

**JINNAH SINDH MEDICAL UNIVERSITY
PROSTHODONTICS CURRICULUM**

Ref#CURRICULUM MEETING / JSMU /2016-17 /15

I. COURSE TOPIC: REMOVABLE PARTIAL DENTURE

S. No.	Lecture Topic	Learning Objectives	Mode of Teaching	Assessment tools
01	Partially edentulous epidemiology, physiology & terminology.	<ul style="list-style-type: none"> - Definitions. <ul style="list-style-type: none"> ○ Abutment ○ Retainer ○ extra coronal partial denture ○ tooth supported RPD ○ tooth tissue supported RPD ○ temporary RPD ○ Interim denture ○ Transitional denture ○ Treatment denture ○ Centric relation ○ Centric occlusion ○ Eccentric relation ○ Support ○ Retention ○ Reciprocation ○ Bracing ○ Appliance ○ Saddle area ○ Stability 	<ul style="list-style-type: none"> - Lecture - Tutorial/ Small Group Discussion 	<ul style="list-style-type: none"> - Class Test - Class Participation - Final Examination
02	Applied anatomy and physiology	<ul style="list-style-type: none"> - Clinical application of anatomy of oral cavity 	<ul style="list-style-type: none"> -Lecture -Tutorial/ -Small Group -Discussion 	<ul style="list-style-type: none"> Class Test -Class Participation -Final Examination
	Classification of partially edentulous arches.	<ul style="list-style-type: none"> - Requirements of an acceptable method of classification. <ul style="list-style-type: none"> ○ Bailyn classification ○ Skinner classification ○ Cummer classification ○ Kennedy classification ○ Applegate's rules 	<ul style="list-style-type: none"> -Lecture -Tutorial -Small group - Discussion - Clinical teaching 	<ul style="list-style-type: none"> - Class Test - Class Participation - Final Examination

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03	Oral manifestations of local and systemic diseases	<ul style="list-style-type: none"> - Problem related to xerostomia - Problem related to poor healing - Problem related to osteoporosis - Problem related to osteopenia - Problem related to autoimmune diseases 	<ul style="list-style-type: none"> - Lecture - Tutorial - Small group discussion Clinical teaching 	<ul style="list-style-type: none"> - Class Test - Class Participation - Final Examination
04	<p>Diagnosis and treatment planning.</p> <p>Patient Evaluation, history, general examination and Problem Oriented Treatment Planning.</p>	<ul style="list-style-type: none"> - Clinical examination A. History: <ul style="list-style-type: none"> ○ Demographic Data ○ Chief Complaint ○ History of Presenting Complaint ○ Dental History ○ Medical History ○ Social History B. Examination <ul style="list-style-type: none"> a. General Examination: <ul style="list-style-type: none"> Gait Complexion and personality Cosmetic index Mental attitude of patient b. Extra Oral examination <ul style="list-style-type: none"> ○ Facial features ○ Facial form ○ Facial profile ○ Lower facial height ○ Muscle tone ○ Complexion ○ Lip competency ○ Tmj examination <ul style="list-style-type: none"> ● Examination of muscles of mastications ● Deviation ● Deflection ● Limited mouth opening ● Clicking sounds / crepitations ○ Neuromuscular examination c. Intra Oral Examination: <ul style="list-style-type: none"> 1) Existing teeth <ul style="list-style-type: none"> ○ Number of teeth ○ Tilting ○ Drifting 	<ul style="list-style-type: none"> - Lecture - Tutorial/ Small Group Discussion - Clinical teaching - 	<ul style="list-style-type: none"> - Class Test - Class Participation - Final Examination

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		<ul style="list-style-type: none"> ○ Supra eruption ○ Rotation 2) mucosa: ○ Color of mucosa ○ Condition of mucosa ○ Thickness of mucosa 3) Saliva: - Normal - Thick and ropy - Xerostomia 4) Occlusion: ○ Canine guided ○ Group function ○ Mutually protected 5) Others: midline ,mouth opening , occlusal stops ,periodontal Condition ,residual roots, Tooth surface loss C. Radiographic examination ○ Crown to root ratio ○ periapical pathology ○ retained residual roots ○ thickness of mucosa ○ bone support and quality ○ root configuration of abutment teeth - - Diagnostic casts <ul style="list-style-type: none"> ○ Purpose of diagnostic cast ○ Mounting diagnostic cast ○ Sequence of mounting maxillary cast to axis orbital plane. ○ Jaw relation for diagnostic cast ○ Materials and methods for centric relation - <u>Diagnostic findings</u> - interpretation of examination data <ul style="list-style-type: none"> ○ radiographic interpretation ○ periodontal consideration ○ caries cavity ○ evaluation of prosthesis 		
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		<ul style="list-style-type: none"> foundation teeth and residual ridge <ul style="list-style-type: none"> ○ surgical preparation ○ analysis of occlusal factors ○ fixed restorations ○ orthodontic treatment - Differential diagnosis; fixed or removable partial denture <ul style="list-style-type: none"> ○ Indications of fixed partial denture ○ Indications of removable partial denture - Choice between complete denture and removable partial denture - Clinical factors related to metal alloys used for metal framework. 		
05	Biomechanics of removable partial dentures	<ul style="list-style-type: none"> - Discuss the bio mechanical consideration - Discuss the concept of <ul style="list-style-type: none"> ○ Lever 1 ○ Lever 2 ○ Lever 3 - Stress consideration in partial denture <ul style="list-style-type: none"> ○ Vertical <ul style="list-style-type: none"> ▪ Displacing stresses ▪ Dislodging stresses ○ Horizontal ○ Torsional - Factors influencing magnitude of stress - Differential support - Role of periodontal ligaments in removable partial denture 	<ul style="list-style-type: none"> - Lecture - Tutorial - Clinical teaching 	<ul style="list-style-type: none"> - Class Test - Class Participation - Group Assignment - Final Examination
<p>COMPONENTS OF RPD</p>				
06	Connectors (major and minor connectors)	<ul style="list-style-type: none"> - Types of major connectors. <ul style="list-style-type: none"> ○ Maxillary major connectors. ○ Mandibular major connectors. 	<ul style="list-style-type: none"> - Lecture - Tutorial/ Small Group 	<ul style="list-style-type: none"> - Quiz - Class Participation

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		<ul style="list-style-type: none"> - location - Indications and contraindication of major connectors. - Ideal requirement - Design consideration for major connectors - MINOR CONNECTORS: - Definition - Types of minor connectors - Function of minor connectors. - Form and location of minor connectors. - Tissue stops - Finishing lines. 	<ul style="list-style-type: none"> Discussion - Clinical Teaching 	<ul style="list-style-type: none"> - Final Examination
07	Rests and Rest Seats	<ul style="list-style-type: none"> - Definition - Types of rest and rest seats. - Form of the occlusal rest and rest seat - Support for rests. - Design of rest seats. - Role of rest in control of prosthesis movement 	<ul style="list-style-type: none"> - Lecture - Small group discussion 	<ul style="list-style-type: none"> - Class Test - Quiz - Class Participation - Final Examination
08	Direct retainers	<ul style="list-style-type: none"> - Definition - Role of direct retainer in prosthesis movement control. - Classification of direct retainer. <ul style="list-style-type: none"> o Extracoronal o Intracoronal - Analysis of tooth contours for retentive clasps. - Functional requirement of clasp - Criteria for selecting a given clasp design. <ul style="list-style-type: none"> o Reciprocal arm function. - - Basic parts of clasp assembly. - Basic principles of clasp design - Types of clasp assemblies. - Other type of retainers. 	<ul style="list-style-type: none"> - Lecture - Tutorial/ Small Group Discussion 	<ul style="list-style-type: none"> - Class Test - Quiz - Class Participation - Final Examination
09	Indirect retainers	<ul style="list-style-type: none"> - Definition - Factors influencing effectiveness of indirect retainer. - Forces acting on the denture - Fulcrum line. - Auxiliary functions of indirect retainers. 	<ul style="list-style-type: none"> - Lecture - Tutorial/ Small Group Discussion 	<ul style="list-style-type: none"> - Class Test - Quiz - Class Participation - Final Examination

