DR. G.D.POL FOUNDATION'S
Y.M.T. DENTAL COLLEGE AND HOSPITAL
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Department of Periodontology

Course Objectives

Sr no	Topic	Course Outcomes (Learning Objectives)
1	Gingiva	To learn about ✓ Macroscopic features- basic anatomy ✓ Microscopic features – epithelium and connective tissue ✓ Correlation between clinical features and microscopic features
2	Periodontal ligament	To learn about ✓ the structural components of the PDL ✓ the development of the PDL ✓ the innervation and vascularization of the PDL ✓ the clinical aspects of the PDL
3	Cementum	To learn about ✓ the structural anatomy of the cementum ✓ the development of the cementum ✓ the innervation of the cementum ✓ the clinical aspects of the cementum
4	Alveolar bone	To learn about ✓ the microscopic and macroscopic structural components of the bone ✓ the development of the alveolar bone ✓ the innervation and vascularization of the alveolar bone ✓ the clinical aspects of the alveolar bone
5	Aging & the Periodontium	To learn about ✓ Effects of Aging on the Periodontium ✓ Effects of Aging on the Progression of Periodontal Diseases ✓ Aging and the Response to Treatment of the Periodontium
6	Classification Of Periodontal Diseases	To learn about ✓ Gingival Diseases ✓ Periodontitis ✓ Medication-Related Osteonecrosis of the Jaw ✓ Necrotizing Periodontal Diseases ✓ Abscesses of the Periodontium

		✓ Periodontitis Associated with Endodontic Lesions ✓ Developmental or Acquired Deformities and Conditions
7	Epidemiology Of Gingival & Periodontal Diseases	To learn about ✓ the quantification of gingival and periodontal diseases ✓ standardized methods of quantification of said diseases.
8	Microbiology of periodontal diseases	To learn about ✓ Microorganisms as etiological agents of periodontal diseases ✓ Periodontal pathogens ✓ Microorganisms associated in health, gingivitis, chronic periodontitis, localized aggressive periodontitis, etc ✓ Various Landmark studies
9	Role of dental calculus and other predisposing factors	To learn about ✓ Definition, classification and composition of Calculus ✓ the theories of mineralization and calculus formation. ✓ Role of Calculus in Periodontal Disease.
10	Immunity and inflammation	To learn about ✓ Cells of immunity and inflammation ✓ Complement ✓ Leucocyte functions ✓ Specific & Non-specific Immunity ✓ To know the interaction between the specific and non-specific immunity ✓ T cell & B cell responses
11	Microbial interactions with host in periodontal disease	To learn about ✓ microbiology and immunology in gingival health ✓ Stages in the pathogenesis
12	Smoking	To learn about ✓ Classification of Smokers ✓ Constituents of tobacco smoke and its effects. ✓ Effect of smoking on the response of Periodontal therapy
13	Host modulation	To learn about ✓ Systemically and locally administered host modulatory agents ✓ Emerging host modulatory therapy ✓ Host modulation factor in systemic disorder.
14	Influence of systemic disorders and stress on the periodontium	To learn about ✓ Nutritional influences ✓ Endocrine disorders ✓ Hematologic disorders ✓ Immunodeficiency disorders ✓ Cardiovascular diseases ✓ Metal intoxication ✓ Psychosomatic disorders ✓ Hans Selye syndrome ✓ Effect of stress on the CNS

		✓ Clinical manifestations ✓ Management of stress
15	Periodontal medicine	To learn about ✓ Effect of systemic conditions on periodontal health ✓ Focal infection theory ✓ Periodontal Disease & Coronary heart disease ✓ Periodontal Disease & Stroke ✓ Periodontal Disease & Diabetes mellitus ✓ Periodontal Disease & Pregnancy outcomes ✓ Periodontal disease & Respiratory diseases
16	Oral malodour	To learn about ✓ Definition ✓ Intra - & extra oral causes ✓ Intra oral examination and diagnosis ✓ Treatment modalities and advances
17	Defense mechanisms of gingiva	To learn about ✓ Basic concept of Junctional epithelium ✓ Importance of PMNLs ✓ Composition & function of saliva ✓ Gingival crevicular fluid- composition, methods of collection, significance, etc
18	Gingival inflammation	To learn about ✓ Classification of gingivitis ✓ Stages of gingivitis ✓ Clinical features of gingivitis
19	Clinical features of gingivitis	To learn about ✓ Course & duration of gingivitis ✓ Causes of Gingival bleeding ✓ Changes in color, contour, consistency, surface texture and position of gingiva
20	Gingival enlargement & treatment	To learn about ✓ Terminologies ✓ Classification of Gingival enlargements ✓ Inflammatory gingival enlargement ✓ Drug induced gingival enlargement ✓ Enlargement associated with systemic diseases & conditions ✓ Hereditary gingival fibromatosis ✓ False enlargements
21	Acute gingival infections	To learn about ✓ Acute necrotizing ulcerative gingivitis ✓ Primary herpetic gingivostomatitis ✓ Pericoronitis
22	Gingival diseases in childhood	To learn about ✓ Periodontium of the Primary Dentition ✓ Periodontal Changes Associated With Normal Development ✓ Gingival Diseases of Childhood ✓ Periodontal Diseases of Childhood

		✓ Gingival Manifestation of Systemic Disease in Children ✓ Oral Mucosa in Childhood Diseases ✓ Therapeutic Considerations for Pediatric Patients
23	Desquamative gingivitis	To learn about ✓ Chronic Desquamative Gingivitis ✓ Diagnosis of Desquamative Gingiviti ✓ Diseases That Can Manifest as Desquamative Gingivitis ✓ Drug-Related Eruptions ✓ Miscellaneous Conditions That Mimic Desquamative Gingivitis
24	Periodontal pocket	To learn about ✓ Definition & Classification of pockets ✓ Clinical Features, Pathogenesis & Histopathology of pockets ✓ Periodontal Disease Activity & Site Specificity ✓ Periodontal Abscess ✓ Lateral Periodontal Cyst
25	Bone loss and patterns of bone destruction	To learn about ✓ Bone Destruction Caused by the Extension of Gingival Inflammation ✓ Bone Destruction Caused by Trauma From Occlusion ✓ Bone Destruction Caused by Systemic Disorders ✓ Factors Determining Bone Morphology in Periodontal Disease ✓ Bone Destruction Patterns in Periodontal Disease
26	Periodontal response to external forces	To learn about ✓ Terminologies ✓ Definition & Classification of Trauma from occlusion ✓ Stages in TFO, Clinical & Radiographic features in TFO ✓ Pathologic tooth migration
27	Chronic periodontitis	To learn about ✓ Terminologies ✓ Clinical & radiographic features of Chronic Periodontitis ✓ Risk factors for chronic periodontitis ✓ Treatment
28	Aggressive periodontitis	To learn about ✓ Overview & Historical Background ✓ Classification and Clinical Characteristics ✓ Pathobiology and Risk Factors ✓ Therapeutic Considerations in Aggressive Periodontitis Patients
29	Necrotizing Ulcerative Periodontitis (NUP)	To learn about ✓ Clinical Features of NUP ✓ Microscopic Findings in NUP ✓ Patients With HIV/AIDS ✓ Etiology of Necrotizing Ulcerative Periodontitis

30	Pathology and management of periodontal problems in patients with HIV infection	To learn about ✓ Pathogenesis, Classification and Staging ✓ Oral and Periodontal Manifestations of Human Immunodeficiency Virus Infection ✓ Dental Treatment Complications ✓ Gingival and Periodontal Diseases ✓ Periodontal Treatment Protocol
31	Clinical diagnosis	To learn about ✓ Recording the clinical history of a patient ✓ Clinical, Radiographic examination ✓ Periodontal Screening & Recording System ✓ Laboratory investigations to aid in clinical diagnosis
32	Advanced diagnostic techniques	To learn about ✓ Limitations of conventional diagnosis ✓ Advances in Clinical diagnosis ✓ Advances in Radiographic diagnosis ✓ Advances in microbiologic analysis ✓ Advances in characterizing the host response
33	Risk assessment	To learn about ✓ Terminologies & Definitions ✓ Risk Factors for Periodontal Disease ✓ Risk Determinants/Background Characteristics for Periodontal Disease ✓ Risk Indicators for Periodontal Disease ✓ Risk Markers/Predictors for Periodontal Disease ✓ Clinical Risk Assessment for Periodontal Disease
34	Determination of Prognosis	To learn about ✓ Definition of prognosis ✓ Types of prognosis ✓ Overall & individual prognosis ✓ Factors affecting the prognosis
35	Treatment of periodontal abscess	To learn about ✓ Classification of Abscesses ✓ Gingival Abscess & its treatment ✓ Periodontal Abscess & its treatment ✓ Pericoronal Abscess & its treatment
36	Plaque control for the periodontal patient	To learn about: ✓ Definition of Plaque control ✓ Significance of Plaque control ✓ Classification of Plaque control ✓ Mechanical Plaque Control ✓ Chemical Plaque Control ✓ Tooth brush specifications ✓ Techniques of tooth brushing
37	Scaling and root planing	To learn about: ✓ Definition of Scaling and Root planing ✓ Classification of Periodontal Instruments ✓ Principles of Instrumentation ✓ Cleaning & Polishing ✓ Sharpening of Instruments

38	Chemotherapeutic agents	To learn about: ✓ Terminologies & definitions ✓ Classification of chemotherapeutic agents ✓ Antiplaque agents ✓ Chlorhexidine ✓ Dentifrices
39	The periodontic endodontic continuum	To learn about: ✓ Endodontic and periodontal lesions and their interrelation ✓ Classification of Periodontic endodontic lesions. ✓ Retrograde periodontitis ✓ Combined lesions ✓ Management of Periodontic endodontic lesions
40	General principles of periodontal surgery	✓ To have knowledge about preparation of the patient and the general considerations that are common to all periodontal surgical techniques. ✓ To be aware of the complications that may occur during or after surgery and their management.
41	Surgical anatomy of the periodontium and related structures	✓ To have a sound knowledge of the anatomy of the periodontium and the surrounding hard and soft tissue structures ✓ to determine scope and possibilities of periodontal and implant surgical procedures and to minimize their risks.
42	Gingival surgical techniques	✓ To understand that Periodontal pocket reduction surgery limited ✓ to the gingival tissues only and not involving the underlying osseous structures, without the use of flap surgery, can be classified as gingival curettage, gingivectomy and gingivoplasty. ✓ To understand the indications and contraindications of these techniques.
43	The periodontal flap	To learn about: ✓ Definition of Flap ✓ Classification of Flaps ✓ Types of Incisions ✓ Different types of Flap Surgeries ✓ Suturing techniques and ✓ Healing after flap surgery
44	The flap technique for pocket therapy	To learn about: ✓ Indications, contraindications, advantages and disadvantages of different flap techniques ✓ Modified Widman Flap, Apically displaced flaps, Undisplaced flaps, Conventional flap, Papilla preservation flap and distal wedge procedure ✓ Healing after flap surgery
45	Resective osseous surgery	To learn about: ✓ Different terminologies in Resective Osseous Surgery ✓ Types of Resective Osseous Surgery ✓ Surgical Procedure

