DCI - CBCS Framework for BDS 2022

# Course (Subject) Name: Oral and Maxillofacial pathology and Microbiology

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## Aim and scope of Oral and Maxillofacial pathology and Microbiology

Oral and Maxillofacial Pathology represents the confluence of the basic sciences and clinical dentistry. Knowledge in this field is acquired through adoption of methods and disciplines of those sciences basic to dental practice, such as gross and microscopic anatomy, chemistry, microbiology and physiology, and through information obtained by clinical histories and observation of patients. Through the science of oral pathology, an attempt is made to correlate human biology with the signs and symptoms to understand oral disease so that it can be properly diagnosed and adequately treated. It is considered as an art and science of dentistry which deals with the study of pathology and its pathogenesis towards its clinical implications.

## Course Prerequisites:

Candidates should have completed the following courses to be eligible to take up this course. Universities can have additional prerequisites in their curriculum.

- 1. Oral Anatomy, Oral Physiology and Tooth morphology
- 2. General Pathology
- 3. Microbiology

#### Course Credits:

Each theory credit is equivalent to 1 theory hour/ week/ semester; each practical credit is equivalent to 2 practical hours per week per semester. According to Dentist act 1948 dental schools should work for 240 working days and this computes to 20 weeks per semester inclusive of the exam duration. Therefore, as per regulations, 1 dental theory credit is equivalent to 20 lecture hours and 1 dental practical credits is equivalent to 40 practical/ clinical hours.

Universities shall have the freedom to increase the credits based on needs in their curriculum but the total credits cannot be lesser than that prescribed by the DCI.

	Credits	Hours
Theory	6.5	130
Practical/ Clinical	2.5	100
Total	9	230

## Course Deployment:

Universities can choose to train their students using the following modules and/or design additional core / elective modules without reducing the minimum required total credits.

Option 1: Single Module						
	Course Name Didactic Credits Practical Credits Total Credits					
1	Oral and Maxillofacial pathology and Microbiology	6.5	2.5	9		

## **Course Objectives**

At the end of Oral and Maxillofacial pathology and Microbiology course, the student should be able to:

- 1. Comprehend the different types of pathological processes that involve the Orofacial tissues.
- 2. Comprehend the manifestations of common diseases, their diagnosis & clinical correlation with pathological processes.
- 3. Understand the oral manifestations of systemic diseases and correlate with the physical symptoms and signs & laboratory findings.
- 4. Understand the underlying biological principles governing treatment of oral diseases.

#### **Domains**

1. Knowledge and Understanding: The student should demonstrate adequate knowledge of demographics, clinical features, etiology, pathogenesis and histopathology of different pathological conditions of oral and paraoral structures.

- 2. Applications: The student should demonstrate the application of the above knowledge in understanding the pathogenesis, clinical findings, radiological features, histological features and their diagnosis, planning and execution stage including the importance of maintenance of oral health following treatment with an understanding of the potential causes.
- 3. Procedural skills to acceptable level of competency: The student should demonstrate procedural skills to acceptable level of competency for identifying the normal and pathological tissues.
- 4. Attitudinal and communication skills including professionalism: The student should demonstrate ethical behavior, empathy, patient centered approach and be able to establish good rapport with the patient.

#### **Course Content**

Theory:

The theoretical aspects in Oral and Maxillofacial pathology and Microbiology includes

- 1. Oral Pathology: 70%
- 2. Oral Microbiology: 30%

Appropriate weightage should be assigned for the same during teaching – learning activities, which should be reflected even during assessment. The teaching learning and assessment strategy adopted should be feasible, appropriate at the undergraduate level. Non didactic modes like Flipped classroom, problem-based learning, problem solving strategies can be adapted for teaching theoretical aspects. Maximize the use of demonstration of concepts using videos, and other audio-visual aids. All the assessment of theoretical components should be carried out using assignments, unit tests, mini-interviews and internal assessment. The completion of the above may be considered for eligibility to appear and internal assessment apart from the attendance. Final assessment would be done through structured written examination and structured viva – voce examinations

**Horizontal and Vertical Integration**: Individual institutions can integrate on other areas which are found appropriate for development of modules for training. The number of hours for integration of all the courses should be consolidated and checked for availability with the total number of hours distributed.

**Practicals/Clinical Procedures**: All the Practical and Procedural Skills should be taught using standard/innovative methods in educational sciences which is deemed appropriate for the specialty. Feasibility of training and assessment should be checked before implementation. All practical procedures should be taught using DOAP—Demonstration, Observation, Assisting and Performance approach. Performance of the procedures by the students is allowed based on the procedure difficulty as independent or under strict supervision. Individual supervision with constructive feedback and

student's reflections form a crucial part in the teaching/training/learning of a particular skill.

**Demonstration of Practical Procedures**: The student should demonstrate the learning, during assessment in the formative, internal and summative examination. Criteria based/checklist based assessment should be used for assessment. DOPS – Direct Observation of Practical/Procedural Skills should be used for assessing the demonstrable skills like practical. The summative examination would be primarily OSC/PE – Objective Structured Clinical/Practical Examination. The demonstration of procedures/practical skills/clinical procedures should be based on a blueprint declared in the scheme of examination

## Recommended Books and Reading

- 1. B Sivapathasundharam B, Ed (2016). Shafer's Textbook of Oral Pathology Elsevier. 8 th Edition. India. Elsevier.
- 2. Neville B W, Damm D D, Allen C M, Chi A. (2016). Oral and Maxillofacial Pathology, 4 th Edition: St. Louis, Missouri. Elsevier.
- 3. Odell E W. (2017). Cawson's Essentials of Oral Pathology and Oral Medicine. 9th Edition. Churchill Livingstone. Elsevier.
- 4. Regezi J.A, Sciubba J, Jordan R. (2016) Oral Pathology Clinical Pathologic Correlations. 7 th Edition. Elsevier
- 5. Wood N.K.& Goaz, P.W. (1997). Differential Diagnosis Of Oral Lesions. 5th Edition. Elsevier
- 6. Mervyn Shear, Paul Speight (2007). Cysts of the Oral and Maxillofacial Regions, 4th Edition. Wiley-Blackwell
- 7. Reichart P. A. & Philipsen H.P.(2004). Odontogenic Tumors & Allied Lesions. 1st Edition Quintessence
- 8. Lucas R.B., Eveson J W (2012). Atlas of Oral Pathology, 5 th Edition. Churchill Livingstone. Springer.
- 9. Eversole L.R. (2011) Clinical Outline of Oral Pathology: Diagnosis & Treatment. 4th Edition. People's Medical Publishing House.
- 10. Goldblum J, Folpe A.L., Weiss, S.W.(2019). Enzinger & Weiss` Soft Tissue Tumors. 7th Edition.

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## Course Outcomes:

## A candidate completing this course should be able to demonstrate

No	Major competencies	Detailed competency codes
	Knowledge, u	nderstanding and Application
CO1/ MC1	A sound understanding of pathophysiology, clinical features, radiographic characteristics (wherever applicable), histological features and treatment of the preneoplastic and neoplastic lesions affecting the oral and maxillofacial regions with special emphasis on the recent concepts in the pathogenesis of neoplasia	OP-3.1, OP-3.3, OP-3.4, OP-3.5, OP-3.7, OP-3.9, OP-3.11, OP-3.13, OP-3.15, OP-3.16, OP-4.1, OP-4.3, OP-4.4, OP-4.6, OP-4.8, OP-4.10, OP-4.12, OP-4.13, OP-4.15, OP-4.16, OP-4.18, OP-4.21, OP-4.23, OP-4.24, OP-4.25, OP-4.26, OP-4.28, OP-4.30, OP-4.31, OP-4.32, OP-4.33, OP-4.34, OP-4.35, OP-4.36, OP-4.37, OP-4.38, OP-4.39, OP-4.40, OP-4.42, OP-4.43, OP-4.45, OP-4.46, OP-4.47, OP-5.1, OP-5.2, OP-5.3, OP-5.4, OP-5.6, OP-5.7, OP-5.9, OP-5.10, OP-5.11, OP-5.12, OP-5.13, OP-5.14, OP-5.15, OP-5.17, OP-5.18, OP-5.20, OP-5.21, OP-5.22, OP-5.23, OP-5.24, OP-5.25, OP-5.26, OP-5.27, OP-7.1, OP-7.2, OP-7.4, OP-7.6, OP-7.8, OP-7.10, OP-7.11, OP-10.12, OP-19.32, OP-19.39, OP-19.45, OP-19.46, OP-19.47, OP-20.10
CO2/ MC2	In-depth knowledge of pathophysiology, clinical features, radiographic characteristics (wherever applicable), histological features and treatment of developmental disorders and non neoplastic conditions including infectious diseases, injuries and cysts affecting the head and neck region	OP-1.1, OP-1.2, OP-1.3, OP-1.4, OP-1.5, OP-1.6, OP-1.7, OP-1.8, OP-1.9, OP-1.11, OP-1.12, OP-1.13, OP-1.14, OP-1.15, OP-1.17, OP-1.18, OP-1.19, OP-1.20, OP-1.21, OP-1.22, OP-1.23, OP-1.24, OP-1.26, OP-1.27, OP-1.29, OP-1.31, OP-1.32, OP-1.33, OP-1.34, OP-1.35, OP-1.36, OP-1.37, OP-1.38, OP-1.39, OP-1.40, OP-1.41, OP-1.42, OP-1.43, OP-1.44, OP-1.45, OP-1.46, OP-1.47, OP-1.48, OP-1.49, OP-1.50, OP-2.17, OP-2.3, OP-2.5, OP-2.7, OP-2.9, OP-2.11, OP-2.13, OP-2.15, OP-2.17, OP-2.19, OP-2.21, OP-2.23, OP-2.25, OP-2.27, OP-2.23, OP-2.25, OP-2.27, OP-2.28, OP-2.30, OP-2.30, OP-2.34, OP-2.36, OP-2.37, OP-2.38, OP-2.40, OP-2.41, OP-2.43, OP-2.45, OP-4.19, OP-5.28, OP-5.29, OP-5.30, OP-5.31, OP-5.32, OP-5.33, OP-5.34, OP-5.35, OP-5.36, OP-5.38, OP-5.40, OP-6.1, OP-6.2, OP-6.3, OP-6.5, OP-6.7, OP-6.8, OP-6.9, OP-6.11, OP-6.12, OP-6.13, OP-6.14, OP-6.16, OP-8.1, OP-8.2, OP-8.3, OP-8.5, OP-8.8, OP-8.9, OP-8.10, OP-8.11, OP-8.12, OP-8.13, OP-8.14, OP-8.15, OP-8.16, OP-8.17, OP-8.19, OP-9.1, OP-9.2, OP-9.3, OP-9.4, OP-9.5, OP-9.6, OP-9.7, OP-9.8, OP-9.9, OP-9.10, OP-9.11, OP-9.12, OP-9.13, OP-9.14, OP-9.15, OP-9.16, OP-9.17, OP-9.18, OP-9.19, OP-9.10, OP-9.11, OP-9.12, OP-10.11, OP-10.2, OP-10.3, OP-10.4, OP-10.5, OP-10.6, OP-10.7, OP-10.8, OP-10.9, OP-10.11, OP-10.12, OP-11.3, OP-11.4, OP-11.5, OP-11.6, OP-11.7, OP-12.1, OP-12.2, OP-12.3, OP-12.4, OP-12.5, OP-12.7, OP-12.8, OP-12.9, OP-12.10, OP-12.11, OP-13.10, OP-13.11, OP-13.12, OP-13.10, OP-13.11, OP-13.13, OP-14.11, OP-14.13, OP-14.15, OP-14.15, OP-15.11, OP-13.11, OP-13.11, OP-13.12, OP-13.10, OP-14.11, OP-14.13, OP-14.15, OP-15.11, OP-15.22, OP-15.11, OP-15.12, OP-15.11, OP-15.21, OP-15.21, OP-15.21, OP-15.22, OP-15.24, OP-15.10, OP-15.21, OP-15.22, OP-15.24, OP-15.20, OP-15.21, OP-15.20, OP-15.20, OP-15.21, OP-15.20, OP-15.