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		<ul style="list-style-type: none"> - Types of indirect retainers. <ul style="list-style-type: none"> o Auxiliary occlusal rests. o Canine rests. o Canine extension from occlusal rests. o Cingulum bars(continuous bars)and linguoplates. o Modification areas. o Rugae support. 		
10	Denture base considerations.	<ul style="list-style-type: none"> - Definition - Ideal requirement - Functions of denture bases <ul style="list-style-type: none"> o Tooth supported partial denture base o Distal extension partial denture base - Methods of attaching denture bases - Ideal denture base material - Advantages and disadvantages of metal and acrylic denture bases. - Methods of attaching artificial teeth <ul style="list-style-type: none"> o Porcelain or acrylic resin teeth attached with acrylic resin o Porcelain or resin tube teeth and facings cemented directly to metal bases o Resin teeth processed directly to metal bases o Metal teeth o Chemical bonding - Need for relining - Stress breakers - 	<ul style="list-style-type: none"> - Lecture - Tutorial/ Small Group Discussion 	<ul style="list-style-type: none"> - Class Participation - Group Assignment - Final Examination
11	Principles of removable partial denture design.	<ul style="list-style-type: none"> - Difference in prosthesis support and the influence on design - Differentiation between two main types of removable partial denture <ul style="list-style-type: none"> o Difference in support o Impression registration o Difference in clasp design - Essentials of partial denture design. - Components of partial denture design. <ul style="list-style-type: none"> o Tooth support o Ridge support. 	<ul style="list-style-type: none"> - Lecture - Tutorial/ Small Group Discussion 	<ul style="list-style-type: none"> - Class Participation - Final Examination

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		<ul style="list-style-type: none"> ○ Major and minor connectors. ○ Direct retainer for tooth supported partial denture ○ Direct retainer for distal extension partial denture. ○ Stabilizing components ○ Guiding plane. ○ Indirect retainers. - Example of systemic approach to design. <ul style="list-style-type: none"> ○ Class I removable partial denture. ○ Kennedy class II removable partial denture ○ Kennedy class III removable partial denture ○ Kennedy class IV partial denture 		
12	surveying	<ul style="list-style-type: none"> - Definition - Types of dental surveyor. - Parts of dental surveyor. - Types of survey lines. - Purposes of surveyor. <ul style="list-style-type: none"> ○ Surveying the diagnostic cast ○ Contouring wax patterns. ○ Surveying ceramic veneer crowns ○ Placement of intracoronal retainers(internal attachments) ○ Placement of internal rest seats ○ Machining cast restorations. ○ Surveying the master cast. - Factors that determine path of placement and removal <ul style="list-style-type: none"> ○ Guide planes <ul style="list-style-type: none"> ● Types ● Functions ○ Retentive areas ○ Interference ○ Esthetics - Step by step procedures in surveying a diagnostic cast 	<ul style="list-style-type: none"> - Lecture - Tutorial/ Small Group Discussion - Laboratorial teaching 	<ul style="list-style-type: none"> - Class Test - Class Participation - Final Examination

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		<ul style="list-style-type: none"> ○ Guiding planes <ul style="list-style-type: none"> ▪ Types ▪ functions ○ Retentive areas ○ Interference ○ Esthetics - Final path of placement - Relation of cast to surveyor - Surveying the master cast - Measuring retention - Blocking out master cast - Relieving the master cast 		
13	Preparation of mouth for removable partial dentures	<ul style="list-style-type: none"> - Oral surgical procedures <ul style="list-style-type: none"> ○ Extractions ○ Removal of residual roots ○ Impacted teeth ○ Malposed teeth ○ Cysts and odontogenic tumors ○ Exostoses and tori ○ Hyperplasic tissue ○ Muscle attachments and frena ○ Bony spines and knife edge ridges ○ Polyps,papillomas and traumatic hemangiomas ○ Hyperkeratosis, erythroplasia, and ulceration. ○ Dentofacial deformity. ○ Osseointegrated devices. ○ Augmentation of alveolar bone - Conditioning of abused and irritated tissue <ul style="list-style-type: none"> ○ Use of tissue conditioning materials. - Periodontal preparations. <ul style="list-style-type: none"> ○ Objectives of periodontal therapy ○ Periodontal diagnosis and treatment planning ○ Initial disease control therapy 	<ul style="list-style-type: none"> - Lecture - Tutorial/ Small Group Discussion - Clinical work 	<ul style="list-style-type: none"> - Quiz - Class Participation - Final Examination

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		<ul style="list-style-type: none"> ○ Definitive periodontal surgery. ○ Recall maintenance. ○ Advantages of periodontal therapy. <ul style="list-style-type: none"> - Diagnosis of occlusal disharmony. - Relief of pain and discomfort - Endodontic treatment 		
14	Preparation of abutment teeth.	<ul style="list-style-type: none"> - Classification of abutment teeth - Sequence of abutment preparation on sound teeth and existing restorations. - Preparation of guide planes. - Preparation of rest seats. - Technique to create undercut - Abutment preparation using crowns. - Abutment preparation using conservative restoration. - Splinting of abutment teeth. - Use of isolated teeth as abutments. - Missing anterior teeth. - Temporary crowns when a removable partial denture is being worn. 	<ul style="list-style-type: none"> - Lecture - Tutorial/ Small Group Discussion - Clinical work 	<ul style="list-style-type: none"> - Class Test - Class Participation - Final Examination
15	Impression techniques and modification	<ul style="list-style-type: none"> - Types of impression materials. - Impression materials used for RPD - Anatomic or functional form of impression - Indication of functional impression. - Impression techniques 1. Mclean's physiologic impression technique 2. Functional relining method 3. Selective pressure impression 4. Altered cast technique 5. Modifications of altered cast technique. 	<ul style="list-style-type: none"> - Lecture - Tutorial/ Small Group Discussion - Clinical work 	<ul style="list-style-type: none"> - Class Test - Class Participation - Final Examination
16	Trial of metal framework	<ul style="list-style-type: none"> - Examination of the framework - Fitting frame work to teeth and supporting structures - Correcting discrepancies <ul style="list-style-type: none"> ○ Indicating media ○ Soft tissue impingements - Fitting frame work to opposite occlusion - Finishing the framework 	<ul style="list-style-type: none"> - Lecture - Tutorial/ Small Group Discussion - Clinical work 	<ul style="list-style-type: none"> - Class Test - Class Participation - Final Examination

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17	Occlusal relations for removable partial denture. (Maxillo-mandibular relations)	<ul style="list-style-type: none"> - Desirable occlusal contact relationship for removable partial denture. - Methods for establishing occlusal relationship <ul style="list-style-type: none"> o Direct apposition of casts o Interocclusal records with posterior teeth remaining o Occlusal relations using occlusal rims on record bases o Jaw relation record o Establishing occlusion by the recording of occlusal pathways. - Use of face bow - Use of articulators - Articulation techniques including split cast technique - Establishing jaw relations for mandibular removable partial denture opposing a maxillary complete denture. 	<ul style="list-style-type: none"> - Lecture - Tutorial/ Small Group Discussion - Clinical work 	<ul style="list-style-type: none"> - Class Test - Class Participation - Final Examination
18	Selection of teeth	<ul style="list-style-type: none"> - Anterior teeth selection - Size or form <ul style="list-style-type: none"> o Gender o Sex o Age o Personality - Color of teeth <ul style="list-style-type: none"> o Age o Complexion o Color of eye o Color of hair o Habits - Posterior teeth - Size of teeth <ul style="list-style-type: none"> o Buccolingual width o Mesio distal length o Occluso gingival height - Form of teeth <ul style="list-style-type: none"> o Condylar inclination 	-	-

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		<ul style="list-style-type: none"> ○ Height of residual ridge ○ Patients age ○ Ridge relationship 		
19	<p>Laboratory procedures.</p> <p>1. (construction of wax pattern and casting procedures)</p> <p>2. Arrangement of teeth.</p> <p>3. Processing and finishing denture.</p>	<ul style="list-style-type: none"> - Duplicating a stone cast <ul style="list-style-type: none"> ○ Duplicating materials and flasks ○ Duplicating procedures. - Waxing the removable partial denture framework. - Spruing, investing, burnout, casting, removing the casting from investment and finishing. - Making record bases. - Making a stone occlusal template from a functional occlusal record. - Arranging teeth <ul style="list-style-type: none"> ○ Anterior teeth ○ Posterior teeth ○ Characterization of teeth ○ Arranging teeth to an occluding surface. <p style="text-align: center;">Waxing and flasking the removable partial denture before processing acrylic resin bases.</p> <ul style="list-style-type: none"> - Processing the denture - Remounting the denture for occlusal correction - Polishing the denture. 	<ul style="list-style-type: none"> - Lecture - Tutorial/ Small Group Discussion - Lab work 	<ul style="list-style-type: none"> - Quiz - Class Participation - Final Examination