		✓ Instruments used to perform Resective Osseous Surgery ✓ Healing after Resective Osseous Surgery
46	Reconstructive periodontal surgery	To learn about: ✓ Methods for regeneration of lost periodontal tissues. ✓ Regenerative materials; namely Bone grafts & Barrier membranes ✓ Classification of Bone grafts & about each bone graft material ✓ Classification of Barrier membranes & about each barrier membrane ✓ Surgical Procedure for placement of bone grafts & barrier membranes ✓ Healing after regenerative therapy
47	Furcation involvement and treatment	To learn about: ✓ Definition of furcation involvement ✓ Classification of Furcation involvement ✓ Clinical & Radiographic assessment for furcation involvement ✓ Management of Furcation involvement
48	Periodontal plastic and esthetic surgery	To learn about: ✓ Terminologies ✓ Definition of Periodontal plastic surgery ✓ Techniques to increase the width of attached gingiva ✓ Techniques to augment the gingiva ✓ Root coverage procedures ✓ Healing after different surgical techniques
49	Restorative interrelationships	To learn about: ✓ Interdisciplinary treatment ✓ Interrelation between Periodontal treatment and prosthodontics treatment ✓ Biologic width ✓ Restoration Margin placement guidelines ✓ Crown lengthening
50	Basic Implantology	To learn about: ✓ Implant, Types of Implants ✓ Indications, Contraindications for Implant placement ✓ Surgical Procedure for Implant placement ✓ Periimplantitis
51	Supportive periodontal treatment	To learn about: ✓ Significance of maintenance after periodontal therapy ✓ Examination procedure during recall visits ✓ Merin’s Classification of recall visits of patients

Department of Conservative Dentistry and Endodontics

Course Objectives

Sr no	Topic	Course Outcomes (Learning Objectives)
1	Dental cements	At the end of this topic, students should know: ▪ Composition of all dental cements ▪ Indications, Contraindication / advantages and disadvantages of each cement
2	Dental Amalgam	At the end of this topic, students should know: ▪ Composition ▪ Indications, Contraindication / advantages and disadvantages ▪ Manipulation of the material ▪ Mercury toxicity
3	Composites	At the end of this topic, students should know: ▪ History, timeline and advances ▪ Composition ▪ Indications, Contraindication / advantages and disadvantages ▪ Polymerization shrinkage
4	Bonding Agent	At the end of this topic, students should know: ▪ Generations of bonding agent ▪ Adhesion and mechanism of bonding ▪ Hybrid layer
5	Direct filling Gold	At the end of this topic, students should know: ▪ Composition ▪ Indications, Contraindication / advantages and disadvantages ▪ Cohesive and non-cohesive gold ▪ Manipulation of DFG
6	Nomenclature	At the end of this topic, students should know: ▪ Terminologies and definitions ▪ Introduction to operative dentistry
7	Fundamentals of tooth preparation	At the end of this topic, students should know: ▪ Goals and objectives of tooth prep ▪ Steps of tooth preparation ▪ Cusp capping protocols
8	Instruments	At the end of this topic, students should know: ▪ Classification of instruments ▪ Instrument formula ▪ Grasps ▪ Principles of sharpening
9	Caries	At the end of this topic, students should know: ▪ Terminologies and definitions, classification ▪ Theories of caries , treatment and prevention
10	Matrices and wedging	Role of matricing and wedging

		▪ Types of tooth separation ▪ Wedging techniques
11	Inlay	At the end of this topic, students should know: ▪ Terminologies and definitions ▪ Indications, Contraindication / advantages and disadvantages ▪ Materials used for fabrication ▪ Cementation of inlays
12	Sterilization and Disinfection control	At the end of this topic, students should know: ▪ Sterilization and Disinfection protocols ▪ Classification
13	Isolation	At the end of this topic, students should know: ▪ goals of isolation ▪ classification of isolation techniques
14	Control of pain	At the end of this topic, students should know: ▪ pharmacological and non pharmacological means of pain control ▪ drugs used in pain control
15	Drugs used in Dentistry	At the end of this topic, students should know: ▪ NSAIDS. Antibiotics used ▪ Antibiotic prophylaxis for infective endocarditis
16	Diagnostic Aids in Dentistry	At the end of this topic, students should know: ▪ Thermal tests ▪ Electric pulpal tests ▪ Inference and co relation
17	Diseases of Pulp	At the end of this topic, students should know: ▪ Classification of pulpal diseases ▪ Diagnosis treatment and prognosis
18	Diseases of Peri radicular tissue	At the end of this topic, students should know: ▪ Classification of pdl diseases ▪ Diagnosis treatment and prognosis
19	Rationale of endodontics	At the end of this topic, students should know: ▪ Fishes zones of infection and kornfelds mountianpass theory ▪ Phases of inflammation

20	Selection of Cases	At the end of this topic, students should know: ▪ Indications of RCT ▪ Prognosis of cases
21	Principles of Endotherapy	At the end of this topic, students should know: ▪ Techniques of asepsis ▪ Patient care ▪ Pain control ▪ hemostasis
22	Case History	At the end of this topic, students should know: ▪ How to take case history ▪ History of present illness ▪ Provisional diagnosis and final diagnosis ▪ Treatment plan
23	Anatomy of Dental Pulp	At the end of this topic, students should know: ▪ Variation in canal morphology ▪ Canal variations
24	Microbiology	At the end of this topic, students should know: ▪ Biofilms ▪ Routes of dental infection ▪ Enterogenic and exterogenic infection ▪ Culture, pcr to identify dental infections
25	Standardization of endodontic instruments	At the end of this topic, students should know: ▪ Ingle and levines standadisation ▪ Classification of files ▪ Niti technology
26	Working length determination	At the end of this topic, students should know: ▪ Radiographic and non radiographic methods of working length determination ▪ Generations of Electronic apex locators
27	Cleaning and shaping	At the end of this topic, students should know: ▪ Schilders objectives of cleaning and shaping ▪ Classification of cleaning and shaping techniques
28	Irrigation and Intracanal medicaments	At the end of this topic, students should know: ▪ Classification of irrigants and intracanal medicaments ▪ Methods of activation of irrigants ▪ Advances in irrigation techniques
29	Obturation	At the end of this topic, students should know:

		▪ Classification of obturating materials and ideal requirements ▪ Classification of obturation techniques
30	Endo-perio lesion	At the end of this topic, students should know: ▪ Classification of Endo perio lesions ▪ Diagnosis treatment and prognosis
31	Endodontic Surgery	At the end of this topic, students should know: ▪ Types of flaps ▪ Inidcations and contraindications ▪ Magnification ▪ Classification of surgical procedures
32	Advances in endodontics	At the end of this topic, students should know: ▪ magnification ▪ advances in access cavity, cleaning and shaping,irrigation and obturation
33	Traumatic injuries	At the end of this topic, students should know: ▪ ellis classifications ▪ avulsion ▪ management of traumatic injuries in patients with closed and open apex
34	Treatment of Discolored teeth	At the end of this topic, students should know: ▪ causes of discoloration ▪ treatment modalities for management of discolored teeth
35	Endodontic emergency and procedural errors	At the end of this topic, students should know: ▪ Classification of endodontic emergencies ▪ Management of procedural errors
36	Vital pulp therapy	At the end of this topic, students should know: ▪ Pulp capping agents ▪ Ipc vs dpc ▪ Indication and contraindications
37	Single visit endodontics	At the end of this topic, students should know: ▪ Indication and contraindications ▪ Oliets criteria ▪ Advantages and disadvanatges
38	Regenerative Endodontics	At the end of this topic, students should know: ▪ Indication and contraindications ▪ Advantages and disadvanatges ▪ Treatment modalities ▪ Stem cell regenerative procedures
39	Complex amalgam restoration	At the end of this topic, students should know: ▪ Indication and contraindications ▪ Advantages and disadvantages ▪ Materials used
40	Cast gold restoration	At the end of this topic, students should know: ▪ Indication and contraindications ▪ Advantages and disadvantages

		▪ Casting defects
41	Tooth colored restoration	At the end of this topic, students should know: ▪ Indication and contraindications ▪ Advantages and disadvantages ▪ Recent advances
42	Post endodontic restoration	At the end of this topic, students should know: ▪ Indication and contraindications ▪ Post and core ▪ Materials used
43	Hypersensitive dentine	At the end of this topic, students should know: ▪ pathophysiology ▪ theories of hypersensitivity ▪ treatment modalities and prevention

Department of Oral and Maxillofacial surgery
Course Objectives

Sr no	Topic	Course Outcomes (Learning Objectives)
1.	Case History	To know the importance of case history, how to record case history and significance of medical history, how to perform examination systematically and reach to diagnosis and plan treatment.
2.	Sterilization and Asepsis	To understand the definition of sterilization and asepsis To understand the methods for prevention of infection To understand the various healthcare settings To understand the protocol for surgical procedures To understand the importance of PPE To understand the instrument and equipment care To understand the importance of prioritizing patient safety To emphasize the importance of environment cleanliness
3.	Basic Principles Of Surgery	to understand various concepts about flap design, tissue handling, healing and sutures and suturing techniques
4.	Trigeminal Nerve	to understand the branches and areas of distribution of the nerve with clinical significance
5.	Local Anaesthesia	to know theories of LA, mechanism of action, role of vasoconstrictors, LA techniques, complications involved
6.	Exodontia	To know indications and contraindications of exodontia, learn about technique and related complications,about instruments used and their principles.
7.	Medical Emergencies And Drugs	To recognise the medical emergencies To understand common medical emergencies To understand the emergency assessment and triage To understand the immediate first aid techniques To understand the proper use of emergency

		equipments To understand the emergency response protocols To understand the management of medical emergencies To understand the preventive measures To understand the post-emergency care
8.	Hemostasis	To understand basic physiology of hemostasis To know about coagulation cascade, natural and synthetic anticoagulants To learn about common coagulation disorders and their preoperative investigation, intraoperative management and postoperative care. To learn about different hemostatic agents and methods.
9.	Analgesics	to understand the classification, mechanism of action and uses of analgesics in maxillofacial region
10.	Antibiotics	To understand the primary objectives of using antibiotics To understand the prophylactic use To understand the method of treatment of existing infections To understand the patient-specific considerations To understand the timing and duration of antibiotic administration To understand the bacterial spectrum To understand the concern of antibiotic resistance To understand the post-operative care
11.	Impaction	To understand the diagnosis of difficulty of impaction To understands to make case specific treatment plan To understand the management of complications
12.	Management Of Medically Compromised Patients	To understand the criteria and definition of medically compromised patients To understand the impact on dental/medical care To understand the medical history assessment

