



STUDY GUIDE – 2025

Final Year BDS

Batch- XXIII (23)

Compiled by:

Department of Health Professions Education
College of Dentistry

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“Heartfelt gratitude to all departments for supporting and collaborating efficiently for compiling of this study guide”





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How is Study guide going to help you?

- ❖ A study guide serves as a comprehensive tool for both learners and facilitators to enhance learning experience by offering direction, organizing academic information, and identifying essential resources. Its primary goal is to optimize individual academic outcomes by providing:
 - Clear details on the academic calendar and administrative procedures for effective communication and support.
 - Defined learning objectives aligned with teaching methodologies, and assessment strategies for each subject to guide students towards their educational targets.
 - Accessible learning resources such as textbooks, and supplementary materials.
 - Guidance on continuous evaluation (internal evaluation) and important instructions.

Vision:

The vision of LCMD is to be an outstanding institution that produces health care providers that are exemplary. Community based, and in alignment with the National Health Policy of Pakistan.

Mission Statement (COD):

To produce outstanding, compassionate, and skillful graduates in the field of dentistry, who practice evidence-based dentistry, professionalism, leadership, advocacy, social responsiveness and are life-long learners.



Program Competencies:

The LCMD BDS program competencies are aligned with those of PMDC's competencies for dental graduates.





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Program Learning Objectives

Demonstrate a high level of clinical proficiency in performing a wide range of dental procedures including diagnosis, treatment planning and execution of dental treatments

Provide patient-centered care, showing empathy, compassion and respect for patients' needs and concerns, and effectively communicate treatment options and plans

Adhere to the highest ethical standards in dental practice, maintaining integrity, honesty and confidentiality while fostering trust and professionalism in their interactions with patients and

Actively engage in their local communities to promote oral health awareness, provide dental care to underserved populations, and contribute to the betterment of oral healthcare on a broader scale

Exhibit a commitment to lifelong learning by actively engaging in continuing education, staying current with advancements in dental science and technology, and seeking opportunities to enhance their skills

Assume leadership roles with in their dental practices or in dental organizations, as well as collaborate effectively with other healthcare professionals to ensure comprehensive patient care

Critically evaluate and apply scientific research to their clinical practice ensuring evidence-based decision making and continuous improvement in patient care

Possess basic knowledge and skills in practice management, including financial management, regulatory compliance, and ethical billing practices

Demonstrate strong communication skills, both with patients and within the dental team, fostering effective teamwork and patient education

Strive to achieve positive patient outcomes, including improved oral health, patient satisfaction, and the prevention or early detection of dental diseases



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Program Outcomes	
1.	Demonstrate proficiency in the use of dental instruments and equipment, required for dental procedures.
2.	Identify common dental conditions and diseases.
3.	Formulate comprehensive treatment plans for patients, considering their oral health status and individual needs.
4.	Develop the ability to prioritize and sequence dental treatments effectively, considering both immediate and long-term oral health goals.
5.	Provide compassionate and empathetic care, acknowledging the physical and emotional needs of patients.
6.	Implement the concept of informed consent, ensuring that patients are well-informed about their treatment options and have the opportunity to provide their consent or refusal.
7.	Engage in self-reflection and continuous improvement of their patient-centered care and communication skills
8.	Consistently make ethical decisions in their interactions with patients, colleagues, and the broader dental community.
9.	Maintain strict patient confidentiality, respecting the privacy and security of patient information and medical records.
10.	Demonstrate appropriate professional boundaries in their relationships with patients and colleagues.
11.	Demonstrate the ability to assume leadership roles within dental practices or dental organizations.
12.	Provide ethical and moral leadership, upholding the highest standards of integrity and professionalism in their roles.
13.	Commit to ongoing professional development and leadership training to refine their leadership and collaboration skills over time.
14.	Develop a strong commitment to lifelong learning, recognizing that dentistry is a dynamic field that requires ongoing education.
15.	Stay informed about the latest advancements in dental science, technology, and treatment options.
16.	Actively participate in continuing education programs, workshops, and seminars to stay current with best practices and evolving standards in dentistry.
17.	Keep up-to-date with advances in dental technology, and effectively and safely integrate these tools into their practice.
18.	Actively participate in and lead community outreach programs and events aimed at promoting oral health awareness, preventive care, and healthy oral hygiene practices.
19.	Proficient in delivering effective oral health education to community members of all ages, focusing on prevention and maintaining good oral hygiene practices.
20.	Aim for long-term community impact by establishing sustainable programs, initiatives, or