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20	Insertion and post insertion instructions and recall.	<ul style="list-style-type: none"> - Adjustment to denture bearing area - Occlusal interferences from denture framework - Evaluation of occlusal interferences - Adjustment of occlusion in harmony with natural and artificial dentition. - Instructions to the patient - Follow up 	<ul style="list-style-type: none"> - Lecture - Tutorial/ Small Group Discussion - Clinical teaching 	<ul style="list-style-type: none"> - Quiz - Class Participation - Final Examination
21	Types of partial denture 1. Interim partial denture 2. Every denture 3. Spoon denture 4. Swing lock partial denture	<ul style="list-style-type: none"> - Impression - Laboratorial procedure - Insertion - Follow up 	<ul style="list-style-type: none"> - Lecture - Tutorial - Small Group Discussion - Clinical teaching 	<ul style="list-style-type: none"> -Quiz -Class Participation -Final Examination

DEPARTMENT OF PROSTHODONTICS

2. COURSE TOPIC: COMPLETE DENTURE

S. NO:	Lecture Topic	Learning Objectives	Mode of Teaching	Assessment Tools
01	Definitions (Glossary of Prosthodontic Terms)	<ul style="list-style-type: none"> - Define the following terms <ul style="list-style-type: none"> o Conventional o Immediate o Overdenture o Single complete denture o Implant supported CD 	<ul style="list-style-type: none"> - Lecture 	<ul style="list-style-type: none"> - Class Test - Class Participation - Final Examination
02	Applied anatomy and physiology of complete denture	<ul style="list-style-type: none"> - Discuss the anatomy and physiology that will help operator and provides enough landmarks to act as positive guide during denture construction <ul style="list-style-type: none"> o Extra-oral landmarks of prosthetic importance o Inter-pupillary line o Ala-tragus line o Canthus-tragus line 	<ul style="list-style-type: none"> - Lecture - Small group discussion/tutorial - Practical teaching 	<ul style="list-style-type: none"> - Class test - Class participation - Group Assignment - Final examination

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		<ul style="list-style-type: none"> ○ Nasolabial sulcus ○ Vermillion border ○ Philtrum ○ Modiolous ○ Angle of the mouth ○ Intra-oral landmarks of prosthetic importance <p>In Maxilla:</p> <ul style="list-style-type: none"> ○ Residual ridge ○ Maxillary tuberosity ○ Palate ○ Mid-palatine raphae ○ Incisive papilla ○ Palatine rugae ○ Torus palatinus ○ Fovea palatinae ○ Post palatal seal ○ Hamular notch ○ Cuspid eminence ○ Zygomatic process <p>In Mandible:</p> <ul style="list-style-type: none"> ○ Residual ridge ○ External oblique ridge ○ Buccal shelf area ○ Mental foramen ○ Retromolar pad area ○ Mylohyoid ridge ○ Torus mandibularis ○ Internal oblique ridge ○ Genial tubercle 		
03	Peripheral tissue attachment of denture bearing area	<ul style="list-style-type: none"> - Describe the border structures that limit the periphery of the denture ○ MAXILLA ○ Labial frenum ○ Labial vestibule ○ Buccal frenum ○ Buccal vestibule ○ Hamular notch 	<ul style="list-style-type: none"> - Lecture - Small group discussion - Clinical teaching 	<ul style="list-style-type: none"> - Class test - Assignment - Final examination

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		<ul style="list-style-type: none"> ○ Posterior palatal seal ○ Muccogingival fold ○ Fovea palatinae ○ MANDIBLE ○ Labila frenum ○ Labial vestibule ○ Buccal frenum ○ Buccal vestibule ○ Lingual frenum ○ Alveololingual sulcus ○ Retromolar pad ○ Pterygomandibular raphae 		
04	Tongue Form	<ul style="list-style-type: none"> - Tongue classifications <ul style="list-style-type: none"> ○ House classification ○ Class I ○ Class II ○ Class III - Selection of occlusion depending on tongue condition <ul style="list-style-type: none"> ○ Tongue position ○ Examination of floor of mouth posture ○ Tongue biting 	<ul style="list-style-type: none"> - Lecture 	<ul style="list-style-type: none"> - Group discussion - Final examination
05	Saliva	<ul style="list-style-type: none"> - Discuss the importance of saliva in complete denture retention <ul style="list-style-type: none"> ○ Salivary flow ○ Viscosity ○ Medical conditions affecting the salivary flow and viscosity ○ Xerostomia - Discuss factors contributing to complete denture retention <ul style="list-style-type: none"> ○ Adhesion ○ Cohesion ○ Interfacial surface tension ○ Capillary attraction - Management of altered salivary flow 	<ul style="list-style-type: none"> - Lecture - Tutorial 	<ul style="list-style-type: none"> - Class participation - Class test - Final examination
06	Systemic disorders and applied pathology	<ul style="list-style-type: none"> - Describe oral-systemic considerations that may influence an adaptive prosthodontic experience <ul style="list-style-type: none"> ○ Mucosal conditions 	<ul style="list-style-type: none"> - Lecture - Clinical teaching/ tutorial 	<ul style="list-style-type: none"> - Class test - Quiz - Final examination

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		<ul style="list-style-type: none"> ○ Vesiculoerosive ○ Oral lichen planus ○ Erythema multiforme ○ Mucous membrane pemphigus/pemphigoid ○ Systemic lupus erythematosus ○ Burning mouth syndrome ○ Oral movement disorders ○ Salivary dysfunction ○ Xerostomia ○ Sjogren's syndrome ○ Diabetes ○ Nutrition ○ Fungal infection 		
07	Identification and evaluation of patients	<ul style="list-style-type: none"> - History taking and diagnosis. <ul style="list-style-type: none"> ○ Biodata ○ Age ○ Occupation - Medical History <ul style="list-style-type: none"> ○ Diseases of joints ○ Neurological diseases ○ Debilitating diseases ○ Oral malignancies - Dental History <ul style="list-style-type: none"> ○ Presenting Complaint ○ History of presenting complaint ○ Period of edentulousness ○ Pretreatment records - Clinical Examination of Patient. <ul style="list-style-type: none"> ○ Extraoral Examination ○ Facial examination ○ TMJ Examination ○ Intraoral Examination ○ Residual alveolar ridge classification ○ Oral mucosa examination ○ Salivary flow (xerostomia) ○ Inter-arch space ○ Bony prominences ○ Gag reflex ○ Undercuts ○ Frenum attachments ○ Tongue examination - Treatment Planning. <ul style="list-style-type: none"> ○ Adjunctive Care ○ Elimination of infection ○ Elimination of pathoses 	<ul style="list-style-type: none"> - Lecture - Small group discussion/tutorial - Clinical teaching 	<ul style="list-style-type: none"> - Class test - Class participation - Final examination

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		<ul style="list-style-type: none"> ○ Preprosthetic surgery ○ Alveoloplasty ○ Excision of flabby tissue ○ Frenectomy - Tissue Conditioning - Nutritional counseling 		
08	General Conditions	<ul style="list-style-type: none"> - Impact of edentulism in old age <ul style="list-style-type: none"> ○ Mucosa ○ Bone ○ Saliva ○ Jaw movements in old age ○ Taste and smell sensations ○ Nutrition ○ Teeth - Occlusion <ul style="list-style-type: none"> ○ Functional and parafunctional considerations 	- Lecture	<ul style="list-style-type: none"> - Class participation - Final examination
09	Muscle tone and muscle development	<ul style="list-style-type: none"> - Movements of facial expressions - Movements of tongue muscles - Muscles of mastication - Muscles that move the mandible and floor of the mouth - Muscles of soft palate - Muscles and movements of TMJ - Conditions that affect motor function of muscles <ul style="list-style-type: none"> ○ Trigeminal neuralgia ○ Bell's palsy ○ Hemiplegia ○ Dyskinesia 	<ul style="list-style-type: none"> - Lecture - Tutorial 	<ul style="list-style-type: none"> - Group participation - Quiz - Final examination
10	Osmotic Balances	<ul style="list-style-type: none"> - Concept of occlusion - Terminologies <ul style="list-style-type: none"> ○ Centric occlusion ○ Maximum intercuspation ○ Excursive movements <ul style="list-style-type: none"> ○ Working ○ Non-working - Mandibular movements - Posselt's Envelope of motion - Occlusal schemes <ul style="list-style-type: none"> ○ Definition ○ Requisites ○ Classification 1. Lingualized Occlusion 2. Monoplane occlusion with balance 3. Linear occlusion 	<ul style="list-style-type: none"> - Lecture - Clinical teaching - Tutorial 	<ul style="list-style-type: none"> - Class test - Assignment - Final examination