		To understand the risk assessment and management To understand the necessary protocols and equipments To understand the infection control and prevention To understand patient education and informed consent
13.	Maxillofacial Space Infections	To know the anatomy of various fascial spaces, spread of infection, management of a space infection patient, incision and drainage, medications used for treatment.
14.	Osteomyelitis	To understand the types, etiology, pathophysiology, radiographic features, management of osteomyelitis, osteoradionecrosis
15.	Pre-prosthetic surgery	To understand the types of procedures To understand indications of each procedure To understand the steps involved in these procedures
16.	Maxillofacial Trauma	To understand the etiology and mechanism of cause of various maxillofacial fractures. To understand and establish need for treatment. To understand clinical and radiological signs and symptoms of various fractures. To understand the concepts of fracture healing. To understand the various past and present treatment modalities. To have an overview of various complications. To have an insight into new innovation and latest trends in management of fractures.
17.	TMJ Pathologies	To understand the basic anatomy and biomechanics of TMJ. To have an overview of TMJ pathologies.
18.	Orthognathic surgery	To understand the planning steps To understand pre-surgical orthodontics. To understand thei types of procedures To understand indications of each procedure To understand the steps involved in these procedures

		To understand the complications associated
19.	Diseases Of Maxillary Sinus	To understand the anatomy and physiology of maxillary sinus To understand the prevalent diseases affecting maxillary sinus. To understand the causes and risk factors To understand the clinical presentation and symptoms To understand the diagnostic methods To understand the medical and surgical management To understand the prognosis and complications
20.	Odontogenic Tumours	To understand the concept of benign tumors To understand the types of benign tumors To understand the causes and risk factors To understand the symptoms and clinical presentation To understand the diagnostic methods To understand the treatment To understand the prognosis and potential complications
21.	Oral Malignancies	To understand etiology, pathophysiology, clinical features and management of various oral malignancies
22.	Salivary Gland Disorders	To understand the different salivary gland pathology with regards to classification clinical features , diagnosis and to make treatment planning
23.	Neurological disorders	To understand trigeminal neuralgia and facial palsy in detail.
24.	Cleft Lip And Palate	To know incidence, preavalence, etiopathology, clinical features and management of cleft lip and palate
25.	Implants	To understand the biocompatibility of implants To understand the process of osseointegration To understand the types of implants To understand the surgical procedure for placement of an implant To understand the process for restoring function To understand the longevity of implants To understand the individualized treatment

		plan and follow-up care To understand the advancements and research in the field of implantology To understand the success rate of implants
26.	General Anesthesia	To know stages of anesthesia, drugs used, indications of various agents and reversal of anesthesia

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DEPARTMENT OF ORAL MEDICINE AND RADIOLOGY.

COURSE OBJECTIVES.

DR. DEEPA DAS		
Sr no	**Topic**	**Course Outcomes (Learning Objectives)**
1	Radiology- A brief history	1. To understand the various milestones in the history and evolution of dental radiology.
2	Construction & Working of X ray tube Radiation Physics	1. To understand how x rays are produced. 2. Factors affecting x ray production and x ray beam
3	Radiation Hazards	1. To know about the biological effects of radiation. 2. To understand the harmful effects of radiation.
4	Radiation Protection	1. To know about various methods of radiation protection in the dental clinic for the dentist and operating personnel
5	Anemia	1. To understand the oral and systemic manifestations of different types of anaemia. 2. To know the various lab investigations of specific anaemia
6	WBC Disorders	1. To know about the various congenital and acquired disorders of the White Blood Corpuscles. 2. To understand the oral manifestations of WBC Disorders

DR. AMITA NAVALKAR		
Sr no	**Topic**	**Course Outcomes (Learning Objectives)**
1	Radiographic films and film accessories	1. To learn about receptors used in Radiology 2. To learn the composition of film packets 3. To learn the chemical composition of film 4. To learn about accessories such as film holders, intensifying screens and grids used in Radiology to minimize radiation exposure to patients
2	Latent image formation	1. To understand how an image is formed on the IOPA 2. To learn the role of exposed and unexposed silver halide crystals 3. To understand Gurney-Mott Theory 4. To learn about shadows cast on the film
3	Processing of radiographs	1. To learn about conversion of latent image into visible image 2. To understand steps in processing a radiograph 3. To understand the process of developing and fixing 4. To learn about the darkroom
4	Radiographic interpretation	1. To explain what is seen on the radiograph 2. To identify radiolucent and radiopaque shadow 3. To identify normal anatomical landmarks 4. To identify faults on the image 5. To understand appearances of Periapical pathologies.
5	TMJ disorders	1. To learn the functional anatomy of the TMJ 2. To learn about imaging of the TMJ 3. To understand the clinical and radiographic changes in TMDs and their management
6	Salivary gland disorders	1. To understand the anatomy and physiology of salivary glands 2. Problem bases assessment of salivary glands 3. To learn about Sialography ad its interpretation
7	Vesicullo Bullous disorders	1. To define terms like vesicle and bulla 2. To understand how to investigate Vesicullo-Bullous lesions 3. To learn how to manage these lesions
8	OPG	1. To understand basic principle of OPG 2. To understanding of real, double and ghost images 3. Applications,advantages, disadvantages and interpretation of OPG.

DR. BHAKTI PATIL SOMAN

Sr no	Topic	Course Outcomes (Learning Objectives)
1	Projection geometry.	1. To understand the rules of projection geometry . 2. To know how the rules change the image characteristics.
2	Orofacial Pain	1. To learn different causes of orofacial pain 2. To learn signs, symptoms and treatment of each type of pain 3. To learn to differentiate between different types of pain 4. To independently diagnose trigeminal neuralgia.
3	Intraoral radiographic techniques paralleling and bisecting angle technique	1. To understand the various imaging techniques used for imaging dentofacial region 2. To understand the various intraoral radiographic techniques
4	Potentially malignant disorders	1. To enumerate potentially malignant disorders. 2. To understand protocol for management of OPMD 3. To identify and diagnose OPMD
5	Radiology of odontogenic tumors	1. To learn about different bony tumors of jaw bone 2. To learn difference between benign and malignant tumors 3. To learn difference between cyst and benign tumor 4. To learn clinical and radiographic features of different tumors.
6	Digital Imaging	1. To understand advantages of digital over conventional 2. To enumerate and understand basic working of digital image receptors 3. To know the workflow for digital imaging
7	CBCT	1. To understand basic principle of CBCT 2. To have a understanding of CBCT principle,applications,advantages.

DR. BHAGYASHRI PURANDARE		
Sr no	**Topic**	**Course Outcomes (Learning Objectives)**
1	Intraoral Bitewing & Occlusal Radiographic technique	1.) To learn about image receptors used in Bitewing & Occlusal Radiography 2.) To learn about accessories such as film holders, required for the same 3.) To learn when these techniques are used in radiology
2	Ideal Radiograph and Radiographic Errors	1.) To understand an ideal IOPA radiographic image 2.) To learn about radiographic errors and artifact shadows cast on the film 3.) To understand the causes of radiographic errors and how to rectify them
4	Bleeding and clotting disorders	1.) Be able to discern signs and symptoms of primary hemostasis defects and plasma coagulation defects. 2.) Able to distinguish hemophilia A (factor VIII deficiency), hemophilia B (factor IX deficiency) and moderate to severe von Willebrand disease
5	Disorders of Oral Pigmentation	1.) To introduce various disorders of pigmentation in the oral cavity 2.) To be able to differentiate the pigmented lesions according to their causes
6	Soft tissue calcifications	1.) To be able to differentiate between soft tissue calcifications and pathology 2.) To be able to give an overview of various soft tissue calcifications
7	Endocrine disorders	1.) To know various features of endocrine disorders 2.) To know their oral manifestations
8.	Contrast radiography	1.) To understand meaning of contrast radiography and its uses 2.) To know various procedures which utilize this principle
9.	HIV- Oral Manifestations	1.) To have a basic understanding of HIV dieases and its causes 2.) To recognize its oral manifestations

DR. NALINI TOMAR		
Sr no	**Topic**	**Course Outcomes (Learning Objectives)**
1	Oral cancer I	1. To understand about the oral cancer 2. To understand its progression and pathogenesis 3. To learn about the different types of investigation
2	Oral cancer II	1. To know the types of treatment available for oral cancer 2. To understand different types of treatment 3. To understand newer modalities to treat oral cancer
3	Diseases of the Maxillary and Paranasal sinuses	1. To Learn about the anatomy of maxillary sinus 2. To able to diagnose the pathology of maxillary sinus
4	Infectious diseases HIV	1. To understand the HIV and AIDS. 2. To know the oral manifestation of HIV 3. To learn the treatment and Prognosis
5	Tuberculosis	1. To identify the oral manifestation of Tuberculosis 2. to learn to understand the various investigations for tuberculosis
6	Syphilis	1. To understand syphilis. 2. To understand types of Syphilis 3. To learn sign and symptoms of syphilis
7	Forensic dentistry	1. To know the basics of forensic science and dentistry 2. To understand the role of forensic dentistry 3. To know the cope and purpose of forensic dentistry
8	Malignant tumours	1. To understand types of malignant tumors of oral cavity 2. To know about the different investigations and clinical features of it

DR. ANUJA KAKADE		
Sr no	**Topic**	**Course Outcomes (Learning Objectives)**
1	Object localisation on IOPA	1. Enumerate various object localization techniques and detail application of most commonly used ones.
2	Cysts of the head and neck region	1.To understand different types and most commonly found cyst of jaw . 2.Clinical along with radiographic evaluation of the lesion.
3	Fibro Osseous Lesions of The Jaws	1.To understand the nature of different fibroosseous lesion affecting the jaw and their radiographic evaluation
4	MRI	1. Basic principle and applications of MRI. 2.Differences between the CT, CBCT and MRI
5	Extraoral radiography	1.Enumerate the different extraoral radiographic technique, their indication and techniques.

