of Cellulitis (Ludwig's Angina). 7. Relate and apply the concepts of pulp pathology in clinical practice.	**Interactive lecture**	**MCQs** **SEQs** **OSPE** **Viva**

4	**Other Disorders**	1. Define disorders of eruption and shedding of teeth. 2. Define and briefly describe the predisposing factors of various types of Non-bacterial tooth loss. 3. Define and explain the pathogenesis along with the clinical and histological features of internal and external tooth resorption. 4. Classify causes of tooth discoloration with brief knowledge of underlying causative agents. 5. Relate and apply the concepts in clinical practice.	**Interactive Lecture**	**MCQs** **SEQs** **OSPE** **Viva**
5	**Periodontal Pathology**	**To avoid overlapping with Periodontology we do not teach this topic.**		


Infections
Connective tissue Pathology
(Block II) Mucosal Pathology
Epithelial Pathology
Systemic Disorders


Mucosal Pathology
Infections
Epithelial Pathology
Connective tissue Pathology
Systemic Disorders
Viral
Oral ulceration & vesicullobullous disorders
Fibrous tissue lesions
Hematologic
Bacterial
White Lesions
Muscular Lesions
Dermatologic
Fungal
Premalignant lesions
Neural lesions
Metabolic
Malignant lesions
Vascular lesions
Immunologic
Lymphoid Lesions

BlOCK II (MUCOSAL PATHOLOGY)

Sub-Category: Infections

S.No	Topic	Learning Objectives	Instructional Strategy	Assessment Tool
1	**Viral Infections**	1. Enlist different types of viral infections affecting the oral cavity. 2. Explain in detail the predisposing factors, etiology, clinical presentation and histology of herpes simplex virus, varicella zoster virus, paramyxo virus, Epstein barr virus and HIV infection. 3. Briefly describe the oral manifestations of Coxackie virus, Human papilloma virus and cytomegalo virus infection. 4. Generate differential diagnosis of various viral infections. 5. Co-relate and apply the knowledge in the clinical practice.	**Interactive lecture**	**MCQs** **SEQS** **OSPE** **Viva**
2	**Bacterial Infections**	1. Enlist common bacterial infections along with causative bacterial organism affecting the oral cavity. 2. Briefly describe the pathogenesis, clinical presentation and histopathology of Noma, syphilis and leprosy. 3. Describe in detail the pathogenesis, clinical presentation,	**Interactive lecture**	**MCQs** **SEQs** **OSPE** **Viva**

		histopathology and diagnostic tests required for Actinomycosis and Tuberculosis.		
3	**Fungal Infections**	1. Differentiate between basic types of fungal infections. 2. Explain in detail the predisposing factors, clinical presentation and histology of oral candida infection. 3. Generate differential diagnosis of various fungal infections. 4. Correlate and apply the knowledge in the clinical practice. 5. Enlist deep fungal infections along with very brief clinical and histological appearance.	**Interactive Lecture** **Histopathological slide study**	**MCQs** **SEQs** **OSPE** **Viva**