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		4. Balanced occlusion		
11	Oral lesions with skin manifestations	<ul style="list-style-type: none"> - Discuss various skin conditions with oral manifestations <ul style="list-style-type: none"> o Oral erythroplakia o Drug induced lichenoid reaction o Oral lichen planus o Systemic lupus erythematosus o Reaction to dentifrices and chlorhexidine o Reaction to smokeless tobacco o Benign migratory glossitis o Leukoedema o White sponge nevus 	<ul style="list-style-type: none"> - Lecture - Tutorial 	<ul style="list-style-type: none"> - Class test - Assignment - Final examination
12	Psychiatric evaluation of patients	<ul style="list-style-type: none"> - Knowledge of the psychological needs that are of special importance to all dentists - Personality Types <ul style="list-style-type: none"> o Philosophical o Exacting o Hysterical o Indifferent - The Doctor's behavior - Dentist-Patient communication - Patient satisfaction in prosthetic dentistry 	<ul style="list-style-type: none"> - Lecture 	<ul style="list-style-type: none"> - Group participation - Final examination
13	Oral conditions of Denture Bearing Area	<ul style="list-style-type: none"> - What are the oral mucosal conditions associated with denture wearing 1. Denture induced stomatitis 2. Flabby ridge 3. Traumatic ulcer 4. Epulisfissuratum 5. Burning mouth syndrome 6. Gaging 7. Residual ridge resorption 8. Denture hyperplasia 9. Angular cheilitis 10. Frictional Keratosis 11. Irritation Fibroma 12. Candidiasis 13. Chronic atrophic candidiasis 14. Inflammatory hyperplasia 15. Papillary hyperplasia of palate - Management 	<ul style="list-style-type: none"> - Lecture 	<ul style="list-style-type: none"> - Class test - Quiz - Group participation - Final examination

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14	Ridge form and ridge relations	<ul style="list-style-type: none"> - Residual ridge configuration given by Atwood - Parallelism of ridges - Ridge relations (distance of incisive papilla from mandibular incisors) 	<ul style="list-style-type: none"> - Small group discussion - Clinical teaching 	<ul style="list-style-type: none"> - Group participation - Final examination
15	Oral mucosa: Resistant and Non resistant	<ul style="list-style-type: none"> - Types and distribution of oral mucous membrane - Mucosal response to oral prosthesis 	<ul style="list-style-type: none"> - Tutorial 	<ul style="list-style-type: none"> - Class test
16	Alveolar bone resorption	<ul style="list-style-type: none"> - Importance of preservation of natural dentition - Alveolar bone resorption after tooth extraction - Alveolar bone resorption complete denture wearer - Bone resorption process in patients wearing overdentures - Factors affecting the resorption of residual ridge - Differential resorption rate in maxilla and mandible - Bone conditions (osteoporosis and arthritis) - Surgical options for highly resorbed ridges 	<ul style="list-style-type: none"> - Lecture - Small group participation/ tutorial 	<ul style="list-style-type: none"> - Class test - Class participation - Final examination
17	Face Forms	<ul style="list-style-type: none"> - House classification of face forms <ul style="list-style-type: none"> o Square o Tapering o Square tapering o Ovoid - Facial profile <ul style="list-style-type: none"> o Normal o Retrognathic o Prognathic - Determining lower facial height <ul style="list-style-type: none"> o Normal lower facial height o Increased lower height o Decreased lower height 	<ul style="list-style-type: none"> - Lecture - Tutorial 	<ul style="list-style-type: none"> - Class participation - Assignment
18	Fundamentals of denture retention and contributing factors	<ul style="list-style-type: none"> - Retention <ul style="list-style-type: none"> o Definition o Factors affecting the degree of retention o Anatomic o Size of the denture bearing area o Quality of the denture bearing area o Parallel ridge walls o Physiological o Quality of saliva o Quantity of saliva 	<ul style="list-style-type: none"> - Lecture - Tutorial - Clinical teaching 	<ul style="list-style-type: none"> - Class test - Quiz - Assignment - Final examination

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		<ul style="list-style-type: none"> ○ Physical ○ Adhesion ○ Cohesion ○ Interfacial surface tension ○ Capillarity ○ Atmospheric pressure ○ Gravity ○ Mechanical ○ Undercuts ○ Retentive springs ○ Magnetic forces denture adhesive ○ Suction chamber and discs ○ Palatal implants ○ Muscular ○ Oral musculature ○ Facial musculature ○ Dislodging forces ○ Mastication ○ Adhesive food ○ Gravity (upper) ○ Surrounding musculature ○ Occlusal prematurities ○ Parafunctional habits 		
19	Mouth preparation including preprosthetic surgery	<ul style="list-style-type: none"> - <u>Nonsurgical methods</u> - Rest for denture bearing area - Occlusal correction - Good nutrition - Conditioning of patient’s musculature - <u>Surgical methods</u> - Removal of retained dentition - Elimination of infections - Removal of hyperplastic ridge tissue - correction of hypertrophic maxillary labial frenum - correction of hypertrophic lingual frenum - correction of papillary hyperplasia - correction of ridge undercuts - correction of hyperplastic epulis fissuratum - Management of prominent mylohyoid and internal oblique ridges - Reduction of pandulus maxillary tuberosity - Excision of tori - Vestibuloplasty - 	<ul style="list-style-type: none"> - Lecture - Clinical teachings 	<ul style="list-style-type: none"> - Class participation - Class test - Final examination

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3. COURSE TOPIC: IMPRESSION PROCEDURES

20	Objectives of impression	<ul style="list-style-type: none"> - Impression <ul style="list-style-type: none"> ○ Objectives ○ Retention ○ Support ○ Stability ○ Preservation of remaining structures ○ Esthetics 	<ul style="list-style-type: none"> - Lecture - Small group discussion/ tutorial 	<ul style="list-style-type: none"> - Class test - Assignment - Final examination
21	Theories and techniques	<ul style="list-style-type: none"> - Theories of impression making <ul style="list-style-type: none"> ○ Minimal-pressure impressions ○ Selective-pressure impressions ○ Definite-pressure impressions ○ Functional impression technique 	<ul style="list-style-type: none"> - Lecture - Tutorial - Clinical teaching 	<ul style="list-style-type: none"> - Class test - Class participation - Assignment - Final examination
22	Impression technique: minimum pressure, definite pressure, selective pressure impression	<ul style="list-style-type: none"> - Theories - Indications - Technique - Advantages - Disadvantages - Material used 	<ul style="list-style-type: none"> - Lecture - Tutorial 	<ul style="list-style-type: none"> - Class test - Quiz - Final examination
23	Pascal's law and its corollaries, atmospheric pressure, intermolar attraction, interfacial surface tension	<ul style="list-style-type: none"> - Definition - Procedure - Mechanism of evaluation of retention 	<ul style="list-style-type: none"> - Lecture - Tutorial 	<ul style="list-style-type: none"> - Quiz - Class participation - Final examination
24	Impression techniques: primary, wash and secondary impression, impression trays, impression materials	<ul style="list-style-type: none"> - Impression techniques <ul style="list-style-type: none"> ○ Based on mouth opening ○ Open mouth technique ○ Closed mouth technique ○ Based on types of trays used ○ Stock tray 	<ul style="list-style-type: none"> - Lecture - Tutorial - Clinical teaching 	<ul style="list-style-type: none"> - Class test - Assignment - Class participation - Final examination

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		<ul style="list-style-type: none"> ○ Custom tray ○ Based on theories of impression ○ Selective pressure ○ Definitive pressure ○ Minimum pressure ○ Based on purpose of impression ○ Primary impression ○ Secondary impression ○ Based on material used ○ Reversible hydrocolloids ○ Irreversible hydrocolloids ○ Impression compound ○ Impression waxes ○ Impression silicone ○ Elastomers 		
25	Stability	<ul style="list-style-type: none"> - Definition - Factors affecting stability - Vertical height of the residual ridge - Quality of the soft tissue covering the ridge - Quality of the impression - Occlusal rims - Arrangement of teeth - Contour of the polished surface 	<ul style="list-style-type: none"> - Lecture - Tutorial - Clinical teaching 	<ul style="list-style-type: none"> - Class test - Class participation - Final examination