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DEPARTMENT OF PEDODONTICS
Course outcomes

Sr. No	Topic	Course Outcomes	No. of Lecture	Faculty
1	Introduction to Pediatric Dentistry	• Definition • Aims and Objectives • Pedodontic treatment triangles	1	Dr. Amar K
2	Case history & Treatment planning	• How to take case history. • How to come to a diagnosis and • How to formulate a treatment plan	3	Dr.Surej
3	Chronology & Morphology of primary and permanent teeth , tooth numbering system	• Age and sequence of eruption of teeth. • Morphological anatomy of primary and permanent teeth • Teeth numbering system	3	Dr. Jaya
4	Diff between primary & permanent dentition	• Morphological differences • Histological differences • Clinical Significance	1	**PG**
5	Eruption & Shedding & development disturbances	• Theories of eruption • Stages of eruption • Disturbances associated with eruption and shedding	3	Dr. Mayur
6	Theories of Growth & development	• Definition of Growth • Definition of Development • Theories of Growth and Development	1	Dr. Pooja
7	Development of maxilla,mandible,palate	• Pre natal growth of maxilla and mandible • Post natal growth of maxilla and Mandible • Disturbances in growth and development of maxilla and mandible	2	Dr. Pooja
8	Development of occlusion	• Predentate stage • Primary dentition stage • Mixed dentition stage • Permanent dentition stage • Self correcting anomalies	3	Dr. Roshni
9	Saliva & oral health	• Physiology of saliva • Role of Saliva in health and Disease • Role of Saliva in Dental caries	2	Dr. Harshali
10	Dental Caries	• Definition, • Classification, • Theories of dental caries, • Factors influencing dental caries, • Keyes triad, critical pH, • Caries diagnosis	3	Dr. Indu
11	ECC and Rampant Caries	• Definition of ECC • Types and Stages of ECC	3	Dr. Surej

		• Etiological factors of ECC • Management and Prevention of ECC • Definition of Rampant caries • Difference between Nursing bottle and Rampant caries		
12	Dental Materials	• History • Properties • Manipulation • Setting reaction • Uses of commonly used dental materials in Pediatric dentistry	2	Dr Pratima
13	Isolation Techniques	• Need of Isolation • Classification of various techniques • Components and method of placement of Rubber Dam.	1	**PG**
14	Restorative dentistry	• Principles of cavity preparation. • Techniques of cavity preparation	2	Dr. Harshali
15	Introduction and theories of Local Anaesthesia	• Definition of local anaesthesia • Classification of local anaesthesia • Theories and mechanism of action of Local anaesthesia	1	**PG**
16	Techniques of LA administration	• Techniques of LA administration in pediatric patients • Local Complications • Systemic Complications	1	Dr Harshali
17	Diet & Nutrition in oral health	• Recommended Dietary Allowance • Food Group Guides • Food Guide Pyramid • Dietary Goals	1	**PG**
18	Developmental milestone	• Gross motor skills • Fine motor skills • Language skills • Social skills • Red flags associated with Developmental milestones	1	**PG**

Sr. No	Topic	Course Outcome	No. of Lecture	Faculty
19	Child Psychology	• Aims • Classification • Psychodynamic theories • Theories of learning and development of behaviour	2	Dr. Roshni
20	Non pharmacological Behaviour management	• Factors influencing child's behaviour in dental office • Maternal influence on children's behaviour • Types of Non Pharmacolocal behaviour management	2	Dr. Subhadra
21	Pharmacological Behaviour management	• Guidelines for use of Conscious sedation • Nitrous Oxide Sedation • Drugs used for Conscious Sedation	3	Dr. Subhadra
22	Pediatric Endodontics	• Pulp capping • Pulpotomy • Pulpectomy • Apexogenesis and Apexification	3	Dr. Amar K
23	Traumatic injuries	• Etiology • Classification • Examination and Diagnosis • Management • Complications/ Sequeale	3	Dr. Amar K
24	Fluorides	• History • Systemic Fluorides • Topical Fluorides • Fluoride Toxicity	3	Dr.Pooja
25	Gingival & periodontal diseases	• Normal Features of Gingiva • Gingival diseases in children • Periodontal Diseases in Children • Management of Gingival and	2	Dr. Roshni

		Periodontal Diseases		
26	Space Management & mixed dentition analysis	• Indications • Conraindications • Factors Determining space management • Removable Space Maintainers • Fixed Space Maintainers • Space Regaining	2+1	Dr.Indu
27	Management of special children	• Dental Management of child with • Autism • Cerebral Palsy • Downs Syndrome • Mental Retardation • Hearing Impairment • Blindness • Prevention of dental caries in special children	3	Dr. Subhadra
28	Oral Habits	• Definition • Classification • Clinical features • Diagnosis • Management	2	Dr.Indu
29	Crowns in Pediatric dentistry	• Classification • Indications • Contraindications • Techniques of placement of Stainless steel crowns • Aesthetic crowns in Pediatric Dentisrty	1	Dr. Roshni
30	Pit & fissure Sealants	• Definition • Classification • Indications and Contraindications • Steps in placement • Recent advances	1	Dr.Pooja
31	Child abuse & neglect	• Definition • Physical abuse • Sexual abuse • Emotional abuse • Types of Neglect • Role of Pedodontist in Child Abuse and	1	**PG**

		Neglect		
32	Cleft lip & palate	• Classification • Pathophysiology • Role of Pedodontist in management of Child with CLCP	1	Dr.Surej
33	Infant oral health care	• Anticipatory guidance, • Dental home & • Agewise oral health care guidelines	1	Dr. Roshni
34	Sports dentistry	• Types of contact Sports • Classification of Mouth Guards	1	**PG**
35	Minor-oral surgical procedures	• Pediatric exodontias • Frenectomies • Management of Mucocele and Ranula	1	**PG**
36	Medical emergencies	• Management of Anaphylaxis • Management of Epilepsy • Management of Syncope • Management and CVS and Respiratory Emergency • BLS	1	Dr. Pratima
37	Interceptive orthodontics	• Management of Crossbites • Serial Extractions • Muscle Exercises	1	Dr.Indu
38	Genetics	• History of genetics • Basics of cell division and protein synthesis • Difference between prokaryotic and eukaryotic cell • Chromosomal aberrations	1	**PG**

Department of Public Health Dentistry

Course Objectives

Sr no	Topic	Course Outcomes (Learning Objectives)
1	Introduction to Dentistry	At the end of this topic, students should know: ▪ History of Dentistry ▪ History of Public Health
2	Concept of Health & disease, Public Health	At the end of this topic, students should know: ▪ Health & Public health ▪ Changing concepts of Health ▪ Changing concepts of Public Health ▪ Iceberg Phenomenon
3	Dental Public Health	At the end of this topic, students should know: ▪ Tools of dental public health ▪ IAPHD
4	Preventive Dentistry	At the end of this topic, students should know: ▪ 3 Levels of Prevention ▪ Primordial Prevention
5	General Epidemiology	At the end of this topic, students should know: ▪ Definition, Tools, Principles of Epidemiology ▪ Classification of epidemiological studies ▪ Steps in each of the epidemiological study designs
6	Environmental Health	At the end of this topic, students should know: ▪ Water, Types of wells ▪ Purification of Water
7	Health Education	At the end of this topic, students should know: ▪ Approaches to achieve health ▪ Principles of Health Education ▪ Methods of Health Education
8	Ethics	At the end of this topic, students should know: ▪ Micro & Macro ethics ▪ Nuremberg Code ▪ Principles of Ethics ▪ Consent & its types ▪ Principles of Ethics by DCI
9	Jurisprudence	At the end of this topic, students should know: ▪ Professional Negligence ▪ Legal implications in dentistry
10	Consumer Protection Act	At the end of this topic, students should know:

		▪ History of CPA ▪ 3 tier system of CPA
11	Dental auxiliaries	At the end of this topic, students should know: ▪ Classification of auxiliaries ▪ Functions of different types of auxiliaries ▪ Four-handed dentistry ▪ Degrees of supervision of auxiliaries
12	Practice Management	At the end of this topic, students should know: ▪ Considerations in setting up dental clinic
13	Behavioral sciences	At the end of this topic, students should know: ▪ Different methods of behavioural management
14	Nutrition & Oral Health	At the end of this topic, students should know: ▪ Balanced Diet ▪ Trace minerals ▪ Food Pyramid
15	Health care delivery systems in India	At the end of this topic, students should know: ▪ PHC: History, Concept, Elements & Principles ▪ Health system administration ▪ Health care system in India (3 tier)
16	Surveys	At the end of this topic, students should know: ▪ What is survey? ▪ Types of surveys ▪ Index age groups in survey ▪ WHO proforma 1997 & 2013
17	School Dental health programmes	At the end of this topic, students should know: ▪ Importance of school dental health programmes ▪ SHARP, Askov dental demonstration ▪ Health promoting school
18	Fluorides in dentistry	At the end of this topic, students should know: ▪ History of fluorides in dentistry ▪ Anti-cariogenic mechanism of fluoride ▪ Classification of fluoride delivery methods ▪ Fluoride agents ▪ Fluoride varnish ▪ Water fluoridation, School water fluoridation ▪ Salt & Milk Fluoridation ▪ Defluoridation
19	Epidemiology of dental caries	At the end of this topic, students should know: ▪ Epidemiological triad for caries ▪ Theories & studies on dental caries

20	Epidemiology of periodontal diseases	At the end of this topic, students should know: ▪ Disclosing agents ▪ Different methods of oral hygiene
21	Epidemiology of oral cancer	At the end of this topic, students should know: ▪ Etiology for Oral Cancer ▪ History of Tobacco ▪ Types of Tobacco, Contents of Tobacco ▪ Tobacco Cessation Counselling: 5As & 5Rs ▪ NRT
22	Epidemiology of Malocclusion	At the end of this topic, students should know: ▪ Etiology of malocclusion ▪ Preventive & Interceptive Orthodontics
23	Payments in dental care	At the end of this topic, students should know: ▪ Different payment mechanisms in dentistry ▪ Payment mechanisms in India
24	Research Methodology	At the end of this topic, students should know: ▪ Know different types of research ▪ Know different types of study designs ▪ Understand different types of data ▪ Understand sampling for a study ▪ Know how to represent data
25	Biostatistics	At the end of this topic, students should know: ▪ Data & types of Data ▪ Methods of presentation of data ▪ Measures of Central tendency & dispersion ▪ Normal curve ▪ Parametric & non-parametric tests
26	Planning & Evaluation	At the end of this topic, students should know: ▪ Types of Planning ▪ Steps in planning a health program ▪ Types of Evaluation
27	IDA, DCI, Dentists Act	At the end of this topic, students should know: ▪ History of Dentists Act 1948 ▪ Chapters in Dentists Act ▪ Structure of IDA & DCI ▪ Functions of IDA & DCI
28	Health agencies around the world	At the end of this topic, students should know: ▪ Different health agencies around the world ▪ WHO: History, structure & functions ▪ UNICEF
29	Health Economics	At the end of this topic, students should know:

		▪ Different types of health economic analysis
30	Mobile dental Units	At the end of this topic, students should know: ▪ Types of Needs ▪ Requirements of MDU ▪ Different MDUs across the world
31	Caries activity tests	At the end of this topic, students should know: ▪ Caries activity & susceptibility ▪ Different caries activity tests ▪ Chair-side caries activity tests
32	Biomedical waste disposal	At the end of this topic, students should know: ▪ Types of biomedical waste ▪ Methods of Biomedical waste disposal ▪ Biomedical Waste Rules, 1998
33	Pit & Fissure Sealants & PRRs	At the end of this topic, students should know: ▪ Rationale & definition of Sealants ▪ Indications & Contraindications ▪ Steps in application ▪ Importance of PRRs & its classification
34	ART	At the end of this topic, students should know: ▪ History of ART ▪ Steps in ART
35	Indices in Dental epidemiology	At the end of this topic, students should know: ▪ Importance & uses of indices ▪ Classification of indices ▪ Different indices : Caries, Periodontal diseases, Gingivitis, Plaque, Fluorosis, Malocclusion
36	Occupational hazards in dentistry	At the end of this topic, students should know: ▪ Classification of occupational hazards ▪ Etiology & Treatment for the same
37	Use of computers in dentistry	At the end of this topic, students should know: ▪ Use of computers in dentistry ▪ Introduction to Statistical softwares