Sub-Category: Epithelial Pathology

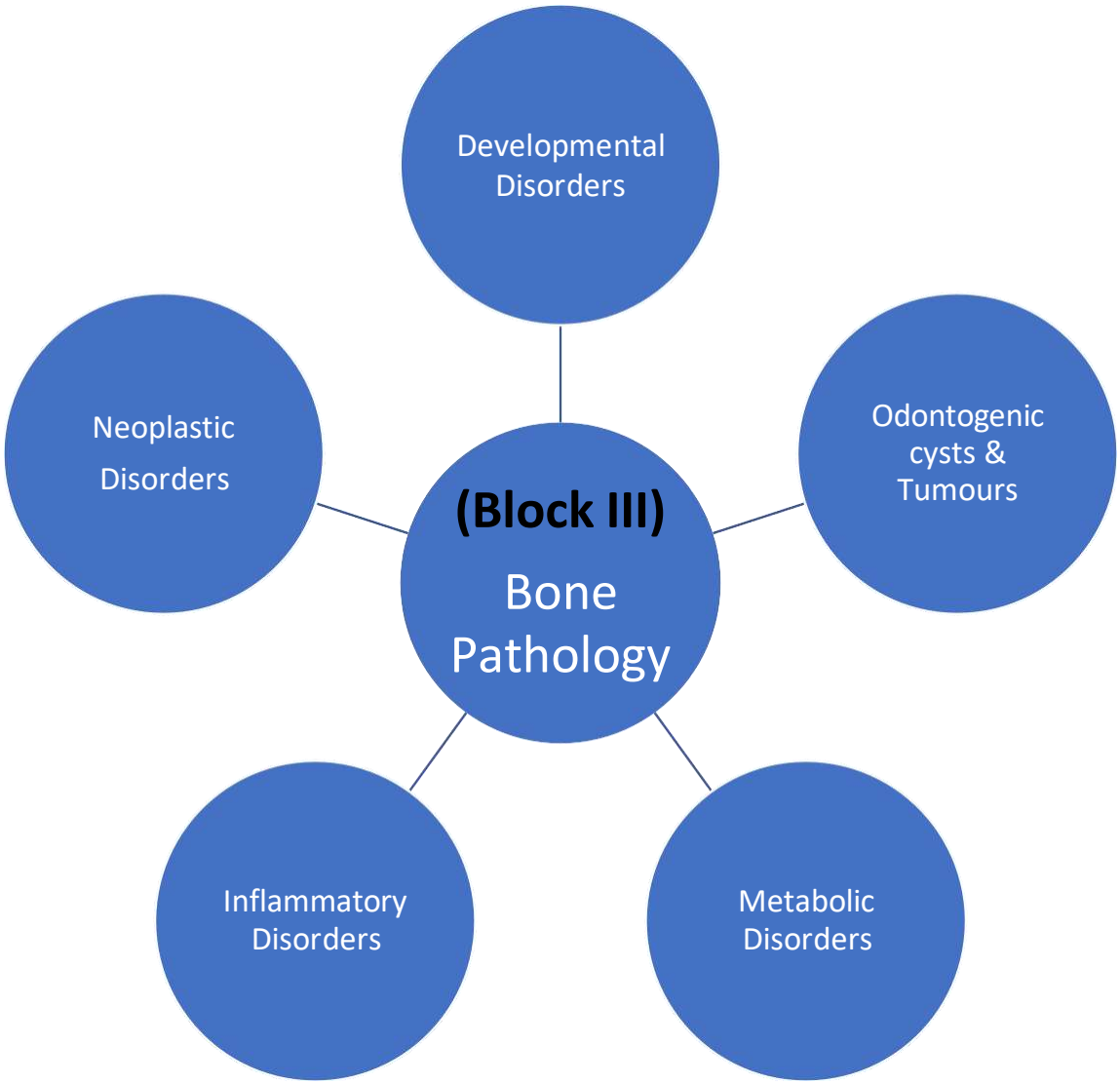
S.No	Topic	Learning Objectives	Instructional Strategy	Assessment Tool
1	**White Lesions**	1. Define and classify white lesions of oral cavity with brief description of histological features. 2. Briefly describe the hereditary and traumatic white lesions. 3. Define and explain in detail the clinical presentation and histology of leukoplakia, oral sub mucous fibrosis and lichen planus. 4. Define and differentiates between the cytological and histological features of Dysplasia in detail. 5. Generate the differential diagnosis of various white lesions. 6. Relate this knowledge in clinical practice.	**Interactive Lecture** **Histopathological slide study**	**MCQs** **SEQs** **OSPE** **Viva**
2	**Premalignant Lesions**	**1.** Define and enlist premalignant lesions. **2.** Highlight the importance of these lesions in clinical practice. **3.** Explain the histopathological features in detail.	**Interactive lecture** **SGD**	**MCQs** **SEQs** **Viva** **OSPE**
3	**Oral ulceration**	1. Define and enlist causes of oral		