S.NO	LECTURE TOPIC	TOPIC OBJECTIVE	MODE OF TEACHING	ASSESSMENT TOOL
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26	Maxillomandibular relations.	<ul style="list-style-type: none"> • Establishing the labial form of occlusal rims <ul style="list-style-type: none"> ○ using facial landmarks as a guide ○ fullness of upper lip ○ Philtrum ○ Nasolabial fold ○ Commissures of the mouth • Establishing the occlusal plane • Establishing Maxillomandibular Relations • Classification <ul style="list-style-type: none"> ○ Orientation relations ○ Vertical relations <ul style="list-style-type: none"> ○ Resting vertical dimensions ○ Occlusal vertical dimensions ○ Methods of determining vertical relations ○ Effects of decreased vertical dimensions ○ Effects of increased dimensions ○ Horizontal relations <ul style="list-style-type: none"> ○ Centric relations ○ Eccentric relations ○ Method of determining centric relation 	- Lecture	<ul style="list-style-type: none"> - Class participation - Class test - Final examination
27	Articulators	<ul style="list-style-type: none"> - Definition - Functions - Types <ul style="list-style-type: none"> - Simple articulators - Simple or mean value condylar path articulators - Adjustable condylar path articulators - Semi adjustable condylar path articulators - Fully adjustable condylar path articulators - Purpose of an articulator - Requirements of an articulator <ul style="list-style-type: none"> ○ Minimal requirements 	<ul style="list-style-type: none"> - Lecture - Tutorial 	<ul style="list-style-type: none"> - Class test assignment - Final examination

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28	Theories of Articulation	<ul style="list-style-type: none"> ○ Additional requirements - Uses of articulators - Advantages of articulators - Disadvantages of articulators - Classifications of articulators - Based on the theories of occlusion ○ Bonwill's theory articulators ○ Conical theory articulators ○ Spherical theory articulators - Based on the stability to stimulate jaw movements <ul style="list-style-type: none"> ○ Class I ○ Class II ○ Class III ○ CLASS IV - BASED ON ADJUSTABILITY OF THE ARTICULATORS <ul style="list-style-type: none"> ○ Non-adjustable ○ Semi adjustable ○ Fully adjustable - Protrusive records - lateral records - Hanau's formula 	<ul style="list-style-type: none"> - Lecture - Tutorial 	<ul style="list-style-type: none"> - Class test - Class participation - Final examination
29	Occlusion	<ul style="list-style-type: none"> - Definition - Types of occlusion <ul style="list-style-type: none"> ● Balanced occlusion ● Mono plane(non-balance) occlusion ● Lingualized occlusion - Concept of Balanced occlusion - Characteristic of balanced occlusion - Importance of balanced occlusion - General considerations 	<ul style="list-style-type: none"> - Lecture - Small group discussion 	<ul style="list-style-type: none"> - Class participation - Quiz - Final examination

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		<p style="text-align: center;">related to balanced occlusion</p> <ul style="list-style-type: none"> - Types of balanced occlusion • Unilateral balanced occlusion • Bilateral balanced occlusion • Protrusive balanced occlusion • Lateral balanced occlusion <p>Advantages, disadvantages, indications, contraindications of types of occlusion</p> <ul style="list-style-type: none"> - Factors influencing balanced occlusion • Condylar guidance • Incisor guidance • Occlusal plane • Cuspal angulation • Compensatory curves Curve of monson Curve of spee Curve of wilson 	<ul style="list-style-type: none"> - Lecture - Tutorial 	<ul style="list-style-type: none"> - Class test - Assignment - Final examination
30	<u>Facebow</u>	<ul style="list-style-type: none"> - Definition - Purpose of using facebow - Parts of facebow - Types of facebow ○ Arbitrary facebow <ul style="list-style-type: none"> • Facial type • Ear piece type • Hanau facebow • Slidematicfacebow 	<ul style="list-style-type: none"> - Lecture - Small group discussion 	<ul style="list-style-type: none"> - Class participation - Class test - Final examination

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		<ul style="list-style-type: none"> ○ Kinematic face bow - Uses of facebow - Errors in facebow recording - Situations where facebow is not required - Recording the transverse hinge axis 		
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31	<p>Teeth selection and arrangement, factors responsible size, shape, color, shade and, position and relationship of teeth</p>	<ul style="list-style-type: none"> - Objectives in teeth selection - General consideration in teeth selection - Size of teeth <ul style="list-style-type: none"> ○ Anterior ○ Posterior - Following methods are used to select the size of teeth - Methods using pre- extraction records - Methods using anthropological measurements of the patient - Methods using anatomical land marks - Methods using theoretical concepts - Other factors <ul style="list-style-type: none"> ● Size of face ● Inter arch spacing ● Distance between the distal ends of the maxillary cuspids ● Length of lips ● Size and relation of the arches ● Size of posterior teeth - Following factors are considered while selecting the size of teeth <ul style="list-style-type: none"> ● Buccolingual width' ● Mesiodistal width ● Occlusogingival width 	<ul style="list-style-type: none"> - Lecture - Tutorial - Small group participation 	<ul style="list-style-type: none"> - Class test - Class participation - Final examination
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		<ul style="list-style-type: none"> - Shape of the teeth - Shape of the patient face or facial form - Patient profile - Dentogenic concept and dynesthetics - Colour of the teeth - Colour can be described under four parameter <ul style="list-style-type: none"> • Hue • Saturation or chroma • Brilliance or value • Translucency • Age • Habits • Complexion • Colour of eyes • Colour of patient hair - Positioning and relationship of teeth skeletal class I,II, III. - Anatomic teeth ○ Advantage and disadvantages of anatomic teeth - Non- anatomic teeth ○ Advantages and disadvantages of non-anatomic teeth - Cuspless teeth ○ It can be used for the following occlusal schemes <ul style="list-style-type: none"> • Bilateral balance with compensating curves • Three- point balance with a balancing ramp • Flat-plane balance in centric only • Reverse-pitch (anti- monsoon) curve ○ Advantages and disadvantages of cuspless teeth 		
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32	Try in	<ul style="list-style-type: none"> - Definition - Preliminary evaluation in articulator - Evaluation of individual trial denture in mouth - Evaluation of lip and cheek support - evaluation of the occlusal plane Evaluation of vertical height Evaluation of centric relation Evaluation of posterior palatal seal 		
33	Insertion	<ul style="list-style-type: none"> A) Checking for the fit of the prosthesis <ul style="list-style-type: none"> ○ Examining the denture ○ Examining the patient's mouth ○ Checking for adaptation ○ Checking for border extension ○ Checking for frenal relief ○ Evaluating the denture aesthetics B) checking of the denture function <ul style="list-style-type: none"> ○ Evaluation of retention and stability ○ Checking the jaw relation ○ Speech ○ Occlusal harmony - Related to fitting surface - Related to esthetics - Related to occlusal surfaces - Pain - Discomfort - Ulcers 		
34	Post insertion instructions	<ul style="list-style-type: none"> - Instruction regarding insertion and removal of the prosthesis - Maintenance of the prosthesis - Night wear of the prosthesis - Periodic recall 		
35	Post insertion complain	<ul style="list-style-type: none"> - Related to fitting surface - Related to esthetics - Related to occlusal surface 		

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		<ul style="list-style-type: none"> - Pain - Discomfort - Mastication problems - ulcers 		
36	Immediate dentures and Replacement dentures	<ul style="list-style-type: none"> - Definition - Classification and types - Indications and contraindications - Objectives - Clinical and laboratory procedures - Multidisciplinary approach including care during surgery - Insertion and follow up - Maintenance 	<ul style="list-style-type: none"> - Lecture - Tutorial 	<ul style="list-style-type: none"> - Class participation - Final examination
37	Single complete denture	<ul style="list-style-type: none"> - Definition and introduction - Problems with single complete denture - Common occlusal disharmonies and ways to adjust them - Single complete denture opposing natural teeth - Single complete denture opposing <ul style="list-style-type: none"> ○ RPD ○ FPD ○ Existing complete denture - Implant supported prosthesis - Methods to achieve balanced occlusion - Clinical procedure of making single complete denture - Occlusal materials for single complete dentures 	<ul style="list-style-type: none"> - Lecture - Tutorial 	<ul style="list-style-type: none"> - Class test - Assignment - Final examination
38	Combination syndrome	<ul style="list-style-type: none"> - Definition and introduction - Diagnosis - Etiology - Treatment strategies 	<ul style="list-style-type: none"> - Lecture - Tutorial 	<ul style="list-style-type: none"> - Class test - Final examination