CO3/ MC3	Proficiency in understanding and identification of the clinical features, radiographic characteristics (wherever applicable), histological features and treatment of oral	OP-19.7, OP-19.8, OP-19.13, OP-19.14, OP-19.15, OP-19.16, OP-19.17, OP-19.18, OP-19.19, OP-19.20, OP-19.21, OP-19.22, OP-19.23, OP-19.24, OP-19.25, OP-19.26, OP-19.28, OP-19.29, OP-19.31, OP-19.32 OP-19.34, OP-19.35, OP-19.36, OP-19.38, OP-19.40, OP-19.41, OP-19.42, OP-19.43, OP-19.44, OP-22.1, OP-22.2, OP-22.3, OP-22.4, OP-22.5, OP-22.6, OP-22.7, OP-22.8, OP-22.9, OP-22.10, OP-22.11, OP-22.12, OP-22.13, OP-22.14.  OP-20.1, OP-20.2, OP-20.3, OP-20.4, OP-20.5, OP-20.6, OP-20.7, OP-20.8, OP-20.9, OP-20.11, OP-14.13, OP-14.14, OP-17.1, OP-17.2, OP-18.1, OP-18.2, OP-18.3, OP-18.4, OP-18.5, OP-18.6, OP-18.7, OP-18.8, OP-19.9, OP-19.10, OP-19.11, OP-19.12, OP-21.1, OP-21.2, OP-21.3, OP-21.4, OP-21.5, OP-21.7, OP-21.9, OP-21.10, OP-21.11, OP-21.13.
	manifestations of systemic diseases.	
	Skills- Procedural Skills	, Attitudinal and Communication skills
CO4/ MC4	Ability to identify and interpret the anomalies in the provided tooth specimen and casts	OP-1.10, OP-1.16, OP-1.25, OP-1.28, OP-1.30, OP-2.2, OP-2.4, OP-2.6, OP-2.8, OP-2.10, OP-2.12, OP-2.14, OP-2.16, OP-2.18, OP-2.20, OP-2.22, OP-2.24, OP-2.26, OP-2.29, OP-2.31, OP-2.33, OP-2.35, OP-2.39, OP-2.42, OP-2.44, OP-15.2, OP-15.4, OP-15.8
CO5/ MC5	Skills in identification of microscopic features of all the diseases and cytological smears pertaining to the craniofacial region along with drawing histopathological features with legible labeled diagrams.	OP-1.16, OP-3.2, OP-3.6, OP-3.8, OP-3.10, OP-3.12, OP-3.14, OP-3.17, OP-4.2, OP-4.5, OP-4.7, OP-4.9, OP-4.11, OP-4.14, OP-4.17, OP-4.20, OP-4.22, OP-4.27, OP-4.29, OP-4.41, OP-4.44, OP-5.5, OP-5.8, OP-5.16, OP-5.19, OP-5.37, OP-5.39, OP-6.4, OP-6.6, OP-6.10, OP-6.15, OP-7.3, OP-7.5, OP-7.7, OP-7.9, OP-8.4, OP-8.7, OP-8.18, OP-10.10, OP-12.6, OP-13.5, OP-13.8, OP-13.11, OP-13.13, OP-13.15, OP-14.2, OP-14.4, OP-14.7, OP-14.10, OP- 15.11, OP-15.13, OP-15.15, OP-15.19, OP-15.23, OP-15.25, OP-16.5, OP-19.27, OP-19.30, OP-19.33, OP-19.37, OP-21.6, OP-21.8, OP-21.12.
	Evide	ence based learning:
CO6/ MC6	Consolidate all above mentioned major competencies acquired during the course and integrate newer evidence based knowledge in displaying expertise in the science of oral pathology and microbiology	
		Self Assessment
CO7/ MC7	Ability to critically appraise their own performance across multiple formative assessments completed during the course	

#### **Early Clinical Exposure Activity**

The students should know the examination of oral mucosa, identify the normal tissues and the disease, to create a list of differential diagnosis for the disease process, plan the approach to diagnosis of oral cancer / potentially malignant diseases and to identify the appropriate microbiological/ histopathological and biochemical tests. Students should be able to perform age estimation, gender and race identification through practice of forensic odontology. This can be carried out through activities such as lectures, clinical demonstrations, virtual case presentations, assignments and small group discussions.

#### AETCOM:

Students should be able to apply the basic principles of AETCOM module acquired during the oral pathology course. These skills shall be evaluated during the assessment of the following major competencies: MC 1, MC 2, MC 3, MC 4, MC 5, MC 6, MC 7.

## **EPA (ENTRUSTABLE PROFESSIONAL ACTIVITIES):**

A student should be able to perform the following tasks at distant supervision

#### **Entrustable professional activities for Oral Pathology**

EPA1 - Identify diseases of teeth - developmental disturbances of teeth and orofacial structures.

EPA2 – Identify benign, premalignant and malignant lesions of oral cavity with orientation towards a systematic approach to differential diagnosis

EPA3 - Identify various signs of abuse, and initiate investigations if required.

## Bloom's Taxonomy, OBE (Outcome Based Education Mapping Course Outcomes, Major Competencies)

Course Outcome / Major competency	Bloom's Taxonomy Level	
CO1 (MC1), CO2 (MC2), CO3 (MC3)	Remember, Understand	
CO4 (MC 4), CO5 (MC 5)	Apply and Analyze	

CO6 (MC6), CO7 (MC7)

**Evaluate and Create** 

## PO - CO Mapping

Oral Pathology & Oral Microbiology		
PO1	Apply critical thinking and problem-solving, skills in the comprehensive care of patients, scientific inquiry and research methodology.	
PO2	Self-assess their own professional competencies and the demonstrate of professional values and capacities associated with self-directed, lifelong learning.	
PO3	PO3  Demonstrate in-depth understanding of basic biological principles, consisting of a core of information on the fundamental structures, functions and interrelationships of the body systems.	
P(A)		CO1,CO2, CO3
PO5	Support a high level of understanding of the etiology, epidemiology, differential diagnosis, pathogenesis, prevention, treatment and prognosis of oral and oral related disorders.	
Apply the fundamental principles of behavioral sciences as they pertain to patient-centered approaches for promoting, improving and maintaining oral health for young, adult and aged patients.		NA
PO7	Understand the principles of ethical decision making and professional responsibility with clear concepts on legal and regulatory requirements pertaining to the provision and/or support of oral health care services.	NA
PO8	Implement the basic principles and philosophies of practice management, models of oral health care delivery, and how to communicate and function successfully as the leader of the oral health care team.	NA

PO9	Practice Evidence based health care and continue to acquire and appraise knowledge.	CO6
PO10	Engage in service learning experiences and/or community-based learning experiences.	NA
PO11	Assess and manage the treatment of patients of all age groups with general and special needs.	NA
PO12	Demonstrate dexterity in pre-clinical skills	NA
PO13	patient assessment, diagnosis, comprehensive treatment planning, prognosis, and informed consent;	NA
PO14	Screening and assessment risk for head and neck cancer;	CO1, CO5
PO15	recognizing the complexity of patient treatment and identifying when referral is indicated;	NA
PO16	Health promotion and disease prevention, including caries management;	NA
PO17	Local anesthesia, and pain and anxiety control, including consideration of the impact of prescribing practices and substance use disorder;	NA
PO18	Restoration of teeth;	NA

PO19	Communicating and managing dental laboratory procedures in support of patient care;	NA
PO20	Replacement of teeth including fixed, removable and dental implant prosthodontic therapies;	NA
PO21	Periodontal therapy;	NA
PO22	Pulpal therapy;	NA
PO23	Oral mucosal, temporomandibular, and osseous disorders;	CO1, CO2
PO24	Hard and soft tissue surgery;	NA
PO25	Dental emergencies;	NA
PO26	Malocclusion and space management;	NA
PO27	Evaluation of the outcomes of treatment, recall strategies, and prognosis	NA

## **Evaluation & Competency Attainment:**

## **Course Outcome Competency Attainment Evaluation:**

Each course evaluation shall be conducted for 500 marks.

Summative Exam : 200 marks Formative Exam: 300 marks

## **Summative Exam (University Final Exam)**

Summative (University Final Exam) Theory			
Exam Name	Marks	Course Outcome ( Major Competencies)	
Theory ( Should include but not limit to EBD, Objective questions, Concept maps etc)	100	CO1 (MC1), CO2 (MC2), CO3 (MC3)	
Total Marks		100	
Summative ( University Final Exam ) Practical			
Exam Name	Marks	Course Outcome (Major Competencies)	
Identification of spotters, specimen and casts	15	CO 4 (MC 4), EPA1	
Identification of the slides and drawing well labeled diagrams	30	CO 5 (MC 5), EPA2	
Practical records of oral pathology	15	CO 5 (MC 5)	
Additional assessments & Viva	40		
Total Marks		100	

## Formative Assessment ( 300 marks)\*

Formative Theory (150 marks)				
Exam Name	Marks	Course Outcome ( Major Competencies)		
FTA 1	10	CO1 (MC1)		
FTA 2	10	CO2 (MC2)		
FTA 3	10	CO3 (MC3)		
FTA4 (Critical thinking)	10	CO1 (MC1), CO2 (MC2), CO3 (MC3)		
FTA5 (Self assessment)	10	CO7 (MO7)		
Additional Tests; Assessments & Research work	100			
Total Marks	150			
Formative Practical (1	Formative Practical (150 marks)			
Exam Name	Marks	Course Outcome ( Major Competencies)		
FPA 1- Submission of a project of allotted pathology: either models or posters.	10	CO4 (MC4), CO5 (MC5), EPA1		
FPA 2- Perform and interpret exfoliative cytology to identify pre-malignant lesions	10	CO5 (MC5) ,EPA 2		
FPA 3- Obtain smears for candida, stain and interpret under the microscope.	10	CO5 (MC5) ,EPA 2		
FPA 4- Differential diagnosis of intraosseous pathology (cysts and tumors)	10	CO5 (MC5) ,EPA 2		
FPA 5- Self assessment	10	CO7 (MC7)		
Other formative practical assessment determined by the department.	100			

Total Marks	150
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\* The University Board of Studies shall have freedom to reallocate the marks assigned for additional assessment between formative theory & practical scores. The overall Formative scores has to be computed for 300.