	& Vesiculobullous disorders	ulceration. 2. Describe the etiology, pathogenesis, clinical presentation and histological features of Recurrent Aphthous ulcers in detail.		
4	**Malignant Lesions**	1. Define and elaborate etiological factors of OSCC. 2. Explain the mechanism of carcinogenesis at molecular level. 3. Elaborate and distinguish between clinical features of early and advanced oral cancer particularly OSCC. 4. Identify and describe in detail the histopathological features in detail. 5. Relates the prognosis of OSCC with the grading and staging systems. 6. Enlist variants of OSCC. 7. Define and classify, with emphasis on the clinical presentation of benign and malignant melanocytic lesions. 8. Interpretation of these concepts in clinical practice.	**Interactive lecture** **SGD** **Histopathological slide study**	**MCQs** **SEQs** **OSPE** **Viva**

Sub-category: Connective Tissue Pathology

S.No	Topic	Learning Objectives	Instructional Strategy	Assessment Tool
1	**Fibrous Lesions**	1. Enlist various fibrous tissue lesions with brief description of clinical and histological features. 2. Generate differential diagnosis based on the clinical and histological features. 3. Enlist and discuss in detail the clinical aspect of various denture induced lesions affecting the oral mucosa. 4. Relate and apply this knowledge in the clinical practice.	**Interactive Lecture** **Histopathological slide study**	**MCQs** **SEQs** **OSPE** **Viva**
2	**Muscular Lesions**	1. Define and classify connective tissue lesions on the basis of tissue of origin. 2. Distinguish between benign and malignant neoplasms of smooth and skeletal muscle origin. 3. Demonstrate and diagnose histopathological features of common lesions with the help of light microscopy.	**Interactive Lecture**	**MCQs** **SEQs** **OSPE** **Viva**
3	**Neural**	1. Define and enlist various connective	**Interactive**	**MCQs**

	Lesions	tissue lesions of neural origin. 2. Briefly describe the clinical and histological features of Granular cell tumor, Schwannoma and neurofibromatosis. 3. Demonstrate and diagnose histopathological features of common lesions with the help of light microscopy.	**Lecture**	**SEQs** **OSPE** **Viva**
4	**Vascular Lesions**	1. Define and classify vascular lesions. 2. Compare vascular anomalies like hemangiomas and AV malformations on clinical grounds.	**Interactive Lecture** **Histopathological slide study**	**MCQs** **SEQs** **OSPE** **Viva**
5	**Lymphoid Lesions**	1. Define and classify malignant lymphoma. 2. Explain the clinical presentation in detail. 3. Briefly describe the histology of basic types of lymphomas.	**Interactive Lecture** **Histopathological slide study**	**MCQs** **SEQs** **OSPE** **Viva**


Developmental Disorders
Neoplastic Disorders
(Block III)
Bone Pathology
Odontogenic cysts & Tumours
Inflammatory Disorders
Metabolic Disorders

BLOCK III - BONE PATHOLOGY

S.No	Topic	Learning Objectives	Instructional Strategy	Assessment Tool
1	**Odontogenic Cysts & Tumors**	1. Define and classify Odontogenic cysts & tumors. 2. Explain pathogenesis of common odontogenic cysts. 3. Describe clinical, radiographical and histopathological features of Jaw cysts and tumors. 4. Identify and draw histopathological features of common cysts and tumors through microscopy. 5. Generate differential diagnosis of various jaw cysts and tumors. 6. Relate and apply knowledge in clinical practice.	**Integrative Lecture** **SGD** **Histopathological slide study**	**SEQs** **MCQs** **OSPE** **Viva**
2	**Developmental Disorders**	1. Define and classify bone lesions. 2. Define fibro-osseous lesions. 3. Compare and	**Interactive Lecture** **Histopathological slide study**	**MCQs** **SEQs** **OSPE**