Department of Oral Pathology

Sub: Dental Anatomy & Oral histology

Course Objectives

Sr no	Topic	Course Outcomes (Learning Objectives)
1	Introduction, Nomenclature and terminology	1. To understand the basic introduction of types and classes of dentition in humans and other organisms. 2. To understand the nomenclature and terminologies of human permanent and deciduous dentition.
2	Development of face	1. To understand the embryology and development of facial structures. 2. To understand the clinical implications of embryology and development of facial structures.
3	Development of tooth	1. To understand the embryology and development of teeth and parts of oral cavity. 2. To understand the clinical implications of embryology and development of teeth and parts of oral cavity.
4	Enamel	1. To understand the normal development, morphology, structure & functions of enamel. 2. To understand the clinical implications of histology of enamel.
5	Dentin	1. To understand the normal development, morphology, structure & functions of dentin. 2. To understand the clinical implications of histology of dentin.
6.	Pulp	1. To understand the normal development, morphology, structure & functions of pulp. 2. To understand the age changes in pulp.
7.	Cementum	1. To understand the normal development, morphology, structure & functions of cementum. 2. To understand the clinical implications of histology of cementum.
8	Oral mucous membrane	1. To understand the normal development, morphology, structure & functions of oral mucous membrane. 2. To understand the difference between normal and pathological states of oral mucous membrane.
9	PDL	1. To understand the normal development, morphology, structure & functions of PDL. 2. To understand the clinical implications of histology of PDL.
10	Eruption and shedding	1. To understand the age group and sequence of eruption of deciduous and permanent teeth. 2. To understand the theories of eruption of teeth. 3. To understand the theories of shedding of primary teeth.
11.	Salivary glands	1. To understand the normal histological structure & functions of salivary glands.

		2. To understand the clinical considerations with respect to salivary glands.
12	Bone	1. To understand the normal development, morphology, structure & functions of alveolar bone. 2. To understand the clinical implications of histology of alveolar bone.
12.	TMJ	1. To understand the normal development, morphology, structure & functions of TMJ. 2. To understand the clinical implications of histology of TMJ.
13	Maxillary sinus	1. To understand the normal histological structure & functions of maxillary sinus. 2. To understand the clinical considerations with respect to maxillary sinus.
14	Incisors	1. To understand the morphology of permanent and deciduous central and lateral incisors. 2. To understand the functions of incisors. 3. To understand the structural and functional differences of incisors with other classes of teeth.
15.	Canines	1. To understand the morphology of permanent and deciduous canines 2. To understand the functions of canines. 3. To understand the structural and functional differences of canines with other classes of teeth.
16	Premolars	1. To understand the morphology of maxillary and mandibular first and second premolars. 2. To understand the functions of premolars. 3. To understand the structural and functional differences of premolars with other classes of teeth.
17	Molars	1. To understand the morphology of permanent and deciduous first and second molars. 2. To understand the functions of molars. 3. To understand the structural and functional differences of molars with other classes of teeth.
18	Occlusion	1. To understand the functional importance of occlusion of teeth. 2. To understand the curves of occlusion.

Department of Oral Pathology

Sub: Oral Pathology & Microbiology

Course Objectives

Sr no	Topic	Course Outcomes (Learning Objectives)
1	Developmental disturbances	1. To understand the classification of different developmental disturbances affecting teeth, parts of oral cavity and perioral structures. 2. To understand the brief pathogenesis, clinical features and treatment of these developmental disturbances affecting teeth, parts of oral cavity and perioral structures.
2	Dental caries	1. To understand the theories of etiopathogensis and classification systems of dental caries. 2. To understand the histology of dental caries. 3. To understand the various caries activity tests.
3	Odontogenic cysts	1. To understand the definition and WHO classification of odontogenic cysts. 2. To understand the brief etiopathogenesis, clinical features, histopathological features, radiological features and treatment in brief of odontogenic cysts.
4	Diseases of pulp and periapical tissues	1. To understand the sequalae, etiopathogensis and classification of pulp & periapical diseases. 2. To understand the pulp vitality tests and diagnosis of various pulp & periapical diseases. 3. To understand the clinical & radiographic features, histopathology and brief management of pulp & periapical diseases.
5	Osteomyelitis	1. To understand the sequalae and etiopathogensis of osteomyelitis. 2. To understand the clinical & radiographic features, histopathology and brief management of osteomyelitis.
6.	Spread of oral infection	1. To understand the sequalae, etiopathogensis and pathways of spread of oral infection. 2. To understand the clinical & radiographic features, histopathology and management of facial spaces infection.
7.	Odontogenic tumours	1. To understand the definition and WHO classification of benign and malignant odontogenic tumours. 2. To understand the brief etiopathogenesis, clinical features, histopathological features, radiological features and treatment in brief of odontogenic tumours.
8	Healing of oral wounds	1. To understand the stages in the healing of oral wounds. 2. To understand the histology of healing of oral wounds.
9	Regressive alterations of teeth	1. To understand the etiology and types of regressive alterations of teeth.

		2. To understand the clinical features and management of of regressive alterations of teeth.
10	Microbial infections	1. To understand the different causative microorganisms of infections in the oral cavity. 2. To understand the clinical features and management of infections in the oral cavity.
11.	Blood dyscrasias	1. To understand the normal number, size and microscopic appearance of RBCs, WBCs and platelets. 2. To understand the various diseases of RBCs, WBCs and platelets.
12	Diseases of bone	1. To understand the WHO classification of various diseases affecting bone including benign and malignant tumours of bone. 2. To understand the brief etiopathogenesis, clinical features, histopathological features, radiological features and treatment in brief of diseases affecting bone including benign and malignant tumours of bone.
13.	Diseases of skin	1. To understand the classification of diseases of skin. 2. To understand the brief etiopathogenesis, clinical features, histopathological features and treatment in brief of odontogenic cysts.
14	Physical and chemical injuries	1. To understand the different physical and chemical injuries affecting oral cavity. 2. To understand the clinical features and treatment in brief of physical and chemical injuries affecting oral cavity.
15	Premalignancies of oral cavity	1. To understand the definition and WHO classification of premalignancies. 2. To understand the brief etiopathogenesis, clinical features, histopathological features and treatment in brief of premalignancies of oral cavity.
16	Benign and malignant epithelial tumours	1. To understand the classification of benign and malignant tumours of oral cavity. 2. To understand the brief etiopathogenesis, clinical features, histopathological features, radiological features and treatment in brief of benign and malignant tumours of oral cavity.
17	Salivary gland tumours.	1. To understand the WHO classification of salivary gland tumours. 2. To understand the brief etiopathogenesis, diagnosis, clinical features, histopathological features, radiological features and treatment in brief of salivary gland tumours.
18	Connective tissue tumours.	1. To understand the WHO classification of connective tissue tumours. 2. To understand the brief etiopathogenesis, clinical features, histopathological features, radiological features and treatment in brief of connective tissue tumours.

19	Oral aspects of metabolic diseases	1. To understand the oral manifestations of metabolic diseases. 2. To understand the clinical features and management of metabolic diseases.
20	Diseases of periodontium	1. To understand the sequalae and etiopathogensis of diseases of periodontium. 2. To understand the clinical features, histopathology and management of diseases of periodontium.
21.	Forensic Odontology	1. To understand the basic introduction of and methods used in Forensic Odontology. 2. To understand the scope and applications of methods of Forensic Odontology. 3. To understand the role of general dental physician in the field of Forensic Odontology.

DR GD POL FOUNDATION'S

YMT DENTAL COLLEGE

Department of Prosthodontics

COURSE OBJECTIVES

SUBJECT: PRECLINICAL PROSTHODONTICS (I&II BDS)

Sr.No	Topic	Course Outcomes (Learning Objectives)
1.	Introduction to Prosthodontics	At the end of this topic, students should know: • Different branches of Prosthodontics • Treatment options for dentulous and edentulous patients
COMPLETE DENTURES		
2.	Anatomical Landmarks maxilla and mandible	At the end of this topic, students should know: • Stress bearing and relief areas • Limiting structures of maxilla • Significance of Posterior palatal seal area
3.	Theories of impression making	At the end of this topic, students should know: • Different theories in impression making • Different materials used in different theories
4.	Final impression making	At the end of this topic, students should know: • Different spacer designs • Significance of tissue stops • Custom tray fabrication and materials used • Outlining and preparing the preliminary cast for making Custom tray
5.	Record bases and Occlusal rims	At the end of this topic, students should know: • Introduction and definition • Materials and purpose of occlusal rims • Dimensions of occlusal rims
6.	Jaw relations	At the end of this topic, students should know: • Definition • Orientation jaw relation • Vertical jaw relation • Methods of determining vertical dimension at rest and at occlusion • Horizontal jaw relations
7.	Articulators	At the end of this topic, students should know: • Classify Articulators

		• Theories of Articulators • Parts and Significance
8.	Mounting Procedures	At the end of this topic, students should know: • Indexing and different types of indexing • Articulating maxillary and mandibular cast on the articulators
9.	Occlusion in complete dentures	At the end of this topic, students should know: • Different types of occlusion • Balanced occlusion
10.	Teeth Selection	At the end of this topic, students should know: • Selection of anterior teeth • Selection of posterior teeth
11.	Teeth Arrangement	At the end of this topic, students should know: • Arranging of anterior teeth according to the glass plate • Compensating curves
12.	Try in	At the end of this topic, students should know: • Evaluation of aesthetics and function • Evaluation of both trialdentures
13.	Laboratory steps in fabrication of complete dentures	At the end of this topic, students should know: • Sequence of laboratory steps • Troubleshooting in denture fabrication
REMOVABLE PARTIAL DENTURE		
14.	Introduction to RPD	At the end of this topic, students should know: • Indications and contraindications • Kennedy's Classification System • Applegates Rules
15.	Parts of RPD and steps of fabrication of RPD	At the end of this topic, students should know: • Major Connectors and minor connectors • Rest and rest seats
FIXED PARTIAL DENTURE		
16.	Introduction to FPD	At the end of this topic, students should know: • Indications and contraindications • Classification
17.	Parts of FPD and Tooth preparation	At the end of this topic, students should know: • Retainers • Pontics • Connectors

SUBJECT: DENTAL MATERIAL (I & II BDS)