A student requires a minimum score of 35% in Formative assessment and 50% in Summative Assessment to clear a course. Universities can add additional formative theory and practical scores over and above the minimum stipulated by the DCI to improve student engagement. These scores can be added to their CGPA, however, they cannot be computed below the minimal stipulated requirements prescribed by the DCI. These scores can be converted to CGPA as per <u>UGC guidelines to prepare marksheets and transcripts.</u>

Universities or Departments can mandate individual exams with focus on each major competency to easily document / analyze competency attainment across all enrolled students. If the department chooses to conduct a combined exam to evaluate 2 or more competencies, then it is suggested that the question papers are divided into sections to focus on a single major competency. In such cases, result analysis should be done for each section to measure competency attainment.

Modern methods of evaluations like OSCE, OSPE can be used to document student performance. Institutions should deploy at least one innovative evaluation method and evaluate its effectiveness as a part of education development.

Departments can conduct individual exercises with focus on each major competency to easily document/analyze competency attainment across all enrolled students. If the department chooses to conduct a combined exercise to evaluate 2 or more competencies, then it is suggested that the assessment rubrics are divided into sections, with each section focusing on a single major competency.

#### **Competency Framework**

## Subject: Oral and Maxillofacial pathology and Microbiology

#### Knowledge:

- OP-1.1 Discuss Agnathia. Describe the clinical features in detail.
- OP-1.2 Discuss Micrognathia. Describe the clinical features in detail.
- OP-1.3 Discuss Macrognathia. Describe the clinical features in detail.
- OP-1.4 Discuss Facial Hemihypertrophy. Describe the clinical features in detail.
- OP-1.5 Discuss Facial Hemiatrophy. Describe the clinical features in detail
- OP-1.6 Discuss Congenital Lip Pits and Commissural Pits and Fistulas. Describe the clinical features in detail.
- Op-1.7 Describe Double Lip and its clinical features in detail
- OP-1.8 Discuss Cleft Lip. Describe the etiology, prevalence, types and clinical features in detail.
- OP-1.9 Discuss Cleft Palate. Describe the etiology, prevalence, types and clinical features in detail.
- OP-1.11 Discuss Cheilitis Glandularis. Describe the clinical features and histopathology in detail.
- OP-1.12 Discuss Cheilitis Granulomatosa. Describe the clinical features and histopathology in detail.
- OP-1.13 Discuss Hereditary Intestinal Polyposis. Describe the clinical features in detail.
- OP-1.14 Discuss Hereditary Melanotic Macules.Describe the clinical features in detail.
- OP-1.15 Describe Fordyce's granules.
- OP-1.17 Describe Focal Epithelial Hyperplasia.
- OP-1.18 Discuss Fibromatosis Gingiva. Describe the clinical features and histopathology in detail.
- OP-1.19 Discuss retrocuspid papilla. Describe the clinical features and histopathology in detail.
- OP-1.20 Discuss macroglossia. Describe the clinical features and implications on normal oral functions. Add a note on the treatment outline.
- OP-1.21 Discuss microglossia. Describe the clinical features and implications on normal oral functions. Add a note on the treatment outline.
- $\mbox{OP}$  -1.22 Discuss Ankyloglossia. Describe the clinical features and implications on normal oral functions. Add a note on the treatment outline.
- $\mbox{OP}$  -1.23 Discuss Cleft Tongue. Describe the clinical features and implications on normal oral functions. Add a note on the treatment outline.
- $\mbox{OP}$  -1.24 Discuss Fissured Tongue. Describe the clinical features and implications on normal oral functions. Add a note on the treatment outline.
- OP -1.26 Discuss Median Rhomboid Glossitis.Describe the clinical features and implications on normal oral functions. Add a note on the treatment outline.
- OP -1.27 Discuss Benign Migratory Glossitis. Describe the clinical features and implications on normal oral functions. Add a note on the treatment outline.
- OP -1.29 Discuss Hairy Tongue. Describe the clinical features and implications on normal oral functions. Add a note on the treatment outline.
- OP-1.31 Discuss Reactive Lymphoid Aggregates. Describe the clinical and histopathological features.
- OP-1.32 Discuss Lymphoid Hamartoma. Describe the clinical and histopathological features.
- $\mbox{OP-1.33}$  Discuss Angiolymphoid Hyperplasia. Describe the clinical and histopathological features.
- OP-1.34 Discuss Lympho-Epithelial Cyst. Describe the clinical and histopathological features.
- OP-1.35 Discuss Aplasia of Salivary gland. Describe the etiology, prevalence, types and clinical features in detail.
- OP-1.36 Discuss Xerostomia. Describe the etiology, prevalence, types and clinical features in detail.
- OP-1.37 Discuss Ptyalism. Describe the etiology, prevalence, types and clinical features in detail.
- OP-1.38 Discuss Hyperplasia of the Palatal Salivary Glands. Describe the etiology, prevalence, types and clinical features in detail.
- OP-1.39 Discuss Atresia of Salivary Glands. Describe the etiology, prevalence, types and clinical features in detail.

- OP-19.1 Enumerate the syndromes involving the bones of the craniofacial region.
- OP-19.2 Describe the etiology, clinical features, oral manifestations, radiographic findings, histological features, treatment and prognosis of Osteogenesis Imperfecta
- OP-19.3 Describe the etiology, clinical features, oral manifestations, radiographic findings, histological features, treatment and prognosis of Marfan Syndrome.
- OP-19.4 Describe the etiology, clinical features, oral manifestations, radiographic findings, histological features, treatment and prognosis of Achondrogenesis.
- OP-19.5 Describe the etiology, clinical features, oral manifestations, radiographic findings, histological features, treatment and prognosis of Hypophosphatasia.
- OP-19.6 Describe the etiology, clinical features, oral manifestations, radiographic findings, histological features, treatment and prognosis of Osteopetrosis
- OP-19.7 Describe the etiology, clinical features, oral manifestations, radiographic findings, histological features, treatment and prognosis of Chondrodysplasia Punctata.
- OP-19.8 Describe the etiology, clinical features, oral manifestations, radiographic findings, histological features, treatment and prognosis of Pycnodysostosis.
- OP-19.9 Describe the etiology, clinical features, oral manifestations, radiographic findings, histological features, treatment and prognosis of Pickets
- OP-19.10 Describe the etiology, clinical features, oral manifestations, radiographic findings, histological features, treatment and prognosis of Hypoparathyroidism.
- OP-19.11 Describe the etiology, clinical features, oral manifestations, radiographic findings, histological features, treatment and prognosis of hyperparathyroidism.
- OP-19.12 Describe the etiology, clinical features, oral manifestations, radiographic findings, histological features, treatment and prognosis of vitamin D resistant rickets
- OP-19.13 Describe the etiology, clinical features, oral manifestations, radiographic findings, histological features, treatment and prognosis of Craniofacial Dysostosis.
- OP-19.14 Describe the etiology, clinical features, oral manifestations, radiographic findings, histological features, treatment and prognosis of Mandibulofacial dysostosis.
- OP-19.15 Describe the etiology, clinical features, oral manifestations, radiographic findings, histological features, treatment and prognosis of Pierre Robin Syndrome.
- OP-19.16 Describe the etiology, clinical features, oral manifestations, radiographic findings, histological features, treatment and prognosis of Apert Syndrome.
- OP -19.17 Describe the etiology, clinical features, oral manifestations, radiographic findings, histological features, treatment and prognosis of Thanatophoric dysplasia.
- OP -19.18 Describe the etiology, clinical features, oral manifestations, radiographic findings, histological features, treatment and prognosis of Achondroplasia.
- OP -19.19 Describe the etiology, clinical features, oral manifestations, radiographic findings, histological features, treatment and prognosis of Robinow Syndrome.
- OP -19.20 Describe the etiology, clinical features, oral manifestations, radiographic findings, histological features, treatment and prognosis of Chondroectodermal Dysplasia.
- OP -19.21 Describe the etiology, clinical features, oral manifestations, radiographic findings, histological features, treatment and prognosis of Cleidocranial Dysplasia.
- OP -19.22 Describe the etiology, clinical features, oral manifestations, radiographic findings, histological features, treatment and prognosis of Down Syndrome.
- OP -19.23 Describe the etiology, clinical features, oral manifestations, radiographic findings, histological features, treatment and prognosis of Tricho -dento -osseous Syndrome.
- OP -19.24 Describe the etiology, clinical features, oral manifestations, radiographic findings, histological features, treatment and prognosis of Crouzon Syndrome.

- OP-1.40 Discuss Abberrancy of Salivary Glands. Describe the etiology, prevalence, types and clinical features in detail.

  OP-1.41 Discuss Stafne's cyst. Describe the etiology, prevalence, types
- and clinical features in detail.
- OP-1.42 Discuss Median palatal cysts. Describe the etiopathogenesis, clinical, radiological and histopathological features.
- OP-1.43 Discuss Globulomaxillary cyst. Describe the etiopathogenesis, clinical, radiological and histopathological features.
- Discuss Median Mandibular cvst. Describe etiopathogenesis, clinical, radiological and histopathological features. OP-1.45 Discuss Naso-alveolar cvst. Describe the etiopathogenesis. clinical and histopathological features.
- Discuss Palatal cyst of neonates.Describe etiopathogenesis, clinical and histopathological features.
- OP-1.47 Discuss Thyroglossal duct cyst. Describe the etiopathogenesis, clinical and histopathological features.
- OP-1.48 Discuss Epidermoid cyst. Describe the etiopathogenesis, clinical and histopathological features.
- OP-1.49 Discuss Dermoid cyst. Describe the etiopathogenesis, clinical and histopathological features.
- OP-1.50 Discuss Nasopalatine cyst. Describe the etiopathogenesis, clinical, radiological and histopathological features.
- OP-2.1 Discuss Microdontia. Describe the etiology, classification, prevalence, types and clinical features in detail.
- OP-2.3 Discuss Macrodontia. Describe the etiology, classification, prevalence, types and clinical features in detail.
- OP-2.5 Discuss Fusion. Describe the etiopathogenesis, Clinical, radiological and histopathological features.
- OP-2.7 Discuss Germination. Describe the etiopathogenesis, Clinical, radiological and histopathological features.
- OP-2.9 Discuss Concrescence. Describe the etiopathogenesis, Clinical, radiological and histopathological features
- OP-2.11 Discuss Dilaceration. Describe the etiopathogenesis, Clinical, radiological and histopathological features.
- OP-2.13 Discuss Talon's Cusp. Describe the etiopathogenesis, Clinical, radiological and histopathological features.
- OP-2.15 Discuss Dens in Dente. Describe the etiopathogenesis, Clinical, radiological and histopathological features.
- OP-2.17 Discuss Dens Evaginatus. Describe the etiopathogenesis, Clinical, radiological and histopathological features.
- OP-2.19 Discuss Taurodontism. Describe the etiopathogenesis, Clinical, radiological and histopathological features.
- OP-2.21 Discuss Supernumerary Roots. Describe the etiopathogenesis, Clinical and radiological features.
- OP-2.23 Discuss Enameloma in detail.
- OP-2.25 Discuss Anodontia, Supernumerary teeth? Describe the etiopathogenesis, Clinical, and radiological features
- OP -2.26- Observe, identify the given cast. Describe in detail about the type of dentition and anomalies if present. Add a note on its clinical implications and any syndromes associated with it.
- OP-2.27 Enumerate the Changes in Predeciduous and Post Permanent dentition. Describe the etiopathogenesis, clinical and radiological features of such abnormal changes.
- -2.28 Discuss Amelogenesis Imperfecta, Describe the etiopathogenesis, types, classification, radiological and histopathological features
- OP-2.30 Discuss Enamel Hypoplasia, Describe the etiopathogenesis, types, classification, radiological and histopathological features.
- Discuss Dentinogenesis Imperfecta. Describe etiopathogenesis, types, classification, radiological and histopathological
- OP-2.34 Discuss Dentinal dysplasia. Describe the etiopathogenesis, types, classification, radiological and histopathological features
- Discuss Regional Odontodysplasia. Describe etiopathogenesis, types, classification, radiological and histopathological features
- OP-2.37 Discuss Shell Teeth. Describe the etiopathogenesis, types, classification, radiological and histopathological features.
- OP-2.38 Discuss Premature Eruption. Describe the process in detail.
- OP-2.40 Discuss Eruption Sequestrum in detail.
- OP-2.41 Discuss Delayed Eruption in detail.
- OP-2.43 Discuss Multiple Unerupted teeth in detail.
- OP-2.45 Discuss Submerged Teeth in detail.
- OP-3.1 List the common Benign tumours of epithelial tissue origin in the oral cavity. Describe Papilloma, Keratoacanthoma, Nevus and discuss their clinical and histopathological features.
- OP-3.3 Enumerate Potentially malignant (Premalignant) lesions and conditions of the oral cavity.
- OP-3.4 Define and Classify OPMD with WHO definitions.