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39	speech consideration with complete denture	<ul style="list-style-type: none"> - Bilabial sounds - Labiodental sounds - Linguoalveolar sounds - Liguodental sounds - Velar sounds 		
40	Relining, rebasing, repair and copy denture	<ul style="list-style-type: none"> - Indications - Contraindications - Principles and procedure 		

3. COURSE TOPIC: FIXED PROSTHODONTICS

S. No.	Lecture Topic	Learning Objectives	Mode of Teaching	Assessment tools
01	An introduction to fixed Prosthodontics and history taking and clinical examination, Diagnosis and treatment planning.	<p>1) Definitions:</p> <ul style="list-style-type: none"> ○ Fixed prosthodontics ○ Crown ○ Bridge ○ inlay ○ onlay ○ laminated veneers ○ Partial Veneer crown ○ full veneer crown ○ retainers ○ connectors ○ pontics ○ abutment ○ saddle area <p>2) Applied Anatomy and Physiology.</p> <ul style="list-style-type: none"> ● Temporomandibular joint ● Muscles of mastication ● Posselt envelop of motion ● dentition 	<ul style="list-style-type: none"> - Lecture - Tutorial/ Small Group Discussion 	<ul style="list-style-type: none"> - Class Test - Class Participation - Final Examination

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	<p>History and examination</p>	<p style="text-align: center;">A.History:</p> <ul style="list-style-type: none"> ○ Demographic Data ○ Chief Complaint ○ History of Presenting Complaint ○ Dental History ○ Medical History ○ Social History <p>B. Examination</p> <p style="text-align: center;">d. General Examination:</p> <p>Gait Complexion and personality Cosmetic index Mental attitude of patient</p> <p style="text-align: center;">e. Extra Oral examination</p> <ul style="list-style-type: none"> ○ Facial features ○ Facial form ○ Facial profile ○ Lower facial height ○ Muscle tone ○ Complexion ○ Lip competency ○ Tmj examination <ul style="list-style-type: none"> ● Examination of muscles of mastications ● Deviation ● Deflection ● Limited mouth opening ● Clicking sounds / crepitations ○ Neuromuscular examination <p style="text-align: center;">f. Intra Oral Examination:</p> <p>6) Existing teeth</p> <ul style="list-style-type: none"> ○ Number of teeth ○ Tilting ○ Drifting ○ Supra eruption ○ Rotation <p>7) mucosa:</p> <ul style="list-style-type: none"> ○ Color of mucosa ○ Condition of mucosa ○ Thickness of mucosa 		
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	<p>Diagnosis and treatment planning</p>	<p>8) Saliva:</p> <ul style="list-style-type: none"> - Normal - Thick and ropy - Xerostomia <p>9) Occlusion:</p> <ul style="list-style-type: none"> o Canine guided o Group fuction o Mutually protected <p>10) Others: midline ,mouth opening , occlusal stops ,periodontal Condition ,residual roots, Tooth surface loss</p> <p>D. Radiographic examination</p> <ul style="list-style-type: none"> o Crown to root ratio o periapical pathology o retained residual roots o thickness of mucosa o bone support and quality o root configuration of abutment teeth <p>E. Cast Examination:</p> <ul style="list-style-type: none"> o mainly lingual and patal surfaces of all teeth o size of saddle area o centric realtion o wear facets <p>Differential Diagnosis</p> <ul style="list-style-type: none"> o Either Kennedy Class I ,II and III with modifications <p>Or Kennedy class IV</p> <p>Treatment Planning:</p>		
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02	Biomechanics of oral cavity and contributory factors	<p>A. Adjunctive care</p> <ul style="list-style-type: none"> ○ Elective endodontic procedure ○ Crown lengthening procedure ○ Restorations ○ Correction of occlusal plane ○ Scaling and root planning <p>B. Treatment options</p> <ul style="list-style-type: none"> ○ Full veneer Crown ○ Bridge ○ inlay ○ onlay ○ laminated veneers ○ Partial Veneer crown <ul style="list-style-type: none"> a) Three quarter b) Seventh eighth c) Proximal half crown d) Reverse three quarter crown <p>- <u>mechanical consideration</u></p> <p>- retention and resistance form</p> <ul style="list-style-type: none"> ○ magnitude of dislodging force ○ geometry of tooth preparation ○ taper ○ surface area ○ stress concentration ○ type of preparation ○ roughness of fitting surface of restoration ○ material being cemented <p>- factors affecting retention in FPD</p> <ul style="list-style-type: none"> ○ Length of span ○ Curvature of arch 	<p>- Lecture</p> <p>- Tutorial</p> <p>Clinical teaching</p>	
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		<ul style="list-style-type: none"> ○ Type of ridge ○ Rigid connector ○ Non rigid connector ○ occlusion 		
03	Oral manifestations of local and systemic diseases	<ul style="list-style-type: none"> - Problem related to xerostomia - Problem related to poor healing - Problem related to osteoporosis - Problem related to osteopenia - Problem related to autoimmune diseases 	-	-

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4. COURSE TOPIC: CROWN AND FIXED PARTIAL DENTURE (INDIRECT RESTORATIONS)

S. No.	Lecture Topic	Learning Objectives	Mode of Teaching	Assessment tools
01	Introduction of fixed partial denture	<ul style="list-style-type: none"> ○ Definition ○ Indications and contraindication 	<ul style="list-style-type: none"> - Lecture - Tutorial/ Small Group Discussion 	<ul style="list-style-type: none"> - Class Test - Class Participation - Final Examination
02	Components of Fixed partial denture	<ul style="list-style-type: none"> ○ Connector ○ Pontic ○ Retainer ○ Abutment 	<ul style="list-style-type: none"> - Lecture - Tutorial/ Small Group Discussion 	<ul style="list-style-type: none"> - Class Test - Class Participation - Final Examination
03	Classification of Fixed Partial Denture	<ul style="list-style-type: none"> ○ Class I ○ Class II ○ Class III 	<ul style="list-style-type: none"> - Lecture - Tutorial/ Small Group Discussion 	<ul style="list-style-type: none"> - Class Test - Class Participation - Group Assignment - Final Examination
04	Fixed Partial Denture types	<ul style="list-style-type: none"> ○ Conventional bridges ○ Minimum preparation bridges ○ Fixed – fixed bridge ○ Fixed – moveable bridge ○ Cantilever bridge ○ Spring cantilever bridge 	<ul style="list-style-type: none"> - Lecture - Tutorial/ Small Group Discussion - Clinical Teaching 	<ul style="list-style-type: none"> - Class Test - Class Participation - Group Assignment - Final Examination
05	Crown and types of crowns	<ul style="list-style-type: none"> ○ Enlist various partial and full coverage indirect restorations. ○ Describe the principles of tooth preparation for indirect restorations. ○ Describe the indications and contraindications for provision of: <ul style="list-style-type: none"> ● Inlay, ● Onlay. ○ Describe the clinical assessment required and the steps of preparation for: <ul style="list-style-type: none"> ● Inlay, 	<ul style="list-style-type: none"> - Lecture - Tutorial/ Small Group Discussion - Clinical Teaching 	<ul style="list-style-type: none"> - Class Test - Class Participation - Group Assignment - Final Examination