SR NO	TOPIC	COURSE OUTCOMES (LEARNING OBJECTIVES)
1	Overview Of Preventive And Restorative Materials	❖ Types Of Dental Materials ❖ Classification Of Dental Materials ❖ Auxiliary Dental Materials ❖ What Is A Restorative Material ❖ Different Types Of Restorative Materials ❖ Direct And Indirect Restorative Materials
2	Structure Of Matter And Principles Of Adhesion	❖ Principles Of Adhesion ❖ Interatomic Bonding ❖ Noncrystalline Solids And Their Structures
3	Physical And Chemical Properties Of Solids	❖ Rheology ❖ Structural Relaxation ❖ Different Physical And Chemical Properties ❖ Color And Optical Effects ❖ Color Matching ❖ Thermal Properties ❖ Electrochemical Properties ❖ Tarnish And Corrosion ❖ Electrochemical Corrosion ❖ Protection Against Corrosion
4	Mechanical Properties Of Dental Materials	❖ Stress And Strain ❖ Mechanical Properties ❖ Strength Properties
5	Structure And Properties Of Cast Dental Alloys	❖ Structure And Properties Of Metals ❖ Solidification Of Cast Dental Alloys ❖ Properties Of Casting Alloys ❖ Noble Metal Alloys ❖ Mechanical Properties Of Casting Alloys

6	Denture Polymers	❖ Resins ❖ Requisites For Dental Polymers ❖ Composition Of PMMA Resin ❖ Properties Of Denture Base Resins ❖ Types Of Porosities In Denture Base Resins ❖ Crazing
7	Biocompatibility	❖ Adverse Effects From Dental Materials ❖ Local And Systemic Effects ❖ Toxicity Of Dental Materials ❖ Allergy Of Dental Materials ❖ Methods For Measuring The Biocompatibility Of Dental Materials ❖ Dental Pulp Irritation Tests ❖ Animal Tests And Usage Tests ❖ Standards That Regulate The Measurement Of Biocompatibility ❖ Pulpal Reaction To Restorative Material ❖ Effect Of Bleaching Agent On Soft Tissues
8	Impression Materials	❖ Definition And Classification Of Impression Materials ❖ Ideal Requirements Of Impression Materials ❖ Rigid Impression Materials ❖ Hydrocolloid Impression Materials ❖ Infection Control In Impression Materials
9	Gypsum Materials	❖ Calcination Process ❖ Types Of Gypsum ❖ Theories Of Setting Reaction ❖ Setting Expansion And Factors Affecting It ❖ Gypsum Bonded Investment Materials ❖ Ideal Requirements Of Impression Materials ❖ Divestment

10	Dental Waxes	❖ Classification Of Dental Waxes ❖ General Properties ❖ Types Of Waxes ❖ Recent Advances For Waxes
11	Casting Procedures	❖ Step By Step Casting Procedure ❖ Spruing Principle ❖ Casting Ring And Ring Liner ❖ Investment Materials ❖ Ringless Casting System ❖ Wet Liner Technique
12	Cutting, Grinding, Finishing And Polishing Materials	Various Abrasives And Finishing Procedures
13	Dental Casting Alloys	❖ Structure And Properties Of Metals ❖ Clinically Important Properties ❖ Classification ❖ Noble Alloys ❖ Base Metal Alloys ❖ Recent Advances
14	Wrought Metals	❖ Different Wrought Metal Alloys ❖ Point Defects ❖ Twinning ❖ Applications Of Wrought Metals In Dentistry
15	Ceramics	❖ Classification Of Dental Ceramics ❖ Glazing ❖ Indications And Contraindications Of Dental Ceramics ❖ Explain In Brief Fabrication Of Ceramic Restoration ❖ Properties Of Ceramics
16	Prosthetic Polymers And Resins	❖ Ideal Properties Of Denture Base Materials ❖ PMMA ❖ Polymerization Shrinkage ❖ Different Techniques For Processing Denture ❖ Recent Advances
17	Implant Biomaterials	❖ Classify ❖ Properties ❖ Recent Advances ❖ Osteoconduction And Osteoinduction

SUBJECT: PROSTHODONTICS (III BDS)

SR.NO	TOPIC	COURSE OUTCOMES (LEARNING OBJECTIVES)
1.	Maxillary anatomical landmarks	At the end of this topic, students should know: 1.Stress bearing and relief areas 2.Limiting structures of maxilla 3.Significance of posterior palatal seal area
2.	Mandibular anatomical landmarks	At the end of this topic, students should know: 1.Stress bearing and relief areas 2.Limiting structures of mandible 3.Boundaries of buccal shelf area 4.Contents of retromolar pad
3.	Diagnosis and treatment planning	At the end of this topic, students should know: 1.Case history in detail 2.Treatment planning in geriatric patients
4.	Impressions in complete denture	At the end of this topic, students should know: 1.Theories of impression making 2.Different materials used in different theories
6.	Orientation Jaw relation	At the end of this topic, students should know: 1.Different types of jaw relation 2.Face bow, parts of facebow 3.Significance of facebow
7.	Vertical and centric relation	At the end of this topic, students should know: 1.Methods to record vertical jaw relation 2. Methods to record centric jaw relation
8.	Teeth Selection	At the end of this topic, students should know: 1.SPA factor 2.Selection of anterior teeth 3.Selection of posterior teeth
9.	Trial	At the end of this topic, students should know: 1.Significance of phonetics 2.Significance of balanced occlusion 3.Esthetic evaluation
10.	Denture insertion	At the end of this topic, students should know: 1.Post denture insertion instructions 2.Denture adhesives
11.	Overdenture	At the end of this topic, students should know: 1.Indications of overdenture 2.Advantages of overdenture 3.Different types of attachments in overdenture
12.	Immediate denture	At the end of this topic, students should know: 1.Indications of immediate denture 2.Advantages of immediate denture

		3.comparision of conventional and interim immediate denture
13.	Single complete denture	At the end of this topic, students should know: 1.Combination syndrome 2.Maxillary single complete denture 3.Mandibular single complete denture
14.	Relining and rebasing	At the end of this topic, students should know: 1.Indications and Contraindication 2.Tissue conditioners 3.Preparation of denture
15	Treating abused tissues	At the end of this topic, students should know:
16	Dental implants	At the end of this topic, students should know: 1.Parts of implant 2.Osseointegration 3.Different types of implant

SUBJECT: PROSTHODONTICS (IV BDS)

SR NO	TOPIC	COURSE OUTCOMES (LEARNING OBJECTIVES)
FIXED PARTIAL DENTURE		
1.	Introduction to FPD	At the end of this topic, students should know: ❖ Definition of FPD ❖ Classification of FPD ❖ Indications and contraindications of FPD ❖ Advantages and disadvantages of FPD
2.	Diagnosis and Treatment planning in FPD	At the end of this topic, students should know: ❖ Case history recording ❖ Clinical examination ❖ Diagnostic casts ❖ Treatment plan ❖ Mouth Preparation
3.	Principles of Tooth Preparation	At the end of this topic, students should know: ❖ Biologic principles of tooth preparation ❖ Mechanical principles of tooth preparation ❖ Aesthetic principles of tooth preparation ❖ Tooth preparation for Full veneer crowns ❖ Tooth preparation for Partial veneer crowns
4.	Occlusion in FPD	At the end of this topic, students should know: ❖ Centric Relation ❖ Concept of Occlusion ❖ Occlusal interference ❖ Pathogenic occlusion
5.	Abutment in FPD	At the end of this topic, students should know: ❖ Abutment selection ❖ Ante's law ❖ Pier abutment
6.	Connectors in FPD	At the end of this topic, students should know: ❖ Definition ❖ Types of connectors
7.	Retainers in FPD	At the end of this topic, students should know: ❖ Definition and Classification of retainers ❖ Material used for retainer ❖ Criteria for selection of retainer
8.	Pontics in FPD	At the end of this topic, students should know: ❖ Definition and Classification of Pontics ❖ Types of Pontics and its indications

9.	Provisional Restorations	At the end of this topic, students should know: ❖ Ideal requirements of Provisional restoration ❖ Classification of Provisional Restorative Materials ❖ Techniques of Fabrication of Provisional restoration
10.	Fluid Control & Soft Tissue Management	At the end of this topic, students should know: ❖ Objectives of Fluid Control ❖ Methods of Fluid Control ❖ Indications, Objectives and Methods for Soft tissue management
11.	Impressions In F.P.D	At the end of this topic, students should know: ❖ Impression material used in FPD ❖ Impression trays used in FPD ❖ Impression techniques in FPD ❖ Disinfection of the impressions
12.	Shade Selection	At the end of this topic, students should know: ❖ Introduction ❖ Hue, value and chroma ❖ Munsell colour order system ❖ Various Shade guides used in FPD ❖ Shade selection guidelines
13.	Cementation and Luting Agents	At the end of this topic, students should know: ❖ Ideal requirements of luting agents ❖ Classification of luting agents ❖ Selection of luting agents ❖ Steps for cementation of individual cements ❖ Post Cementation Instructions
14.	Resin bonded restoration	At the end of this topic, students should know: ❖ Indications and contraindications of Resin Bonded restorations ❖ Types of Resin Bonded restorations ❖ Fabrication of Resin Bonded restorations
15.	Restoration of the endodontically treated tooth	At the end of this topic, students should know: ❖ Rationale for the use of Core and Dowel ❖ Classification and Selection of Dowel systems ❖ Cementation procedure

REMOVABLE PARTIAL DENTURE		
1.	Introduction To RPD	At the end of this topic, students should know: ❖ Components of Removable Partial Dentures ❖ Indications of Removable Partial Denture ❖ Contraindications of Removable Partial Dentures ❖ Classification in RPD. ❖ Applegate's Rules
2.	Principles Of Designing	At the end of this topic, students should know: ❖ Requirements of RPD ❖ Biomechanical Considerations in RPD ❖ Physiologic Basing ❖ Broad Stress Distribution ❖ Stress Equalization
3.	Surveying In RPD	At the end of this topic, students should know: ❖ Definition of Surveyor ❖ Parts of Surveyor ❖ Classification of Surveyor ❖ Surveying tools ❖ Surveying procedures ❖ Survey lines ❖ Factors affecting path of insertion
4.	Major Connectors	At the end of this topic, students should know: ❖ Definition of major connectors ❖ Ideal requirements of major connectors ❖ Maxillary major connectors ❖ Mandibular major connectors ❖ Indications, Advantages & Limitations of different major connectors
5.	Minor Connectors	At the end of this topic, students should know: ❖ Definition of Minor Connectors ❖ Classification of Minor Connectors ❖ Indications of different Minor Connectors
6.	Mouth Preparation In RPD	At the end of this topic, students should know: ❖ Objectives of mouth preparation in RPD. ❖ Classification of procedures in mouth preparation ❖ Classification of abutment teeth.
7.	Direct Retainer	At the end of this topic, students should know: ❖ Definition & Classification of Direct Retainer. ❖ Principles of Direct Retainers