- OP-19.25 Describe the etiology, clinical features, oral manifestations, radiographic findings, histological features, treatment and prognosis of Infantile Cortical Hyperostosis.
- OP-19.26 Describe the etiology, clinical features, oral manifestations, radiographic findings, histological features, treatment and prognosis of Monostotic and Polyostotic Fibrous Dysplasia.
- OP-19.28 Enumerate the differences between Jaffe's type fibrous dysplasia and McCune-Albright Syndrome.
- OP-19.29 Describe the etiology, clinical features, oral manifestations, radiographic findings, histological features, treatment and prognosis of Cherubism
- OP-19.31 Enumerate the malignancies associated with McCune Albright syndrome
- OP-19.32 Describe the etiology, clinical features, oral manifestations, radiographic findings, histological features, treatment and prognosis of Ossifying Fibroma.
- OP-19.34 Describe the etiology, clinical features, oral manifestations, radiographic findings, histological features, treatment and prognosis of Cemento-osseous Dysplasia.
- OP-19.35 Enumerate the histopathological differences between fibrous dysplasia, ossifying fibroma and cemento-osseous dysplasia.
- OP-19.36 Describe the etiology, clinical features, oral manifestations, radiographic findings, histological features, treatment and prognosis of Paget's Disease.
- OP-19.38 Describe the etiology, clinical features, oral manifestations, radiographic findings, histological features, treatment and prognosis of Massive osteolysis.
- OP-19.39 Describe the etiology, clinical features, oral manifestations, radiographic findings, histological features, treatment and prognosis of Cementoblastoma
- OP-19.40 Enumerate and describe the developmental disturbances of Temporomandibular Joint.
- OP-19.41 Enumerate and describe traumatic disturbances of Temporomandibular Joint.
- OP-19.42 Enumerate and describe Inflammatory Disturbances of Temporomandibular Joint
- OP-19.43 Enumerate and describe Neoplastic Disturbances of Temporomandibular Joint.
- OP-19.44 Describe the etiology, clinical features, oral manifestations, radiographic findings, laboratory findings, histological features, treatment and prognosis of Temporomandibular Joint Syndrome.
- OP-19.45 Describe the etiology, clinical features, oral manifestations, radiographic findings, laboratory findings, histological features, treatment and prognosis of Hand-SchullerChristian Syndrome.
- OP-19.46 Describe the etiology, clinical features, oral manifestations, radiographic findings, laboratory findings, histological features, treatment and prognosis of Eosinophilic Granuloma.
- OP-19.47 Describe the etiology, clinical features, oral manifestations, radiographic findings, laboratory findings, histological features, treatment and prognosis of Langerhans Cell Histiocytosis.
- OP-20.1 Discuss the Blood dyscrasias.
- OP-20.2 Describe the Clinico-pathological aspects and oral manifestations of Anemias. Add a note on the laboratory diagnosis.
- OP-20.3 Describe the Clinico-pathological aspects and oral manifestations of Polycythemia. Add a note on the laboratory diagnosis.
- OP-20.4 Describe the Clinico-pathological aspects and oral manifestations of Leukopenia. Add a note on the laboratory diagnosis.
- OP-20.5 Describe the Clinico-pathological aspects and oral manifestations of Neutropenia. Add a note on the laboratory diagnosis. OP-20.6 Describe the Clinico-pathological aspects and oral manifestations of Agranulocytosis. Add a note on the laboratory diagnosis.
- OP-20 7 Describe the Clinico-pathological aspects and oral manifestations of Chediak- Higashi syndrome. Add a note on the laboratory diagnosis.
- OP-20.8 Describe the Clinico-pathological aspects and oral manifestations of Leukocytosis. Add a note on the laboratory diagnosis.
- Describe the Clinico-pathological aspects and oral OP-20 9 manifestations of Infectious mononucleosis. Add a note on the laboratory diagnosis.
- the Clinico-pathological aspects and oral OP-20.10 Describe manifestations of Leukemias. Add a note on the laboratory diagnosis.
- OP-20.11 Describe the Clinico-pathological aspects and oral manifestations of Purpura and Haemophilia. Add a note on the laboratory diagnosis.

- OP-3.5 Discuss Epithelial dysplasia. Describe the characteristics and histopathological features of epithelial dysplasia.
- OP-3.7 Discuss Leukoplakia, Carcinoma in situ, Erythroplakia and Oral submucous fibrosis . Describe the etiopathogenesis, clinical features, types and histopathological characteristics of the entities separately.
- OP-3.9 Discuss Basal cell carcinoma. Describe the clinical features, types and histopathological features.
- OP-3.11 Describe Squamous Cell carcinoma. Add a note on the epidemiology, etiology, clinical & histological features, grading and TNM staging. How does it differ from Verrucous carcinoma
- OP-3.13 Discuss Malignant melanoma. Describe the clinical features. types and histopathological characteristics of the malignant melanoma OP-3.15 Describe the recent molecular advances in diagnosis and
- prevention of Oral cancer.
- OP-3.16 Describe rarer variants of Squamous cell carcinoma eg, Spindle cell carcinoma, Adenosquamous carcinoma, Adenoid squamous carcinoma with histopathological differences.
- OP-4.1 Discuss Fibroma. Describe the clinical features, types and histopathological characteristics.
- OP-4.3 Discuss Giant cell fibroma. Describe the clinical features and histopathological characteristics.
- OP-4.4 Discuss Peripheral and Central ossifying fibroma. Describe the clinical features and histopathological characteristics.
- OP-4.6 Discuss Lipoma. Describe the clinical features, types and histopathological characteristics.
- OP-4.8 Discuss Haemangioma. Describe the clinical features, types and histopathological characteristics.
- OP-4.10 Discuss Lymphangioma. Describe the clinical features, types
- and histopathological characteristics.

  OP-4.12 Discuss Chondroma. Describe the clinical features, radiological and histopathological characteristics.
- OP-4.13 Discuss Osteoma. Describe the clinical features, types, radiological and histopathological characteristics.
- OP-4.15 Discuss Osteoid osteoma. Describe the clinical features, radiological and histopathological characteristics
- OP-4.16 Discuss Benign osteoblastoma. Describe the clinical features, radiological and histopathological characteristics.
- OP-4.18 Discuss Tori and Multiple exostoses. Describe the clinical features, types, radiological and histopathological characteristics.
- OP-4.19 Discuss Central and Peripheral Giant cell granuloma. Describe the clinical features and histopathological characteristics
- OP-4.21 Describe Fibrosarcoma. Describe the clinical features, types and histopathological characteristics. OP-4.23 Describe Chondrosarcoma. Describe the clinical features,
- types and histopathological characteristics
- OP-4.24 Describe Kaposi's sarcoma. Describe the clinical features, types and histopathological characteristics.
- OP-4.25 Describe Ewing's sarcoma. Describe the clinical features, types and histopathological characteristics.
- OP-4.26 Describe Osteosarcoma. Describe the clinical features, types, radiological and histopathological characteristics.
- OP-4.28 Describe Hodgkin's and Non Hodgkin's lymphoma. Describe the clinical features, types and histopathological characteristics
- OP-4.30 Describe Burkitt's lymphoma. Describe the clinical features, types and histopathological characteristics.
- OP-4.31 Describe Multiple myeloma. Describe the clinical features, types, radiological and histopathological characteristics. Add a note on laboratory diagnosis
- OP-4.32 Describe Solitary Plasma cell myeloma. Describe the clinical features ,radiological and histopathological characteristics.
- OP-4.33 Discuss Leiomyoma. Describe the clinical features and histopathological characteristics. OP-4.34 Discuss Rhabdomyoma. Describe the clinical features and
- histopathological characteristics OP-4.35 Discuss Congenital Epulis of newborn. Describe the clinical
- features and histopathological characteristics. OP-4.36 Discuss Granular cell tumour. Describe the clinical features and
- histopathological characteristics. OP-4.37 Discuss leiomyosarcoma. Describe the clinical features and
- histopathological characteristics
- OP-4.38 Discuss Rhabdomyosarcoma. Describe the clinical features and histopathological characteristics
- OP-4.39 Discuss briefly Alveolar soft part sarcoma
- OP-4.40 Discuss Neurofibroma. Describe the clinical features, and histopathological characteristics.
- OP-4.42 Discuss Neurofibromatosis. Describe the clinical features, and histopathological characteristics.
- OP-4.43 Discuss Schwannoma. Describe the clinical features, and histopathological characteristics.