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		<ul style="list-style-type: none"> ● Onlay. ○ enlist materials available for these restorations. ○ Discuss fluid management and soft tissue management ○ impression making for inlays and onlays. ○ Discuss laboratory steps for these restorations. ○ Enlist the materials used for cementation. ○ Describe the clinical procedure for cementation. ○ Discuss the latest innovations including CAD-CAM technology. 		
		<p>Porcelain laminated veneers:</p> <ul style="list-style-type: none"> ○ Discuss indications and contraindications for veneers. ○ Describe the diagnostic procedures involved in treatment planning. ○ Explain the importance of quality and quantity of enamel for predictable bonding. ○ Describe tooth preparation, soft tissue management and impression making for veneers. ○ Describe methods of temporization. ○ Describe step by step procedure of veneer placement. ○ Identify techniques for intra oral repair of indirect restorations. 	<ul style="list-style-type: none"> - Lecture - Tutorial/ Small Group Discussion - Clinical Teaching 	<ul style="list-style-type: none"> - Class Test - Class Participation - Group Assignment - Final Examination
		<p>Full Veneer</p> <p>Describe the indications and contraindications for:</p> <ul style="list-style-type: none"> ○ Porcelain fused to metal crown, ○ All metal crown, ○ All ceramic crown. ○ Discuss factors influencing shade selection. 	<ul style="list-style-type: none"> - Lecture - Tutorial/ Small Group Discussion - Clinical Teaching 	<ul style="list-style-type: none"> - Class Test - Class Participation - Group Assignment - Final Examination

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		<ul style="list-style-type: none"> ○ Describe guidelines for accurate shade matching. ○ Discuss various methods of shade selection. ○ Describe the clinical assessment required and the steps of preparation for: <ul style="list-style-type: none"> ● Porcelain fused to metal crown, ● All metal crown, ● All ceramic crown. ○ List materials available for these restorations. ○ Discuss soft tissue management and impression making for full coverage restorations. ○ Discuss the indications, contra indications and technique for the use of electrosurgery. ○ Discuss laboratory steps for these restorations. ○ Enlist the materials used for cementation. ● Describe the clinical procedure for cementation. ○ Discuss the latest innovations including CAD-CAM technology. 		
		<p>Implant Supported Restorations</p> <ul style="list-style-type: none"> ○ Discuss indications and contraindications of implant supported restorations. ○ Describe various implant supported restorations that can be used for replacement of missing teeth. 	<ul style="list-style-type: none"> - Lecture - Tutorial/ Small Group Discussion - Clinical Teaching 	<ul style="list-style-type: none"> - Class Test - Class Participation - Group Assignment - Final Examination
06	Fixed Partial Denture Design	<ul style="list-style-type: none"> ○ Introduction ○ Design consideration for 	<ul style="list-style-type: none"> - Lecture - Tutorial/ Small 	<ul style="list-style-type: none"> - Class Test - Class

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		<ul style="list-style-type: none"> individual conditions ○ Material selection ○ Biomechanical considerations ○ Abutment selection ○ Special cases ○ Condition of residual ridge ○ Occlusion with opposing teeth 	Group Discussion	Participation - Final Examination
07	Abutment and retainer selection	<ul style="list-style-type: none"> ○ Introduction ○ Types of retainers <ul style="list-style-type: none"> ● Based on tooth coverage <ul style="list-style-type: none"> a) Full veneer crowns b) Partial veneer crowns c) Conservative (minimal preparation) retainers ● Based on material being used <ul style="list-style-type: none"> a) All metal retainers b) Metal ceramic retainers c) All ceramic retainers d) All acrylic retainers ○ Criteria for selection of retainers: <ul style="list-style-type: none"> ● Alignment of abutment teeth and retention ● Appearance ● Condition of abutment teeth ● Cost ● Preservation of tooth structure ○ Abutment selection <ul style="list-style-type: none"> ● Location, condition and position of tooth ● Root configuration ● Crown root ratio ● Root support ● Periodontal ligament area ● Assessment of pulpal health ○ Types of abutments: <ul style="list-style-type: none"> ● Healthy/ideal abutments ● Cantilever abutments ● Pier abutments ● Tilted abutments ● Extensively damaged abutments ● Implant abutments 	<ul style="list-style-type: none"> - Lecture - Tutorial/ Small Group Discussion 	<ul style="list-style-type: none"> - Class Test - Class Participation - Final Examination
08	Margin placement	<ul style="list-style-type: none"> ○ Types of margins 	- Lecture	- Class Test

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	and pontic design	<ul style="list-style-type: none"> ○ Shoulder ○ Chamfer ○ Slope shoulder ○ Shoulder with bevel ○ Feather edge ○ Chisel edge ○ Bevel ○ Pontic design ○ Factors effecting pontic design <ul style="list-style-type: none"> ○ Available space ○ Contour of ridge ○ Amount of occlusal load ○ General design consideration. ○ Characteristic of margin design 	<ul style="list-style-type: none"> - Lecture - Tutorial/ Small Group Discussion 	<ul style="list-style-type: none"> - Class Test - Class Participation - Final Examination
09	Material considerations and cementation	<ul style="list-style-type: none"> - Types of materials - Discuss the composition, properties, merits and demerits of materials 	<ul style="list-style-type: none"> - Lecture - Tutorial/ Small Group Discussion 	<ul style="list-style-type: none"> - Quiz - Class Participation
10	Tooth preparation	<ul style="list-style-type: none"> - Principles Tooth preparation <ul style="list-style-type: none"> ○ Biological consideration ○ Mechanical consideration ○ Esthetic consideration - Impression procedures - Double mix technique - Single mix technique - Triple tray technique - Copper tube impression - Post space impression - Lab procedures <ul style="list-style-type: none"> - Waxing - Spruing - Investing - Burnout - Casting - Soldering - Ceramic veneering - Cementation final - Post cementation follow up - Complication and management 	<ul style="list-style-type: none"> - 	<ul style="list-style-type: none"> -

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11	Resin bonded bridge	<ul style="list-style-type: none"> ○ Introduction ○ Indications and contraindications ○ Advantages and disadvantages ○ Types of resin bonded bridges: <ul style="list-style-type: none"> ● Rochette bridge ● Maryland bridge ● Cast mesh fixed partial dentures ● Virginia bridge 	<ul style="list-style-type: none"> - Lecture - Tutorial/ Small Group Discussion 	<ul style="list-style-type: none"> - Quiz - Class Participation - Final Examination
12	Temporization	<ul style="list-style-type: none"> - Biological consideration - Mechanical consideration - Esthetics consideration 	<ul style="list-style-type: none"> - Lecture - Tutorial/ Small Group Discussion 	<ul style="list-style-type: none"> - Quiz - Class Participation - Final Examination

5.COURSE TOPIC: IMPLANTOLOGY

01	Types of implants	<ul style="list-style-type: none"> - Endosteal. <ul style="list-style-type: none"> ○ Root form <ol style="list-style-type: none"> 1. Cylinder (pressfit). 2. Screw root form 3. Combination root form (cylinder+screw root form) ○ Blade form - Sub periosteal. - Transosteal. - Components of implants <ul style="list-style-type: none"> ○ Implant body ○ First stage cover screw ○ Second stage (healing cap) ○ Abutment <ol style="list-style-type: none"> 1. for screw retention 2. for cement retention 3. for attachment 	<ul style="list-style-type: none"> - Lecture - Clinical teaching 	<ul style="list-style-type: none"> - Quiz - Class Participation - Final Examination
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		<ul style="list-style-type: none"> ○ hygiene screw ○ transfer coping ○ abutment or implant body analog ○ abutment or implant body coping ○ prosthesis screw <ul style="list-style-type: none"> - Advantages, disadvantages, indications and contraindications of implants. - Impression techniques 		
02	Osteointegration and biocompatibility.	<ul style="list-style-type: none"> - Describe osteointegration. - Describe bio integration. - Mechanism of osteointegration. - Stages of osteointegration. - Theories of bone to implant interface <ul style="list-style-type: none"> ○ Fibroosseous integration ○ Osteointegration - Factors influence the osteointegration. <ul style="list-style-type: none"> ○ Implant related <ul style="list-style-type: none"> ▪ Material ▪ Deign ▪ Loading ▪ Surface coating ▪ ○ Surgical related <ul style="list-style-type: none"> ▪ Minimum trauma ▪ No contamination ▪ Profuse irrigation ▪ Use of torque wench ○ Patient related <ul style="list-style-type: none"> ▪ Bone quality(D1 ,D2,D3 & D4) ▪ Systemic disease - Advantages, disadvantages, indications and contraindications of hydroxyapatite crystal and titanium plasma coating - Methods to check osteointegration. <ul style="list-style-type: none"> ○ Percussion test ○ Radiographs ○ Probing depth. 	<ul style="list-style-type: none"> - Lecture - Tutorial - Small group discussion 	<ul style="list-style-type: none"> - Class Participation - Final Examination