		❖ Functional Requirements of Direct Retainers ❖ Different types of Intra-coronal & Extra-Coronal retainers
8.	Indirect Retainers	At the end of this topic, students should know: ❖ Definition of indirect retention ❖ Principles of indirect retention ❖ Factors affecting indirect retention ❖ Fulcrum lines ❖ Types of indirect retainers
9.	Rest And Rest Seats	At the end of this topic, students should know: ❖ Definition & Classification of Rest. ❖ Functions of Rest ❖ Types of Rest ❖ Preparation of Rest Seat.
10.	Impressions In R.P.D	At the end of this topic, students should know: ❖ Anatomic Impressions ❖ Functional Impressions ❖ Altered Cast Technique ❖ Impression Materials
11.	Jaw Relations In R.P.D	At the end of this topic, students should know: ❖ Orientation jaw relations ❖ Establishing Vertical Jaw Relations ❖ Establishing & Recording of Centric Jaw Relations
12.	Laboratory Steps In R.P.D	At the end of this topic, students should know: ❖ Duplication of Casts. ❖ Blockout and Relief of Casts ❖ Casting of The Frame Work. ❖ Finishing and Polishing of Partial Dentures ❖ Occlusal Remounting.
13.	Denture insertion in R.P.D	At the end of this topic, students should know: ❖ Objectives ❖ Denture insertion procedures ❖ Post insertion instructions. ❖ Post insertion problems

MISCELLANEOUS		
1.	Ceramic Laminate Veneers	At the end of this topic, students should know: ❖ Definitions ❖ Indication and contraindications ❖ Advantages and Disadvantages ❖ Tooth Preparation for Veneers
2.	Overdentures	At the end of this topic, students should know: ❖ Definitions ❖ Indication and contraindications ❖ Advantages and Disadvantages ❖ Abutment selection ❖ Types of tooth supported Overdentures
3.	Oral Implantology	At the end of this topic, students should know: ❖ Definitions ❖ Indication and contraindications ❖ Advantages and Disadvantages ❖ Component parts of Implant restoration ❖ Osseointegration
4.	Maxillofacial Prosthetics	At the end of this topic, students should know: ❖ Classification of Maxillary and Mandibular defects ❖ Obturators ❖ Extra-oral Prosthesis and materials

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DEPARTMENT OF ORTHODONTICS & DENTOFACIAL ORTHOPAEDICS

FACULTY NAME – DR MEGHNA VANDEKAR

SR NO	TOPIC NAME	LEARNING OBJECTIVE
1.	INTRODUCTION TO ORTHODONTICS	1. DEFINITION, AIMS AND OBJECTIVES ORTHODONTICS 2. SCOPE OF ORTHODONTICS 3. UNDERSTANDING THE DIFFERENT BRANCHES OF ORTHODONTICS
2.	BIOLOGY OF TOOTH MOVEMENT	1. UNDERSTAND THE VARIOUS THEORIES OF TOOTH MOVEMENT 2. OPTIMUM ORTHODONTIC FORCE 3. TYPES OF ORTHODONTIC FORCE
3.	PRESURGICAL AND POST SURGICAL ORTHODONTICS	1. UNDERSTAND THE ROLE OF ORTHODONTIST IN PLANNING AN ORTHOGNATHIC SURGERY 2. ESSENTIALS OF PRE SURGICAL ORTHODONTICS 3. SURGICAL MANAGEMENT & POST SURGICAL ORTHODONTICS

FACULTY NAME: DR. VIKRAM SHETTY

SR NO	TOPIC NAME	LEARNING OBJECTIVE
1.	CLASS II MALOCCLUSION	1. TIMING OF TREATMENT IS IMPORTANT IN TREATING CLASS II MALOCCLUSION. 2. TO UNDERSTAND THE IMPOTANCE OF FEATURES OF CLASS II MALOCCLUSION AND THEIR SUBTYPES. 3. TO UNDERSTAND THE AETIOLOGY OF MALOCCLUSION. 4. TO PLAN AN APPROPRIATE TREATMENT PLAN.
2.	CLASS III MALOCCLUSION	1. TIMING OF TREATMENT IS IMPORTANT IN TREATING CLASS II MALOCCLUSION. 2. TO DEFINE CLASS III DENTAL AND SKELETAL RELATIONSHIPS. 3. UNDERSTANDING THE RELATED FATORS WHICH GIVE RISE TO CLASS III MALOCCLUSION. 4. TO UNDERSTAND THE APPROPRIATE TIMING OF TREATMENT AND TREATMENT METHODS.
3.	FIXED FUNCTIONAL APPLIANCES	1. UNDERSTANDING THE INDICATIONS FOR USE OF ORTHOPEDIC APPLIANCES

FACULTY NAME: DR RAJESH KURIL

SR NO	TOPIC NAME	LEARNING OBJECTIVE
1.	MYOFUNCTIONAL APPLIANCES	1. Understanding how two treat skeletal class II malocclusions in growing individuals. 2. Understanding how the myofunctional appliances work 3. Understanding fixed functional appliances
2.	MANAGEMENT OF CROSS BITE	1. Understanding how to treat anterior and posterior cross bite. 2. How to manage crossbite in growing individuals 3. Understanding various cross bite correction appliances.
3.	MANAGEMENT OF CLEFT LIP AND PALATE	1. Understanding etiopathology of cleft lip and palate. 2. Understanding how to treat cleft lip and palate in growing individuals. 3. Understanding role of team work in growing and adult malocclusions suffering from cleft lip and palate.
4.	RETENTION AND RELAPSE	1.Understanding basic cause of relapse. 2.Understanding methods to prevent relapse.

FACULTY NAME: DR YASH SHEKATKAR

SR NO	TOPIC NAME	LEARNING OBJECTIVE
1.	MODEL ANALYSIS	1. IMPORTANCE OF MODEL ANALYSIS IN TREATMENT PLANNING 2. DIFFERENT MODEL ANAYSIS FOR PERMANENT DENTION 3. MODEL ANALYSIS FOR MIXED DENTITION.
2.	BIOMECHANICS IN ORTHODONTICS	1. UNDERSTANDING THE BASIC PRINCIPLE IN TOOTH MOVEMENT 2. TYPES OF TOOTH MOVEMENT 3. APPLICATION OF BIOMECHANICS IN CLINICAL PRACTICES
3.	ORTHOPEDIC APPLIANCE	1. UNDERSTANDING THE INDICATIOINS FOR USE OF ORTHOPEDICS APPLIANCE IN ORTHODONTICS 2. BASIC PRINCIPLE IN USING ORTHOPEDIC APPLIACES. 3. CLINICAL APPLICATION OF ORTHODEPEDIC APPLIANCES.

FACULTY NAME: DR TEJAS POL

SR NO	TOPIC NAME	LEARNING OBJECTIVE
1.	CEPHALOMETRICS	1. IMPORTANCE OF CEPHALOMERTICS IN TREATMENT PLANNING 2. DIFFERENT CEPHALOMETRIC ANALYSIS FOR PERMANENT DENTION 3. APPLICATION IN CLINICAL ORTHODONTICS.
2.	TREATMENT PLANNING IN OPEN BITE AND DEEP BITE	1. UNDERSTANDING THE BASIC PRINCIPLE IN OPEN BITE AND DEEP BITE 2. VARIES TREATEMENT MODALITIES IN OPEN BITE AND DEEP BITE 3. APPLICATION OF BIOMECHANICS IN CLINICAL PRACTICES TO TREAT OOPEN BITE AND DEEP BITE
3.	COMPUTER IN ORTHODONTICS	1. UNDERSTANDING THE IMPORTANCE OF COMPUTER IN ORTHODONTICS. 2. APPLICATION OF VARIOUS SOFTWARES IN TREATMENT PLANING

FACULTY NAME: DR ANIKET S THORAT

SR NO	TOPIC NAME	LEARNING OBJECTIVE
1.	GENETIC IN ORTHODONTICS	1. IMPORTANCE OF GENETICS IN TREATMENT PLANNING 2. GENETIC MALOCCLUSIONS 3. HOW DOES GENETIC PLAY A ROLE IN MALOCCLUSION
2.	LAB PROCEDURES IN ORTHODONTICS	1. UNDERSTANDING THE BASIC LABORATORY PROCEDURES IN ORTHODONTIC TREATMENT PLANNING 2. TYPES OF MACHINES USED
3.	ADULT ORTHODONTICS	1. FACTORS AFFECTING TREATMENT IN ADULT PATIENTS 2. IS THERE ANY IDEA AGE GROUP FOR ORTHODONTICS 3. TREATMENT MODIFICATIONS IN ADULT ORTHODONTICS
4.	BIOLOGY OF TOOTH MOVEMENT	1. BIOLOGY AND HISTLOGY OF BONE 2. PHYSIOLOGY OF BONE 3. HOW DOES THE BONE 4. RESPOND TO ORTHODONTIC TREATMENT

FACULTY NAME: DR SHWETA CHHAYA

SR NO	TOPIC NAME	LEARNING OBJECTIVE
1.	BASICS OF GROWTH AND DEVELOPMENT	• DEFINITIONS OF GROWTH AND DEVELOPMET • VARIOUS CONCEPTS OF GROWTH • THEORIES OF GROWTH
2.	PRENATAL GROWTH AND DEVELOPMENT	• STAGES OF PRENATAL GROWTH • DERIVATIVES OF BRACHIAL ARCHES • PRENATAL EMBRYOLOGY OF MAXILLA • PRENATAL EMBRYOLOGY OF MANDIBLE
3.	POST NATAL GROWTH AND DEVELOPMENT	1. UNDERSTANDING THE VARIOUS METHODS OF POSTNATAL GROWTH OF THE CRANIAL BASE 2. UNDERSTANDING THE VARIOUS METHODS OF POSTNATAL GROWTH OF THE MAXILLA 3. UNDERSTANDING THE VARIOUS METHODS OF POSTNATAL GROWTH OF THE MANDIBLE
4.	CLASSIFICATION OF MALOCCLUSION	1. UNDERSTANDING THE NEED FOR CLASSIFICATION 2. UNDERSTANDING VARIOUS METHODS OF CLASSIFICATION AND THEIR RESPECTIVE DRAWBACKS 3. CLASSIFICATION OF MIXED DENTITION
5.	METHODS OF GAINING SPACE	1. ASSEMENT OF SPACE REQUIREMENT 2. METHODS OF GAINING SPACE 3. CLINICAL APPLICATION OF MODEL ANALYSIS AND SPACE ASSESSMENT IN VARIOUS SITUATIONS.