- OP-21.1 Discuss the concept and Terminology related to Synonymous lesions Mucocutaneous, Vesiculo Bullous, Autoimmune
- OP-21.2 Discuss the concept of histological, molecular and genetic organization of normal oral epithelial cells and detailed description of ultrastructure and immunofluorescence of basement membrane and enithelium
- OP-21.3 Classification of various Mucocutaneous disorders under different classifications.
- OP-21.4 Discuss in detail pathogenesis, C/F, pre operative investigations, histopathology, treatment and prognosis of histopathology, Genodermatotic Mucocutaneous lesions.
- OP- 21.5 Discuss in detail pathogenesis, C/F, pre operative investigations, histopathology, treatment and prognosis of Pemphigus and its types. Special emphasis on immunofluorescence.
- OP- 21.7 Discuss in detail pathogenesis, C/F, pre operative investigations, histopathology, treatment and prognosis of Oral Lichen Planus and its types with special emphasis on immunofluorescence.
- OP- 21.9 Discuss in detail pathogenesis, C/F, pre operative investigations, histopathology, treatment and prognosis of Erythema Multiforme and Steven Jhonson Syndrome with special emphasis on immunofluorescence.
- OP- 21.10 Discuss in detail pathogenesis, C/F, pre operative investigations, histopathology, treatment and prognosis of Lupus Erythematosus.
- OP- 21.11 Discuss in detail pathogenesis, C/F, pre operative investigations, histopathology, treatment, and prognosis of Benign Mucous membrane Pemphigoid with special emphasis on immunofluorescence.
- OP- 21.13 Discuss briefly about Dermatitis Herpetiformis, Psoriasis, Incontinentia Pigmenti, Acnthosis Nigricans, Ehlers Syndrome, Pachyonychia Congenitas, Warty Dyskeratoma, Peutz Jeghers Syndrome.
- OP-22.1 Discuss Facial neuralgia. Describe the etiopathogenesis and clinical features.
- OP-22.2 Discuss Trigeminal neuralgia. Describe the etiopathogenesis and clinical features.
- OP-22.3 Discuss Sphenopalatine neuralgia. Describe etiopathogenesis and clinical features.
- OP-22.4 Discuss Glossopharyngeal etiopathogenesis and clinical features. neuralgia. Describe
- OP-22.5 Discuss VII nerve paralysis. Describe the etiopathogenesis and clinical features.
- OP-22.6 Discuss Causalgia . Describe the etiopathogenesis and clinical features.
- OP-22.7 Discuss Psychogenic facial pain. Describe the etiopathogenesis and clinical features.
- OP-22.8 Discuss Burning mouth syndrome. Describe the etiopathogenesis and clinical features.
- OP-22.9 Discuss muscle Dystrophy in brief.
- OP-22.10 Discuss myotonia in brief.
- OP-22.11 Discuss Myasthenias in brief
- OP-22.12 Discuss myositis ossificans in brief.
- OP-22.13 Discuss heterotopic Ossifications in brief.
- OP-22.14 Discuss Proliferative Myositis in brief.

#### Skills:

- OP-1.10 Observe, identify the given cast. Describe in detail about the type of dentition and anomalies present if any. Add a note on its clinical importance and any syndrome associated with it.
- OP-1.16 Observe, identify the microscopic features of Fordyce's granules. Describe and draw the histopathological features of the same with legible labeled diagram
- OP-1.25 Observe, identify the given cast. Describe in detail about the type of dentition and anomalies present if any. Add a note on its clinical importance and any syndrome associated with it.
- OP-1.28 Observe, identify the given cast. Describe in detail about the type of dentition and anomalies present if any. Add a note on its clinical importance and any syndromes associated with it.
- OP-1.30 Observe, identify the given cast. Describe in detail about the type of dentition and anomalies present if any. Add a note on its clinical importance and any syndromes associated with it
- OP-2.2 Observe, identify the given cast. Describe in detail about the type of dentition and anomalies present if any. Add a note on its clinical importance and any syndrome associated with it.
- OP-2.4 Observe, identify the given cast. Describe in detail about the type of dentition and anomalies present if any. Add a note on its clinical importance and any syndrome associated with it.

- OP-4.45 Discuss Melanotic neuroectodermal tumour of infancy Describe the clinical features, and histopathological characteristics.
- OP-4.46 Discuss Malignant Schwannoma. Describe the clinical features, and histopathological characteristics.
- OP.4.47 Discuss metastatic tumours of jaws and soft tissues of the oral cavity. Describe the types, clinical features and histopathological characteristics
- OP-5.1 Describe the classification systems of Salivary gland tumors
- OP-5.2 Describe the structural organization of salivary glands.
- OP-5.3 Enumerate benign tumors of the salivary glands.
- OP-5.4 Describe the pathogenesis, histogenesis, clinical manifestations, histological features, treatment and prognosis of Pleomorphic adenoma. OP-5.6 Describe the pathogenesis, histogenesis, clinical manifestations,
- histological features, treatment and prognosis of Myoepithelioma OP-5.7 Describe the pathogenesis, histogenesis, clinical manifestations, histological features, treatment and prognosis of Warthin's Tumor
- OP-5.9 Describe the pathogenesis, histogenesis, clinical manifestations, histological features, treatment and prognosis of Oncocytoma.
- OP-5.10 Describe the pathogenesis, histogenesis, clinical manifestations, histological features, treatment and prognosis of Canalicular Adenoma and Basal cell adenoma
- OP-5.11 Describe the pathogenesis, histogenesis, clinical manifestations, histological features, treatment and prognosis of Sebaceous Adenoma.
- OP-5.12 Describe the pathogenesis, histogenesis, clinical manifestations, histological features, treatment and prognosis of Ductal Papilloma
- OP-5.13 Describe the pathogenesis, histogenesis, clinical manifestations, histological features, treatment and prognosis of Cystadenoma.
- OP-5.14 Enumerate malignant tumors of the salivary glands.
- OP-5.15 Describe the pathogenesis, histogenesis, clinical manifestations, histological features, treatment and prognosis of Mucoepidermoid Carcinoma.
- OP-5.17 Describe the pathogenesis, histogenesis, clinical manifestations, histological features, treatment and prognosis of Acinic Cell Carcinoma.
- OP-5.18 Describe the pathogenesis, histogenesis, clinical manifestations, histological features , treatment and prognosis of Adenoid Cystic Carcinoma.
- OP-5.20 Describe the pathogenesis, histogenesis, clinical manifestations, histological features, treatment and prognosis of Polymorphous Adenocarcinoma.
- OP-5.21 Describe the pathogenesis, histogenesis, clinical manifestations, histological features, treatment and prognosis of Epithelial -Myoepithelial Carcinoma.
- OP-5.22 Describe the pathogenesis, histogenesis, clinical manifestations, histological features, treatment and prognosis of Basal Cell Adenocarcinoma.
- OP-5.23 Describe the pathogenesis, histogenesis, clinical manifestations, histological features, treatment and prognosis of Oncocytic Carcinoma.
- OP-5.24 Describe the pathogenesis, histogenesis, clinical manifestations, histological features, treatment and prognosis of Salivary Duct Carcinoma
- OP-5.25 Describe the pathogenesis, histogenesis, clinical manifestations, histological features, treatment and prognosis of Carcinoma in Pleomorphic Adenoma.
- OP-5.26 Describe the pathogenesis, histogenesis, clinical manifestations, histological features, treatment and prognosis of Squamous Cell Carcinoma in salivary glands.
- OP-5.27 Describe the pathogenesis, histogenesis, clinical manifestations, histological features, treatment and prognosis of Malignant Lymphomas of salivary glands.
- OP-5.28 Enumerate non neoplastic tumor like lesions of salivary glands. OP-5.29 Describe causes, clinical features, histological features and treatment of Sialadenosis.
- OP-5.30 Describe causes, clinical features, histological features and treatment of Sialadenitis.
- OP-5.31 Describe causes, clinical features, histological features and treatment of Oncocytosis.
- OP-5.32 Describe causes, clinical features, histological features and treatment of Necrotizing Sialometaplasia.
- OP-5.33 Describe causes, clinical features, histological features and treatment of Benign Lymphoepithelial Lesion.
- OP-5.34 Describe causes, clinical features, histological features, laboratory findings, radiographic features and treatment of Sjogren's Syndrome.

- OP-2.6 Observe, identify the given specimen of tooth (fusion). Describe in detail about its salient features, any syndrome associated with it and its clinical importance
- OP-2.8 Observe, identify the given specimen of tooth (gemination). Describe in detail about its salient features, any syndrome associated with it and its clinical importance.
- OP-2.10 Observe, identify the given specimen of tooth (Concrescence). Describe in detail about its salient features, any syndrome associated with it and its clinical importance.
- OP-2.12 Observe, identify the given specimen of tooth (Dilaceration). Describe in detail about its salient features, any syndrome associated with it and its clinical importance.
- OP-2.14 Observe, identify the given specimen of tooth (Talon's Cusp). Describe in detail about its salient features, any syndrome associated with it and its clinical importance
- OP-2.16 Observe, identify the given specimen of tooth (Dens in Dente). Describe in detail about its salient features, any syndrome associated with it and its clinical importance
- OP-2.18 Observe, identify the given specimen of tooth (Dens Evaginatus). Describe in detail about its salient features, any syndrome associated with it and its clinical importance.
- OP-2.20 Observe, identify the given specimen of tooth (Taurodontism). Describe in detail about its salient features, any syndrome associated with it and its clinical importance
- OP-2.22 Observe, identify the given specimen of tooth (Supernumerary Roots). Describe in detail about its salient features, any syndrome associated with it and its clinical importance
- OP-2.24 Observe, identify the given specimen of tooth (Enameloma). Describe in detail about its salient features, any syndrome associated with it and its clinical importance.
- OP-2.29 Observe, identify the given cast. Describe in detail about the type of dentition and anomalies present if any. Add a note on its clinical importance and any syndrome associated with it.
- OP-2.31 Observe, identify the given cast. Describe in detail about the type of dentition and anomalies present if any. Add a note on its clinical importance and any syndrome associated with it.
- OP-2.33 Observe, identify the given cast. Describe in detail about the type of dentition and anomalies present if any. Add a note on its clinical importance and any syndrome associated with it.
- OP-2.35 Observe, identify the given specimen of tooth (Dentin dysplasia). Describe in detail about its salient features, any syndrome associated with it and its clinical importance.
- OP-2.39 Observe, identify the given cast. Describe in detail about the type of dentition and anomalies present if any. Add a note on its clinical importance and any syndrome associated with it.
- OP-2.42 Observe, identify the given cast. Describe in detail about the type of dentition and anomalies present if any. Add a note on its clinical importance and any syndrome associated with it.
- OP-2.44 Observe, identify the given cast. Describe in detail about the type of dentition and anomalies present if any. Add a note on its clinical importance and any syndrome associated with it.
- OP-3.2 Observe, identify the microscopic features of Papilloma and Nevus. Describe and draw the histopathological features of the same with legible labeled diagram
- OP-3.6 Observe, identify the microscopic features of Mild, Moderate and Severe epithelial dysplasia. Describe and draw the histopathological features of the same with legible labeled diagram
- OP-3.8 Observe, identify the microscopic features of Carcinoma in situ and Oral submucous fibrosis. Describe and draw the histopathological features of the same with legible labeled diagram
- OP-3.10 Observe, identify the microscopic features of Basal cell carcinoma. Describe and draw the histopathological features of the same with legible labeled diagram
- OP-3.12 Observe, identify the microscopic features of Well differentiated squamous cell carcinoma, Moderately differentiated squamous cell carcinoma, Poorly differentiated squamous cell carcinoma and Verrucous carcinoma. Describe and draw the histopathological features of the same with legible labeled diagram
- OP-3.14 Observe, identify the microscopic features of Malignant melanoma. Describe and draw the histopathological features of the same with legible labeled diagram
- OP-3.17 Observe, identify the microscopic features of Spindle cell carcinoma. Describe and draw the histopathological features of the same with legible labeled diagram
- OP-4.2 Observe, identify the microscopic features of Fibroma. Describe and draw the histopathological features of the same with legible labeled diagram