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03	Prosthetic options	<ul style="list-style-type: none"> - FP1 - FP2 - FP3 <ul style="list-style-type: none"> o Fixed prosthesis o Hybrid prosthesis - RP4 - RP5 - Advantages and disadvantages of screw retained and cement retained prosthesis 	<ul style="list-style-type: none"> - Lecture 	<ul style="list-style-type: none"> - Quiz - Class Test - Class Participation - Final Examination
04	Limitation of implants	<ul style="list-style-type: none"> - Age - Patient desire - Patient fear - Time of treatment - Consequence of failure - Cost to patient - Adjacent tooth mobility - Bone height - Bone length - Bone width - Soft tissue drape - Challenging aesthetics - Systemic diseases - Crown height space 	<ul style="list-style-type: none"> - Lecture 	<ul style="list-style-type: none"> - Class Test - Class Participation - Final Examination
05	Clinical and laboratory procedure	<ul style="list-style-type: none"> - Clinical procedure <ol style="list-style-type: none"> I. One stage implant placement technique II. Two stage implant placement technique III. Impression technique IV. Jaw relation V. Try in - Laboratorial procedures 	<ul style="list-style-type: none"> - Lecture - Clinical teaching - tutorial 	<ul style="list-style-type: none"> - Quiz - Class Participation - Final Examination

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6.COURSE TOPIC: MAXILLO FACIAL PROSTHESIS

S. No.	Lecture Topic	Learning Objectives	Mode of Teaching	Assessment Tools
01	Classification of congenital and acquired defects.	<ul style="list-style-type: none"> - Maxillary defects <ul style="list-style-type: none"> o Congenital <ul style="list-style-type: none"> ▪ Cleft lip ▪ Cleft palate o Acquired <ul style="list-style-type: none"> ▪ Total maxillectomy ▪ Partial maxillectomy. - Mandibular defects - Velo-pharyngeal defects 	<ul style="list-style-type: none"> - Lecture - Tutorial 	<ul style="list-style-type: none"> - Class Test - Quiz - Class Participation - Final Examination
02	Principles governing treatment and management of patients presenting with various defects	<ul style="list-style-type: none"> A) Treatment of mandibular defects <ul style="list-style-type: none"> I. Mandibular guidance prosthesis B) Treatment of soft and hard palate defects <ul style="list-style-type: none"> Obturator Speech aid 	<ul style="list-style-type: none"> - Lecture - Clinical Training 	<ul style="list-style-type: none"> - Class Test - Quiz - Class Participation - Final Examination
03	Obturators	<ul style="list-style-type: none"> - Surgical obturator prosthesis <ul style="list-style-type: none"> I. Advantages II. how to retain 	<ul style="list-style-type: none"> - Lecture - Clinical work 	<ul style="list-style-type: none"> - Class Test - Quiz - Class Participation - Final Examination
04	Cleft palate prosthesis	<ul style="list-style-type: none"> - Pre surgical nasoalveolar molding appliance <ul style="list-style-type: none"> I. definition 	<ul style="list-style-type: none"> - Lecture - Tutorial 	<ul style="list-style-type: none"> - Class Test

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				<ul style="list-style-type: none"> - Class Participation - Final Examination
05	Speech aid prosthesis.	<p>A) Classification based on physiological and anatomical</p> <ol style="list-style-type: none"> I. Palatopharyngeal insufficiency II. Palatopharyngeal incompetency III. Palatopharyngeal inadequacy <p>B) Types of speech aid</p> <ol style="list-style-type: none"> I. Fixed horizontal pharyngeal obturator II. Hinged pharyngeal obturator III. Meatal pharyngeal obturator <p>C) Advantages of prosthesis</p>	- Lecture	<ul style="list-style-type: none"> - Class Test - Quiz - Class Participation - Final Examination
06	Facial prosthesis	<ul style="list-style-type: none"> - Auricular defects <ul style="list-style-type: none"> o Microtia o Anotia - Nasal defects - Ocular defects - Lip and cheek defect <ul style="list-style-type: none"> o Double lip o Hemi facial microsomia 	<ul style="list-style-type: none"> - Lecture - Tutorial 	<ul style="list-style-type: none"> - Class Test - Quiz - Class Participation - Final Examination
07	TMD SPLINTS	<p>A) Types of splints</p> <ul style="list-style-type: none"> • Stabilization appliance • Anterior positioning appliance • Soft or resilient appliance <p>B) Indications of splints</p>	<ul style="list-style-type: none"> - Lecture - Tutorial 	<ul style="list-style-type: none"> - Class Test - Quiz - Class Participation - Final Examination
08	Bite raising appliance	-Dahl appliance, anterior bite plane	Lecture Tutorial/ Small Group Discussion	Class Test Class Participation Group Assignment Final Examination
09	Splints and stents	A) Shielding and positioning stents	Lecture	Class Test

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			Tutorial/ Small Group Discussion	Quiz Class Participation Final examination
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7. COURSE TOPIC:OCCLUSION INCLUDING TMD/MPD

<u>01</u>	Theories and principles of occlusion	<p>A) Describe optimum functional occlusion</p> <p>B) Occlusal schemes</p> <p style="padding-left: 20px;">I. Canine guided</p> <p style="padding-left: 20px;">II. Group function</p> <p style="padding-left: 20px;">III. Mutually protected</p> <p>C) Determinants of occlusal morphology</p> <p style="padding-left: 20px;">I. Posterior controlling factors(condylar guidance)</p> <p style="padding-left: 20px;">II. Anterior controlling factors(anterior guidance)</p> <p style="padding-left: 20px;">III. Vertical determinants of occlusal morphology</p> <p style="padding-left: 20px;">IV. Horizontal determinant of occlusal morphology</p>	- lecture	<p>- Class Test</p> <p>- Class Participation</p> <p>- Group Assignment</p> <p>- Final Examination</p>
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02	Concept, etiology, treatment planning and options	<p>A) Etiology of TMDs</p> <ol style="list-style-type: none"> I. Occlusal condition II. Trauma <ol style="list-style-type: none"> a. Microtrauma b. Macrotrauma <ul style="list-style-type: none"> • Direct • Indirect III. Emotional stress IV. Deep pain input V. Para functional habits <p>B) Treatment options</p> <ol style="list-style-type: none"> I. Supportive therapy <ul style="list-style-type: none"> • Pharmacological therapy • Physical therapy II. Definitive therapy <ul style="list-style-type: none"> • Reversible • Irreversible 	Lecture	<ul style="list-style-type: none"> - Class Test - Quiz - Class Participation Final Examination
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8. COURSE TOPIC GERODONTOLOGY

	Effects of medication on oral health	<p>A) Xerostomia</p> <p>B) Sialorrhoea(increased salivation)</p> <p>C) Lichen planus</p> <p>D) Aphthous like ulcers</p> <p>E) Pigmentation</p> <p>F) Gingival enlargement</p> <p>G) Burning mouth syndrome</p> <p>H) Loss of taste</p> <p>I) Pseudomembranous candidiasis</p> <p>J) Angular cheilitis</p> <p>K) Osteonecrosis of jaw</p>	<ul style="list-style-type: none"> - Lecture - Tutorial/ Small Group Discussion 	<ul style="list-style-type: none"> - Quiz - Class Participation - Final Examination
12	Medical conditions having oral manifestation	<p>A) Pulmonary conditions</p> <p>B) Skin diseases</p> <p>C) Connective tissue disorders</p> <p>D) Liver disease</p> <p>E) Hematological disorders</p>	<ul style="list-style-type: none"> - Lecture 	<ul style="list-style-type: none"> - Class Test - Class Participation

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		F) Autoimmune disease		
13	Xerostomia	A) Definition B) Causes of xerostomia C) Clinical features D) Effect of xerostomia on prosthesis E) Diagnosis F) Management	- Lecture	- Quiz - Class Participation - Final Examination
14	Root caries	A. Clinical features B. Microbiology of root surface caries C. Diagnosis D. Factors predispose to root caries <ul style="list-style-type: none"> • Diet • Oral flora • Periodontal disease • Xerostomia • Age • Management 	- Lecture - Tutorial/ Small Group Discussion	- Class Test - Class Participation - Individual Assignment - Final Examination
15	Geriatric nutrition	A) Build diet around <ol style="list-style-type: none"> 1. Complex carbohydrates 2. Protein enriched diet 3. Calcium rich food 4. Excessive water B) Limit intake of <ol style="list-style-type: none"> 1. Simple sugar 2. Fat 3. Sodium 	-	

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