FACULTY NAME: DR POOJA

ROHONDIA

SR NO	TOPIC NAME	LEARNING OBJECTIVE
1.	DEVELOPMENT OF DENTITION AND OCCLUSION	1. IMPORTANCE OF STAGES OF DEVELOPMENT OF DENTIOTION 2. ANAYSIS OF DEVELOPMENT OF TYPES OF MALOCCLUSIONS 3. IMPORTANCE OF SELF-CORRECTING MALOCCLUSIONS
2.	SKELETAL MATURITY INDICATORS	1. UNDERSTANDING THE BASICS OF SKELETAL MATURATION AND STAGES 2. CORRELATION BETWEEN SKELETAL MATURITY AND ORTHODONTIC AND ORTHOPEDIC INTERVENTION 3. APPLICATIONS OF SKELETAL MATURITY INDICATORS IN CLINICAL ORTHODONTICS
3.	EXPANSION IN ORTHOODNTICS	1. UNDERSTANDING EXPANSION AS A METHOD OF GAINING SPACE 2. INDICATIONS AND CONTRAINDICATIONS FOR EXPANSION 3. VARIOUS METHODS OF SKELETALAND DENTOALVEOLAR EXPANSION

FACULTY NAME: DR PRIYANKA KENKARE

SR NO	TOPIC NAME	LEARNING OBJECTIVE
1	HABITS	• DEFINITIONS OF HABITS • UNDERSTANDING THUMB SUCKING HABIT • UNDERSTANDING MOUTH BREATHING HABIT • UNDERSTANDING TONGUE THRUSTING HABIT • UNDERSTANDING BRUXISM AND ITS RELEVANCE IN CLINICS TODAY • DETAILS OF THE VARIOUS TREATMENT PLANS FOR EACH OF THE HABITS
2	DIAGNOSIS IN ORTHODONTICS	• IMPORTANCE OF PROPER DIAGNOSIS • UNDERSTANDING IMPORTANCE OF CASE HISTORY AND PATIENTS RECORD • UNDERSTANDING THE TYPES OF SKELETAL MATURITY INDICATORS AND THEIR ANALYSES • UNDERSTANDING THE IMPORTANCE AND USE OF VARIOUS RADIOGRAPHIC TECHNIQUES

Dr. Pragati Pradeep Nakra Lecturer

Sr no	Topic	Course Outcomes (Learning Objectives)
1.	Etiology ofmalocclusion	Studythecauseandits importance in deciding the treatmentplan.
2.	Preventive orthodontics	Prevention from developing severe malocclusions and guidance in the oral cavity.
3.	Interceptive orthodontics	Address potential orthodontic problems before it becomes severe.

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BDS PROGRAM OUTCOMES

The undergraduates during training in the institution acquire adequate knowledge, necessary skills and reasonable attitudes which are required for carrying out all activities appropriate to general dental practice involving prevention, diagnosis and treatment of the teeth, mouth, jaws and associated tissues. The undergraduate also should understand the concept of community oral health education and be able to participate in the rural health care delivery program existing in the country.

(A) KNOWLEDGE AND UNDERSTANDING

The undergraduate acquire the following during the period of training:

1. Adequate knowledge of the scientific foundation on which dentistry is based and good understanding of various relevant scientific methods, principles of biological functions; ability to evaluate and analyse scientifically various established facts and data.

2. Adequate knowledge of the development, structure and function of the teeth, mouth and jaws and associated tissues both in health and disease and their relationship and effect on general state of health and also bearing on physical and social well-being of the patient.

3. Adequate knowledge of clinical disciplines and methods which provide a coherent picture of anomalies, lesions and diseases of the teeth, mouth and jaws and preventive diagnostic and therapeutic aspects of dentistry.

4. Adequate clinical experience required for general dental practice.

5. Adequate knowledge of the constitution, biological function and behaviour of persons in health and sickness as well as the influence of the natural and social environment in the state of health in so far as it affect dentistry.

(B) SKILLS:

An undergraduate is being able to demonstrate the following skills necessary for practice of dentistry:

1. Diagnose and manage various common dental problems encountered in general dental practice keeping in mind the expectations and the right of the society to receive the best possible treatment available wherever possible.

2. Prevent and manage complications if encountered while carrying out various surgical and other procedures.

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3. Carry out certain investigative procedures and ability to interpret laboratory findings

4. Promote oral health and help prevent oral diseases where possible.

5. Control pain and anxiety among patients during dental treatment.

(C) ATTITUDES:

An undergraduate develops the following attitudes during the training.

1. Willingness to apply current knowledge of dentistry in the best interest of the patient and community.

2. Maintain a high standard of professional ethics and conduct and apply these in all aspect of professional life.

3. Seek to improve awareness and provide possible solutions for oral health problems and needs throughout the community.

4. Willingness to update knowledge and professional skills from time to time.

5. Help and participate in the implementation of the national oral health policy.

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MDS PROGRAM OUTCOMES

The post-graduate training in various specialties is to train the graduate in Dental Surgery who will:

I. Practice respective speciality efficiently and effectively, backed by scientific knowledge and skill;
II. Exercise empathy and a caring attitude and maintain high ethical standards;
III. Continue to evince keen interest in professional education in the speciality and allied specialties whether in teaching or practice;
IV. Willing to share the knowledge and skills with any learner, junior or a colleague;
V. To develop the faculty for critical analysis and evaluation of various concepts and views and to adopt the most rational approach.

The objective of the post-graduate program is to train a student so as to ensure higher competence in both general and special area of interest and prepare him or her for a career in teaching, research and specialty practice. A student must achieve a high degree of clinical proficiency in the subject and develop competence in research and its methodology in the concerned field.

The objectives to be achieved by the candidate on completion of the post graduate course may be classified as under:-

a) Knowledge (Cognitive domain)

b) Skills (Psycho motor domain)

c) Human values, ethical practice and communication abilities

a) KNOWLEDGE:-

i. Demonstrate understanding of basic sciences relevant to specialty;

ii. Describe etiology, patho-physiology, principles of diagnosis and management of common problems within the specialty in adults and children;

iii. Identify social, economic, environmental and emotional determinants in a given case and take them into account for planned treatment;

iv. Recognize conditions that may be outside the area of speciality or competence and to refer them to the concerned specialist;

v. update knowledge by self study and by attending courses, conferences and seminars pertaining to specialty;

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vi. Undertake audit, use information technology and carry out research in both basic and clinical with the aim of publishing the work at various scientific gathering.

(b) SKILLS:

I. Take a proper clinical history, examine the patient, perform essential diagnostic and other relevant tests and interpret them to come to a reasonable diagnosis about the condition;

II. Acquire adequate skills and competence in performing various procedures as required in the speciality.

(c) HUMAN VALUES, ETHICAL PRACTICE AND COMMUNICATION ABILITIES.

I. Adopt ethical principles in all aspects of practice;
II. Foster professional honesty and integrity;
III. Deliver patient care irrespective of social status, caste, creed, or religion of the patient;
IV. Develop communication skills, to explain various options available and obtain a true informed consent from the patient;
V. Provide leadership and get the best out of his team in congenial working atmosphere;
VI. Apply high moral and ethical standards while carrying out human or animal research.
VII. Be humble and accept the limitations in his knowledge and skill and to ask for help from colleagues when needed;
VIII. Respect patient's rights and privileges including patient's right to information and right to seek a second opinion.

At the completion of the postgraduate training programme the graduates shall be competent in the following:

ORAL MEDICINE AND RADIOLOGY

- Able to identify precancerous and canceros lesions of the oral cavity and refer to concerned speciality for their management.
- Have an adequate knowledge about common laboratory investigations and interpretation of their results.
- Have adequate knowledge about medical complications that can arise treating systematically compromised patients and take prior precautions /consent from concerned medical specialist.

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- Have adequate knowledge about the radiation health hazards , radiation safety protection.
- Competent to take intraoral radiographs and interpret the radiographic findings.
- Gain adequate knowledge of extraoral radiographic procedures, TMJ radiographs and sialography.
- Be aware of the importance of intra and extra oral radiographs in forensic identification and age estimation.
- Become familiar with jurisprudence, ethics and understand the significance of records with respect to law.

PAEDIATRIC AND PREVENTIVE DENTISTRY

- Able to instill a positive attitude and behaviour in children towards oral health and understand the principles of prevention and preventive dentistry right from birth to adolescence.
- Able to guide and counsel the guardian/ parents with regard to various treatment modalities including different facets of preventive dentistry.
- Able to treat dental diseases occurring in the child patient.
- Able to manage physically and mentally challenged/ disabled children effectively and efficiently , tailored to the needs of individual requirement and conditions.
-

ORTHODONTICS AND DENTOFACIAL ORTHOPEDICS

- Understand about normal growth and development of facial skeleton and dentition.
- Pinpoint aberrations in growth process both dental and skeletal and plan necessary treatment.
- Diagnose the various catagories of malocclusion
- Able to motivate and explain to the patient (and parent or guardian) about the necessity of the treatment.
- Plan and excecute preventive orthodontics (space maintainers or space regainers)
- Plan and excecute interceptive orthodontics (habit breaking appliances)
- Manage treatment of simple malocclusion such as anterior spacing using removable appliances.
- Handle delivery and activation of removable orthodontic appliances.

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PERIODONTOLOGY

- Diagnose the patients periodontal problem, plan and perform appropriate periodontal treatment.
- Competent to educate and motivate the patient.
- Competent to perform thorough oral prophylaxis, subgingival scaling, root planning and minor periodontal surgical procedures.
- Give proper post treatment instructions and to do periodic recall and evaluation.

PROSTHODONTICS AND CROWN AND BRIDGE

- Able to understand and use various dental materials.
- Competent to carry out treatment of conventional complete and partial removable dentures and fabricate fixed partial dentures.
- Able to carry out treatment of routine prosthodontic procedures.
- Familier with the concept of osseointegration and the value of implant supported prosthodontic procedures.

CONSERVATIVE DENTISTRY AND ENDODONTICS

- Competent to diagnose all carious lesions.
- Competent to perform Class I and Class II cavities and their restoration with amalgam
- Restore Class V and Class III cavities with Glass Ionomer cement.
- Able to diagnose and appropriately treat pulpally involved teeth (pulp capping procedures)
- Able to perform RCT for anterior teeth
- Competent to carry out small composite restorations.
- Understand the principles of aesthetic dental procedures.

ORAL AND MAXILLOFACIAL SURGERY

- Able to apply the knowledge gained in the basic medical and clinical subjects in the management of patients with surgical problems.
- Able to diagnose, manage and treat patients, with basic oral surgical problems.
- Have a broad knowledge of maxillofacial surgery an oral implantology.

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- Should be familier with legal, ethical and moral issues pertaining to the patient care and communication skills.
- Should have acquired the skill to examine any patient with an oral surgical problem in an orderly manner.
- Understand and practice the basic principles of asepsis and sterilization
- Should be competent in the extraction of the teeth under both local and general anesthesia .
- Competent to carry out certain monir oral surgical procedure under LA like trans-alveolar extraction, frenectomy, dentoalveolar procedures, simple impaction, biopsy etc.
- Competent to assess, prevent and manage common complications that arise during and after minor oral surgery.
- Able to provide primary care and manage medical emergencies in the dental office.
- Familier with the management of major oral surgical problems and principles involved in patient management.

PUBLIC HEALTH DENTISTRY

- Apply the principles of health promotion and disease prevention.
- Have knowledge of the organisation and provision of health care in community and in the hospital service.
- Have knowledge of the prevalence of common dental conditions in India.
- Have knowledge of community based preventive measures.
- Have knowledge of the social, cultural and environmental factors which contribute to health or illness.
- Administer oral hygiene instructions, topical fluoride therapy and fissure sealing.
- Educate patients about the etiology and prevention of oral disease and encourage them to assure responsibility for their oral health.

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