- OP-5.35 Describe causes, clinical features, histological features and treatment of cysts of salivary glands.
- OP-5.36 Describe causes, clinical features, histological features and treatment of Mucous extravasation phenomenon.
- OP-5.38 Describe causes, clinical features, histological features and treatment of Mucous Retention Cyst.
- OP-5.40 Describe causes, clinical features, histological feature and treatment of Chronic Sclerosing Sialadenitis of Submandibular glands OP-6.1 Define Cyst, Classify cysts of orofacial region. Add a note on Biological Classification of Odontogenic Cysts.
- OP-6.2 Compare and contrast theories of cyst enlargement between inflammatory and developmental odontogenic cysts.
- OP-6.3 Define Dentigerous cyst. Discuss in detail its pathogenesis, C/F, R/F and Types, pre operative investigations, histopathology, treatment, prognosis and complications of the same.
- OP-6.5 Define Odontogenic Keratocyst. Discuss in detail its pathogenesis, C/F, R/F and Types, pre operative investigations, histopathology and its types, treatment, prognosis and complications of the same, reasons for recurrence. Syndrome associated with OKC
- OP-6.7 Discuss Eruption Cyst, Gingival Cyst of Adults and Gingival cyst of NewBorn.
- OP-6.8 Discuss Lateral Periodontal cyst and Glandular Odontogenic cvst.
- OP-6.9 Discuss in detail pathogenesis, C/F, R/F and Types, pre operative investigations, histopathology and its types, treatment, & prognosis of Calcifying Odontogenic Cyst, Dentinogenic Ghost cell Tumour
- OP-6.11 Discuss nonodontogenic cysts.
- OP-6.12 Discuss inflammatory Odontogenic Cysts, role of Inflammatory mediators in Root end cyst/Periapical cyst.
  OP- 6.13 Compare pathogenesis, C/F, R/F, investigations, H/F of
- Inflammatory Odontogenic Cysts.
- OP-6.14 Discuss Aneurysmal bone cyst. Describe in detail the etiopathogenesis, clinical features, histopathology,and radiological features.
- OP-6.16 Discuss Traumatic bone cyst. Describe in detail the etiopathogenesis, clinical features, histopathology and radiological
- OP-7.1 Classify Odontogenic Tumours. Discuss in detail recent concepts of Odontogenic tumours classification.
- OP-7.2 Define Ameloblastoma. Discuss in detail its pathogenesis, C/F, R/F and Types, pre Operative Investigations, histopathology and its variants, treatment, prognosis. Add a note on molecular pathogenesis and cell of origin in pathogenesis.
- OP-7.4 Discuss Pathogenesis, C/F, R/F pre operative investigations. histopathology and treatment of Calcifying Epithelial Odontogenic Tumour, Squamous OdontogenicTumour, Adenomatoid Odontogenic
- OP-7.6 Discuss in detail pathogenesis, C/F, R/F, pre operative investigations, histopathology, treatment and prognosis of Tumors of Mixed Odontogenic Origin, Odontoma, Ameloblastic Fibroma and its variants.
- OP-7.8 Discuss in detail pathogenesis, C/F, R/F, pre operative Investigations, histopathology, treatment and prognosis of Odontogenic Tumors of Mesenchymal Origin. Odontogenic Myxoma, Cementoma, Cementoblastoma.
- OP-7.10 Discuss about Malignant Odontogenic Tumours.
- OP-7.11 Discuss briefly about the differentiation of metastatic tumors to jaw bones, cysts and Odontogenic tumours.
- OP-8.1 Describe the pathogenesis, clinical features, oral manifestations, complications, diagnosis, prevention and treatment of Scarlet Fever. OP-8.2 Describe the pathogenesis, clinical features, oral manifestations, complications, diagnosis, prevention and treatment of Diphtheria.
- OP-8.3 Describe the pathogenesis, clinical features, oral manifestations, complications, diagnosis, prevention and treatment of tuberculosis.
- OP-8.5 Describe the pathogenesis, clinical features, oral manifestations, complications, diagnosis, prevention and treatment of Leprosy.
- OP-8.6 Describe the pathogenesis, clinical features, oral manifestations, complications, diagnosis, prevention and treatment of Actinomycosis.
- OP-8.8 Describe the pathogenesis, clinical features, oral manifestations, complications, diagnosis, prevention and treatment of Botryomycosis.
- OP-8.9 Describe the pathogenesis, clinical features, oral manifestations, complications, diagnosis, prevention and treatment of Tularemia.
- OP-8.10 Describe the pathogenesis, clinical features, oral manifestations, complications, diagnosis, prevention and treatment of Tetanus.
- Describe the pathogenesis, clinical manifestations, complications, diagnosis, prevention and treatment of Congenital and Acquired Syphilis.

- OP-4.5 Observe, identify the microscopic features of Peripheral and Central ossifying fibroma. Describe and draw the histopathological features of the same with legible labeled diagram
- OP-4.7 Observe, identify the microscopic features of Lipoma. Describe and draw the histopathological features of the same with legible labeled diagram
- OP-4.9 Observe, identify the microscopic features of Cavernous and capillary haemangioma. Describe and draw the histopathological features of the same with legible labeled diagram
- OP-4.11 Observe, identify the microscopic features of Lymphangioma. Describe and draw the histopathological features of the same with legible labeled diagram
- OP-4.14 Observe, identify the microscopic features of Compact and cancelous Osteoma. Describe and draw the histopathological features of the same with legible labeled diagram
- OP-4.17 Observe, identify the microscopic features of Benign osteoblastoma. Describe and draw the histopathological features of the same with legible labeled diagram
- OP-4.20 Observe, identify the microscopic features of Central and Peripheral Giant cell granuloma. Describe and draw the histopathological features of the same with legible labeled diagram
- OP-4.22 Observe, identify the microscopic features of Fibrosarcoma. Describe and draw the histopathological features of the same with legible labeled diagram
- OP-4.27 Observe, identify the microscopic features of Osteosarcoma. Describe and draw the histopathological features of the same with legible labeled diagram
- OP-4.29 Observe, identify the microscopic features of Hodgkin's and Non Hodgkin's Lymphoma. Describe and draw the histopathological features of the same with legible labeled diagram
- OP-4.41 Observe, identify the microscopic features of Neurofibroma. Describe and draw the histopathological features of the same with legible labeled diagram
- OP-4.44 Observe, identify the microscopic features of Schwannoma. Describe and draw the histopathological features of the same with legible labeled diagram
- OP-5.5 Observe, identify the microscopic features of Pleomorphic adenoma. Describe and draw the histopathological features of the same with legible labeled diagram
- OP-5.8 Observe, identify the microscopic features of Warthin's Tumor. Describe and draw the histopathological features of the same with legible labeled diagram
- OP-5.16 Observe, identify the microscopic features of Mucoepidermoid carcinoma. Describe and draw the histopathological features of the same with legible labeled diagram
- OP-5.19 Observe, identify the microscopic features of Adenoid Cystic Carcinoma. Describe and draw the histopathological features of the same with legible labeled diagram
- OP-5.37 Observe, identify the microscopic features of Mucous extravasation phenomenon. Describe and draw the histopathological features of the same with legible labeled diagram
- OP-5.39 Observe, identify the microscopic features of Mucous Retention Cyst. Describe and draw the histopathological features of the same with legible labeled diagram
- OP-6.4 Observe, identify the microscopic features of Dentigerous cyst. Describe and draw the histopathological features of the same with legible labeled diagram
- OP-6.6 Observe, identify the microscopic features of Odontogenic Keratocyst. Describe and draw the histopathological features of the same with legible labeled diagram
- OP-6.10 Observe, identify the microscopic features of Calcifying Odontogenic Cyst. Describe and draw the histopathological features of the same with legible labeled diagram
- OP-6.15 Observe, identify the microscopic features of Aneurysmal Bone Cyst. Describe and draw the histopathological features of the same with legible labeled diagram
- OP-7.3 Observe, identify the microscopic features of Ameloblastoma. Describe and draw the histopathological features of the same with legible labeled diagram
- OP-7.5 Observe, identify the microscopic features of Calcifying Epithelial Odontogenic Tumour and Adenomatoid Odontogenic Tumour. Describe and draw the histopathological features of the same with legible labeled diagram
- OP-7.7 Observe, identify the microscopic features of Complex Odontoma, Compound Odontoma and Ameloblastic Fibroma. Describe and draw the histopathological features of the same with legible labeled diagram

- OP-8.12 Describe the pathogenesis, clinical features, oral manifestations, complications, diagnosis, prevention and treatment of Gonorrhea.
- OP-8.13 Describe the pathogenesis, clinical features, oral manifestations, complications, diagnosis, prevention and treatment of Granuloma Inguinale.
- OP-8.14 Describe the pathogenesis, clinical features, oral manifestations, complications, diagnosis, prevention and treatment of Rhinoscleroma.
- OP-8.15 Describe the pathogenesis, clinical features, oral manifestations, complications, diagnosis, prevention and treatment of Noma
- OP-8.16 Describe the pathogenesis, clinical features, oral manifestations, complications, diagnosis, prevention and treatment of Cat-scratch Disease.
- OP-8.17 Describe the pathogenesis, clinical features, oral manifestations, complications, diagnosis, prevention and treatment of Pyogenic Granuloma.
- OP-8.19 Describe the pathogenesis, clinical features, oral manifestations, complications, diagnosis, prevention and treatment of Pyostomatitis Vegetans.
- OP-9.1 Classify disease causing viruses on the basis of genome.
- OP-9.2 Describe the pathogenesis, clinical features, oral manifestations, complications, diagnosis, prevention and treatment of Herpes Simplex.
- OP-9.3 Describe the pathogenesis, clinical features, oral manifestations, complications, diagnosis, prevention and treatment of Herpangina.
- OP-9.4 Describe the pathogenesis, clinical features, oral manifestations, complications, diagnosis, prevention and treatment of Acute Lymphonodular Pharyngitis.
- OP-9.5 Describe the pathogenesis, clinical features, oral manifestations, complications, diagnosis, prevention and treatment of Hand, Foot and Mouth Disease.
- OP-9.6 Describe the pathogenesis, clinical features, oral manifestations, complications, diagnosis, prevention and treatment of Measles.
- OP-9.7 Describe the pathogenesis, clinical features, oral manifestations, complications, diagnosis, prevention and treatment of Rubella.
- OP-9.8 Describe the pathogenesis, clinical features, oral manifestations, complications, diagnosis, prevention and treatment of Small Pox.
- OP-9.9 Describe the pathogenesis, clinical features, oral manifestations, complications, diagnosis, prevention and treatment of Molluscum Contagiosum.
- OP-9.10 Describe the pathogenesis, clinical features, oral manifestations, complications, diagnosis, prevention and treatment of Condyloma Acuminatum.
- OP-9.11 Describe the pathogenesis, clinical features, oral manifestations, complications, diagnosis, prevention and treatment of Chickenpox
- OP-9.12 Describe the pathogenesis, clinical features, oral manifestations, complications, diagnosis, prevention and treatment of Hernes Zoster.
- OP-9.13 Describe the pathogenesis, clinical features, oral manifestations, complications, diagnosis, prevention and treatment of Mumps.
- OP-9.14 Describe the pathogenesis, clinical features, oral manifestations, complications, diagnosis, prevention and treatment of Nonspecific 'Mumps'.
- OP-9.15 Describe the pathogenesis, clinical features, oral manifestations, complications, diagnosis, prevention and treatment of Cytomegalic Inclusion Disease.
- OP-9.16 Describe the pathogenesis, clinical features, oral manifestations, complications, diagnosis, prevention and treatment of Poliomyelitis.
- OP-9.17 Describe the pathogenesis, clinical features, oral manifestations, complications, diagnosis, prevention and treatment of Chikungunya.
- OP-9.18 Describe the pathogenesis, clinical features, oral manifestations, complications, diagnosis, prevention and treatment of HIV Infection.
- OP-9.19 Describe the pathogenesis, clinical features, oral manifestations, complications, diagnosis, prevention and treatment of disease caused by Coronavirus infection.
- OP-10.1 Describe the pathogenesis, clinical features, oral manifestations, complications, diagnosis, prevention and treatment of North American Blastomycosis.
- OP-10.2 Describe the pathogenesis, clinical features, oral manifestations, complications, diagnosis, prevention and treatment of South American Blastomycosis.