		distinguish between various fibro-osseous lesions. 4. Generate differential diagnosis on clinical and radiographical grounds. 5. To be able to apply their knowledge on patient diagnosis.		**Viva**
3	**Metabolic Disorders**	1. Define and enlist metabolic bone disorders. 2. Briefly distinguish among various metabolic bone disorders clinically, radiographically and histopathologically. 3. Discuss the oral manifestations of these disorders.	**Interactive Lecture**	**MCQs** **SEQs** **OSPE** **Viva**
4	**Inflammatory Disorders**	1. Define and classify osteomyelitis. 2. Explain in detail the etiology and pathogenesis. 3. Discuss the clinical, radiographical and histopathological features in relation to clinical practice.	**Interactive Lecture** **Histopathological slide study**	**MCQs** **SEQs** **OSPE** **Viva**
5	**Neoplastic Disorders**	4. Define and classify neoplastic bone lesions. 5. Discuss and distinguish between common benign and malignant	**Interactive Lecture** **Histopathological slide study**	**MCQs** **SEQs** **OSPE** **Viva**

		neoplasms clinically, radiographically and histopathologically, that includes osteomas, osteoblastoma, osteosarcoma and chondrosarcoma. 6. Generate differential diagnosis based on clinical and radiographical grounds. 7. Relate this knowledge in clinical practice.		


Neoplastic disorders
Inflammatory Disorders
(Block IV) Salivary Gland Pathology
Immunological Disorders
Reactive Disorders

BLOCK IV - SALIVARY GLAND PATHOLOGY

S.No	Topic	Learning Objectives	Instructional Strategy	Assessment Tool
1	**Inflammatory Disorders**	1. Define and enlist different types of sialadenitis. 2. Discuss the causative agents along with differential diagnosis of acute/chronic sialadenitis based on clinical grounds.	**Interactive Lecture**	**MCQs** **SEQs** **OSPE** **Viva**
2	**Immunological Disorders**	1. Define and classify Sjogren's syndrome. 2. Discuss the pathogenesis and clinical presentation in detail. 3. Evaluate and diagnose based on various lab tests. 4. Apply knowledge in the clinical practice.	**Interactive Lecture**	**MCQs** **SEQs** **OSPE** **Viva**
3	**Reactive Disorders**	1. Enlist and define various reactive lesions such as mucocele, sialolithiasis, sialadenitis, sialorrhea and necrotizing sialometaplasia. 2. Identify the underlying causative agent along with the characteristic clinical presentation of these conditions. 3. Diagnose such lesions in clinical practice.	**Interactive Lecture** **Histopathological slide study**	**MCQs** **SEQs** **OSPE** **Viva**

4	**Neoplastic Disorders**	1. Classify salivary gland neoplasms. 2. Differentiate between benign and malignant salivary gland tumor on clinical grounds. 3. Explain in detail the clinical and histological features of common benign tumor like pleomorphic adenoma and warthin's tumor. 4. Discuss in detail the clinical and histological features of common malignant tumor like mucoepidermoid carcinoma, ca ex-pleomorphic adenoma and adenoid cystic carcinoma. 5. Generate differential diagnosis of various salivary gland pathologies with application in the clinical setting.	**Interactive Lecture** **Histopathological slide study**	**MCQs** **SEQs** **OSPE** **Viva**

ASSESSMENT STRUCTURE

BDS 3rd PROFESSIONAL EXAMINATION

MARKS DISTRIBUTION

THEORY MARKS DISTRIBUTION:

Total Marks of MCQs = 40 Marks

Total Marks of SEQs = 50 Marks

Internal Assessment = 10 Marks

Total Marks: 100 Marks

PRACTICAL MARKS DISTRIBUTION:

Total Marks of OSPE = 40 Marks

Total Marks of Viva = 50 Marks

Internal Assessment = 10 Marks

Total Marks :100 marks

INTERNAL ASSSSMENT FORMULA

Internal Assessment Calculation Method
(Proposed for BDS basic sciences Subjects)

1. Internal Assessment Theory

$$\frac{\text{Marks obtained}}{\text{Total Marks}} \times 10 = \frac{(1^{st}\text{ Term} + 2^{nd}\text{ Term} + \text{Send-up}) \text{ obtained}}{(1^{st}\text{ Term} + 2^{nd}\text{ Term} + \text{Send-up}) \text{ total}} \times 10$$

2. Internal Assessment Viva/Practical

a. Viva +OSPE Exam = (1st term+ 2nd term + send-up) — 8%

b. Practical Book (2) = — 2%

FOUNDATION UNIVERSITY COLLEGE OF DENTISTRY & HOSPITAL

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