- OP-7.9 Observe, identify the microscopic features of Odontogenic Myxoma. Describe and draw the histopathological features of the same with legible labeled diagram
- OP-8.4 Observe, identify the microscopic features of Tuberculous granuloma. Describe and draw the histopathological features of the same with legible labeled diagram
- OP-8.7 Observe, identify the microscopic features of Actinomycosis. Describe and draw the histopathological features of the same with legible labeled diagram
- OP-8.18 Observe, identify the microscopic features of Pyogenic granuloma. Describe and draw the histopathological features of the same with legible labeled diagram
- OP-10.10 Observe, identify the microscopic features of Candidiasis. Describe and draw the histopathological features of the same with legible labeled diagram
- OP-12.6 Observe, identify the microscopic features of Enamel, Dentinal and Root Caries. Describe and draw the histopathological features of the same with legible labeled diagram
- OP-13.5 Observe, identify the microscopic features of Pulpitis. Describe and draw the histopathological features of the same with legible labeled diagram
- OP-13.8 Observe, identify the microscopic features of Periapical Granuloma and periapical Cyst . Describe and draw the histopathological features of the same with legible labeled diagram
- OP-13.11 Observe, identify the microscopic features of Acute and Chronic Suppurative Osteomyelitis. Describe and draw the histopathological features of the same with legible labeled diagram
- OP-13.13 Observe, identify the microscopic features of Focal and Diffuse Sclerosing Osteomyelitis. Describe and draw the histopathological features of the same with legible labeled diagram
- OP-13.15 Observe, identify the microscopic features of chronic Osteomyelitis with Periostitis. Describe and draw the histopathological features of the same with legible labeled diagram
- OP-14.2 Observe, identify the microscopic features of Pyogenic granuloma. Describe and draw the histopathological features of the same with legible labeled diagram
- OP-14.4 Observe, identify the microscopic features of Peripheral & Central Giant cell granuloma. Describe and draw the histopathological features of the same with legible labeled diagram
- OP-14.7 Observe, identify the microscopic features of Fibrous Hyperplasia. Describe and draw the histopathological features of the same with legible labeled diagram
- OP-14.10 Observe, identify the microscopic features of Traumatic Neuroma. Describe and draw the histopathological features of the same with legible labeled diagram
- OP-15.2 Observe, identify the given tooth specimen. Describe in detail about its salient features and its clinical significance
- OP-15.4 Observe, identify the given tooth specimen. Describe in detail about its salient features and its clinical significance
- OP-15.6 Observe, identify the given tooth specimen. Describe in detail about its salient features and its clinical significance
- OP-15.8 Observe, identify the given tooth specimen. Describe in detail about its salient features and its clinical significance.
- OP- 15.9 Enumerate the regressive changes seen in dentin.
- OP-15.10 Define and describe the mechanism of Dentinal sclerosis.
- OP-15.11 Observe, identify the microscopic features of Dentinal sclerosis. Describe and draw the histopathological features of the same with legible labeled diagram
- OP-15.12 Define and describe the mechanism of Dead tract formation.
- OP-15.13 Observe, identify the microscopic features of the Dead tract. Describe and draw the histopathological features of the same with legible labeled diagram
- OP-15.14 Define and describe the mechanism of Secondary dentin formation.
- OP-15.15 Observe, identify the microscopic features of Secondary dentin. Describe and draw the histopathological features of the same with legible labeled diagram
- OP-15.16 Enumerate the regressive changes seen in dental pulp.
- OP-15.17 Describe reticular atrophy of pulp.
- OP-15.18 Describe the different types of pulp calcification.
- OP-15.19 Observe, identify the microscopic features of pulp calcification.Describe and draw the histopathological features of the same with legible labeled diagram
- OP-15.20 Describe the various causes of external resorption of teeth.
- OP-15.21 Describe the etiology, clinical features, histological features, radiographic features and treatment of internal resorption of teeth.

- OP-10.3 Describe the pathogenesis, clinical features, oral manifestations, complications, diagnosis, prevention and treatment of Histoplasmosis.
- OP-10.4 Describe the pathogenesis, clinical features, oral manifestations, complications, diagnosis, prevention and treatment of Coccidioidomycosis.
- OP-10.5 Describe the pathogenesis, clinical features, oral manifestations, complications, diagnosis, prevention and treatment of Cryptococcosis.
- OP-10.6 Describe the pathogenesis of Candidiasis by different strains. OP-10.7 Describe the classification of oral candidiasis.
- OP-10.8 Describe the oral manifestations of different types of candidiasis.
- OP-10.9 Describe the lab diagnosis of candidiasis.
- OP -10.11 Discuss the treatment modalities of candidiasis.
- OP -10.12 Discuss the carcinogenic potential of candida
- OP -10.13 Describe Candida -Associated Lesions.
- OP-10.14 Describe the pathogenesis, clinical features, oral manifestations, complications, diagnosis, prevention and treatment of Geotrichosis.
- OP -10.15 Describe the pathogenesis, clinical features, oral manifestations, complications, diagnosis, prevention and treatment of Phycomycosis .
- OP -10.16 Describe the pathogenesis, clinical features, oral manifestations, complications, diagnosis, prevention and treatment of Sporotrichosis.
- OP -10.17 Describe the pathogenesis, clinical features, oral manifestations, complications, diagnosis, prevention and treatment of Rhinosporidiosis.
- OP -10.18 Describe the pathogenesis, clinical features, oral manifestations, complications, diagnosis, prevention and treatment of Cysticercosis.
- OP -10.19 Describe the pathogenesis, clinical features, oral manifestations, complications, diagnosis, prevention and treatment of Oral Myiasis.
- OP-11.1 Discuss dental Stains Describe in detail the types, microbiology and clinical features.
- OP-11.2 Discuss dental Calculus. Describe in detail the microbiology and its clinical implications.
- OP-11.3 Discuss dental plaque. Describe in detail the microbiology and clinical features
- OP-11.4 Describe the Etiopathogenesis, microbiology, clinical features, histopathology (as appropriate) of gingivitis and gingival enlargement.
- OP-11.5 Discuss ANUG. Enumerate the etiopathogenesis, microbiology, clinical features and histopathology features (as appropriate).
- OP-11.6 What do you understand by chronic desquamative gingivitis, Periodontitis and juvenile periodontitis? Describe the Etiopathogenesis, microbiology, and clinical features, histopathology & radiological features (as appropriate).
- OP-11.7 Elaborate on the Basic immunological mechanisms of periodontal disease.
- OP- 12.1 Enumerate the Theories of Dental Caries? Describe them in detail.
- OP- 12.2 Discuss the Clinical features of dental caries.
- OP- 12.3 Classify Dental caries.
- OP- 12.4 Discuss Radiological Features of dental caries. Describe in detail the radiology of enamel, dentin and root caries.
- OP- 12.5 Discuss the Histopathology of dental caries. Describe in detail the histopathology of enamel, dentin and root caries.
- OP- 12.7 List the organisms and microbiology of Dental caries.
- OP- 12.8 Describe the Immunology of Dental caries.
- OP- 12.9 Discuss the Caries activity tests. Describe in detail the chair side procedures.
- OP- 12.10 Discuss the Factors influencing dental caries.
- OP- 12.11 Discuss Caries Vaccine? Describe the recent advances
- OP-13.1 Discuss in Brief the Concept of Effects of Infection on Host, Spread of Infection and Pathophysiology of infection.
- OP-13.2 Discuss Pulp and histology of Pulp with reference to hemodynamic of pulp in normal, Inflammatory and infectious State.

  OP-13.3 Classification of Diseases of Pulp and Seguelae of Pulpal
- OP-13.3 Classification of Diseases of Pulp and Sequelae of Pulpal Infection.
- OP-13.4 Discuss in detail Pulpitis and its types, their clinical differences. Special emphasis on hemodynamics and tests of differentiation.
- OP-13.6 Compare in detail about pathogenesis, C/F, R/F pre operative investigations, histopathology, Treatment, and prognosis of Periapical and Periodontal abscess.
- OP-13.7 Discuss in detail pathogenesis, C/F, R/F pre operative investigations, histopathology, treatment and prognosis of Periapical Granuloma and periapical Cyst.

- OP-15.22 Describe the etiology, clinical features, histological features, radiographic features and treatment of Hypercementosis.
- OP-15.23 Observe, identify the microscopic features of Hypercementosis.Describe
- OP-15.24 Discuss Cementiclesand draw the histopathological features of the same with legible labeled diagram
- OP-15.25 Observe, identify the microscopic features of cementicles. Describe and draw the histopathological features of the same with legible labeled diagram
- OP-16.1 Enumerate the Factors affecting healing of wounds. Discuss each one of them in detail.
- OP-16.2 Describe the Healing of extraction wounds in stages. Discuss clinical features of dry socket.
- OP-16.3 Discuss the Biopsy-techniques. Describe the healing of biopsy wound.
- OP-16.4 Discuss Exfoliative cytology. Mention its indications, staining procedure and interpretation. Add a note on dental application of exfoliative cytology.
- OP-16.5 Observe and perform the clinical procedure of preparation of smear, staining and microscopic identification of different types of smear
- OP-17.1 Describe the Oral aspects of each Avitaminosis and Hypervitaminosis.
- OP-17.2 Describe the Oral Aspects of various Endocrine dysfunctions. OP-18.1 Discuss Angioedema. Describe in detail the types etiopathogenesis, clinical features, histopathology and laborator features
- OP-18.2 Discuss Stomatitis medicamentosa. Describe in detail the types etiopathogenesis and clinical features.
- OP-18.3 Discuss Stomatitis venenata. Describe in detail the types etiopathogenesis, clinical features, histopathology and laboratory features.
- OP-18.4 Discuss Contact Stomatitis. Describe in detail the etiopathogenesis, clinical features and histopathological features
- OP-18.5 Describe Recurrent Aphthous stomatitis. Describe the types stages, clinical features, histopathology and lab diagnosis
- OP-18.6 Describe Bechet's syndrome. Describe the types, clinical features, histopathology and lab diagnosis.
- OP-18.7 Describe Reiter's syndrome. Discuss clinical features histopathology and lab diagnosis.
- OP-18.8 Describe Sarcoidosis. Describe its clinical features
- histopathology and lab diagnosis. Add a note on its oral manifestation. OP-19.1 Enumerate the syndromes involving the bones of the craniofacial region.
- OP-19.2 Describe the etiology, clinical features, oral manifestations radiographic findings, histological features, treatment and prognosis of Osteogenesis Imperfecta
- OP-19.3 Describe the etiology, clinical features, oral manifestations radiographic findings, histological features, treatment and prognosis of Marfan Syndrome.
- OP-19.4 Describe the etiology, clinical features, oral manifestations radiographic findings, histological features, treatment and prognosis of Achondrogenesis.
- OP-19.5 Describe the etiology, clinical features, oral manifestations radiographic findings, histological features, treatment and prognosis o Hypophosphatasia.
- OP-19.6 Describe the etiology, clinical features, oral manifestations radiographic findings, histological features, treatment and prognosis of Osteopetrosis.
- OP-19.7 Describe the etiology, clinical features, oral manifestations radiographic findings, histological features, treatment and prognosis of Chondrodysplasia Punctata.
- OP-19.8 Describe the etiology, clinical features, oral manifestations radiographic findings, histological features, treatment and prognosis of Pyknodysostosis.
- OP-19.9 Describe the etiology, clinical features, oral manifestations radiographic findings, histological features, treatment and prognosis of Rickets
- OP-19.10 Describe the etiology, clinical features, oral manifestations radiographic findings, histological features, treatment and prognosis of Hypoparathyroidism.
- OP-19.11 Describe the etiology, clinical features, oral manifestations radiographic findings, histological features, treatment and prognosis on hyperparathyroidism.
- OP-19.12 Describe the etiology, clinical features, oral manifestations radiographic findings, histological features, treatment and prognosis ovitamin D resistant rickets

- OP-13.9 Classify osteomyelitis. Discuss the pathogenesis o osteomyelitis and their radiographic description.
- OP-13.10 Discuss in detail pathogenesis, C/F, R/F pre operative Investigations, histopathology, treatment and prognosis of Acute and Chronic Suppurative Osteomyelitis.
- OP-13.12 Discuss in detail pathogenesis, C/F, R/F pre operative investigations, histopathology, treatment and prognosis of Focal and Diffuse Sclerosing Osteomyelitis.
- OP-13.14 Discuss in detail pathogenesis, C/F, R/F pre operative Investigations, histopathology, treatment and prognosis of chronic Osteomyelitis with Periostitis and radiation Osteomyelitis.
- OP-13.16 Discuss in detail about pathogenesis, C/F, pre Operative Investigations, histopathology, treatment, prognosis and complications of Cellulitis and Ludwig's Angina with special emphasis on bacteriology of the infection.
- OP-13.17 Discuss in detail about fatal complications of oral infections, Bacterial meningitis, Brain abscess, Cavernous Sinus Thrombosis, Odontogenic Infection of Orbit, Mediastinits, Necrotizing fasciitis, Dry Socket.
- OP-13.18 Discuss in detail about oral foci of infection and different space infection of Head and Neck with special emphasis on bacteriology and complications of space infections.
- OP-14.1 Describe Pyogenic granuloma. Describe in detail the etiopathogenesis, clinical features and histopathology.
- OP-14.3 Describe about Peripheral & Central Giant cell granuloma. Describe in detail the pathogenesis, clinical features, histopathology, laboratory and radiological features (as appropriate).
- OP-14.5 Describe Exostoses. Describe in detail the etiopathogenesis, clinical features, histopathology, laboratory and radiological features (as appropriate).
- OP-14.6 Discuss Fibrous Hyperplasia . Describe in detail the etiopathogenesis, clinical features and histopathology.
- OP-14.8 Discuss Traumatic Ulcer. Describe in detail the types, etiopathogenesis, clinical features and histopathology.
- OP-14.9 Discuss Traumatic Neuroma. Describe in detail the types, etiopathogenesis, clinical features and histopathology
- OP-14.11 Discuss Bruxism. Describe in detail the types, etiopathogenesis and clinical features.
- OP-14.12 Discuss the Radiation effects of oral cavity? Describe in detail the etiopathogenesis, clinical features, histopathology, laboratory and radiological features (as appropriate).
- OP-14.13 Discuss in brief non allergic reaction to drugs and chemicals used locally.
- OP-14.14 Discuss nonallergic reaction to drugs and chemicals used systemically. Add a note on Acrodynia and Argyria
- Op-14.15 Enumerate the effects of LASER on oral soft and hard tissues. Describe in detail the types, etiopathogenesis, clinical features, histopathology, laboratory and radiological features (as appropriate).
- OP- 15.1 Define and describe the causes, clinical features, prevention and treatment of attrition.
- OP-15.3 Define and describe the causes, clinical features, prevention and treatment of Abrasion.
- OP-15.5 Define and describe the causes, clinical features, prevention and treatment of Erosion.
- OP-15.7 Define and describe the causes, clinical features, prevention and treatment of Abfraction.
- OP-15.21 Describe the etiology, clinical features, histological features, radiographic features and treatment of internal resorption of teeth.
- OP-15.22 Describe the etiology, clinical features, histological features, radiographic features and treatment of Hypercementosis.
- OP-15.24 Discuss cementicles.
- OP-16.1 Enumerate the Factors affecting healing of wounds. Discuss each one of them in detail.
- OP-16.2 Describe the Healing of extraction wound in stages. Discuss clinical features of dry socket.
- OP-16.3 Discuss the Biopsy-techniques. Describe the healing of biopsy wound.
- OP-16.4 Discuss Exfoliative cytology. Mention its indications, staining procedure and interpretation. Add a note on dental application of exfoliative cytology.
- OP-17.1 Describe the Oral aspects of each Avitaminosis and Hypervitaminosis.
- OP-17.2 Describe the Oral Aspects of various Endocrine dysfunctions.
- OP-18.1 Discuss Angioedema. Describe in detail the types, etiopathogenesis, clinical features, histopathology and laboratory features.
- OP-18.2 Discuss Stomatitis medicamentosa. Describe in detail the types, etiopathogenesis and clinical features.

- OP-19.13 Describe the etiology, clinical features, oral manifestations radiographic findings, histological features, treatment and prognosis o Craniofacial Dysostosis.
- OP-19.14 Describe the etiology, clinical features, oral manifestations
- radiographic findings, histological features, treatment and prognosis of Mandibulofacial dysostosis.
- OP-19.15 Describe the etiology, clinical features, oral manifestations radiographic findings, histological features, treatment and prognosis of Pierre Robin Syndrome.
- OP-19.16 Describe the etiology, clinical features, oral manifestations radiographic findings, histological features, treatment and prognosis of Apert Syndrome
- OP -19.17 Describe the etiology, clinical features, oral manifestations, radiographic findings, histological features, treatment and prognosis o Thanatophoric dysplasia.
- OP -19.18 Describe the etiology, clinical features, oral manifestations radiographic findings, histological features, treatment and prognosis of Achondroplasia.
- OP -19.19 Describe the etiology, clinical features, oral manifestations radiographic findings, histological features, treatment and prognosis of Robinow Syndrome.
- OP -19.20 Describe the etiology, clinical features, oral manifestations radiographic findings, histological features, treatment and prognosis of Chondroectodermal Dysplasia.
- OP -19.21 Describe the etiology, clinical features, oral manifestations radiographic findings, histological features, treatment and prognosis of Cleidocranial Dysplasia.
- OP -19.22 Describe the etiology, clinical features, oral manifestations radiographic findings, histological features, treatment and prognosis of Down Syndrome.
- OP -19.23 Describe the etiology, clinical features, oral manifestations radiographic findings, histological features, treatment and prognosis of Tricho -dento -osseous Syndrome.
- OP -19.24 Describe the etiology, clinical features, oral manifestations radiographic findings, histological features, treatment and prognosis of Crouzon Syndrome.
- OP-19.25 Describe the etiology, clinical features, oral manifestations radiographic findings, histological features, treatment and prognosis of Infantile Cortical Hyperostosis.
- OP-19.26 Describe the etiology, clinical features, oral manifestations, radiographic findings, histological features, treatment and prognosis of Monostotic and Polyostotic Fibrous Dysplasia.
- OP-19.27 Observe, identify the microscopic features of Fibrous Dysplasia. Describe and draw the histopathological features of the same with legible labeled diagram
- OP-19.28 Enumerate the differences between Jaffe's type fibrous dysplasia and McCune-Albright Syndrome.
- OP-19.29 Describe the etiology, clinical features, oral manifestations radiographic findings, histological features, treatment and prognosis of Cherubism.
- OP-19.30 Observe, identify the microscopic features of Cherubism. Describe and draw the histopathological features of the same with legible labeled diagram
- OP-19.31 Enumerate the malignancies associated with McCune Albrigh syndrome.
- OP-19.32 Describe the etiology, clinical features, oral manifestations, radiographic findings, histological features, treatment and prognosis of Ossifying Fibroma.
- OP-19.33 Observe, identify the microscopic features of Ossifying fibroma. Describe and draw the histopathological features of the same with legible labeled diagram
- OP-19.34 Describe the etiology, clinical features, oral manifestations radiographic findings, histological features, treatment and prognosis of Cemento-osseous Dysplasia.
- OP-19.35 Enumerate the histopathological differences between fibrou dysplasia, ossifying fibroma and cemento-osseous dysplasia.
- OP-19.36 Describe the etiology, clinical features, oral manifestations, radiographic findings, histological features, treatment and prognosis of Paget's Disease.
- OP-19.37 Observe, identify the microscopic features of Paget's disease. Describe and draw the histopathological features of the same with legible labeled diagram
- OP-21.6 Observe, identify the microscopic features of Pemphigus. Describe and draw the histopathological features of the same with legible labeled diagram
- OP-21.8 Observe, identify the microscopic features of Oral Lichen Planus. Describe and draw the histopathological features of the same with legible labeled Diagram

OP-18.3 Discuss Stomatitis venenata. Describe in detail the types, etiopathogenesis, clinical features, histopathology and laboratory features.

Discuss Contact Stomatitis. Describe in detail the OP-18.4 etiopathogenesis, clinical features and histopathological features OP-18.5 Describe Recurrent Aphthous stomatitis. Describe the types,

OP-18.5 Describe Recurrent Aprilinous stomatitis. Describe the types, stages, clinical features, histopathology and lab diagnosis.

OP-18.6 Describe Bechet's syndrome. Describe the types, clinical features, histopathology and lab diagnosis.

OP-18.7 Describe Reiter's syndrome. Discuss clinical features, histopathology and lab diagnosis.

OP-18.8 Describe Sarcoidosis. Describe its clinical features, histopathology and lab diagnosis. Add a note on its oral manifestation. OP-19.1 Enumerate the syndromes involving the bones of the craniofacial region.

OP-19.2 Describe the etiology, clinical features, oral manifestations, radiographic findings, histological features, treatment and prognosis of Osteogenesis Imperfecta

OP-19.3 Describe the etiology, clinical features, oral manifestations, radiographic findings, histological features, treatment and prognosis of Marfan Syndrome.

OP-21.12 Observe, identify the microscopic features of Pemphigoid. Describe and

draw the histopathological features of the same with legible labeled diagram