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	partnerships that continue to promote oral health awareness and access to care.
21.	Engage in self-reflection and evaluation of their community engagement efforts, seeking continuous improvement and increased effectiveness.
22.	Develop strong research literacy, which includes the ability to locate, critically evaluate, and understand scientific literature relevant to dentistry.
23.	Consistently make clinical decisions based on the best available scientific evidence, using research findings to guide patient care.
24.	Integrate evidence-based findings into their clinical practice, adapting treatment plans and approaches as new research emerges.
25.	Practice research ethics, including the responsible conduct of research, informed consent, and the protection of human subjects in dental research.
26.	Engage in lifelong learning by continuously updating their knowledge of research methodologies and staying informed about the latest research trends in dentistry.
27.	Demonstrate proficiency in managing the financial aspects of a dental practice, including budgeting, financial planning, and expense control.
28.	Practice intricacies of billing and coding for dental services, ensuring accuracy and compliance with insurance and regulatory requirements.
29.	Well-versed in dental practice regulations, including those related to licensure, accreditation, and quality assurance.
30.	Commit to ethical billing practices, avoiding overbilling or unnecessary procedures and ensuring transparency in financial transactions with patients.
31.	Proficient in communicating effectively with patients, using clear and empathetic language to explain diagnoses, treatment options, and post-treatment care instructions.
32.	Excel in communicating and collaborating with other members of the dental team, including dental assistants, hygienists, and administrative staff, to ensure seamless patient care.
33.	Educate patients about oral health, prevention, and treatment options in a clear and understandable manner, using various educational materials and tools.
34.	Prioritize and demonstrate their commitment to improving the oral health of their patients by providing evidence-based and effective dental care.
35.	Excel in the prevention and early detection of dental diseases, promoting regular check-ups, screenings, and preventive measures to minimize the impact of oral health issues.
36.	Prioritize patient comfort and satisfaction, ensuring a positive and comfortable experience during dental procedures.
37.	Actively promote preventive education and awareness to help patients understand the importance of maintaining good oral hygiene and the prevention of dental diseases



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FINAL YEAR BDS FACULTY & ADMINISTRATION

Department	Faculty Name	Designation	Email Address
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	Dr. Summera Kanwal	Senior Registrar	summera.kanwal@yahoo.com
	Dr. Amna Afridi	Registrar	afridi.amna9571@gmail.com
	Dr. Mohsin	Registrar	dr.m.mohsinkhan21@gmail.com
Operative Dentistry	Prof. Dr. Naheed Najmi	Head Of Department	naheednajmi16mds@gmail.com
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	Dr. Uzma Yasmeen	Registrar	dr.uzma8691@gmail.com
Orthodontics	Prof. Dr. Attiya Shaikh	Head of Department	dr.attiyashaikh@gmail.com
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	Dr. Nazneen Rabia Zubair	Senior Registrar	nzlcmd@gmail.com
	Dr. Muhammad Siddique	Senior Registrar	muhammadsiddiquekhatri@gmail.com
Prosthodontics	Prof. Dr. Uzma Zareef	Head of Department	uzmaz_3@hotmail.com
	Prof. Dr. Irum Munir Raja	Professor	drirumraja@yahoo.com
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Pediatric Dentistry	Dr. Aisha Faisal	Head Of Department	dr_great_aisha@hotmail.com
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	Dr. Rida Sabir	Dental Officer	ridasabir94@yahoo.com
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	Dr. Fauzia Perveen	Deputy Controller - COD	
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CURRICULUM COMMITTEE CLINICAL SCIENCES

Prof. Dr. Tahera Ayub

Chairperson Curriculum Committee Clinical Sciences

Prof. Dr. Naheed Najmi

Advisor Curriculum Committee Clinical Sciences

Dr. Sabaa Shahid

Secretary Curriculum Committee Clinical Sciences

Dr. Amna Afridi

Coordinator Curriculum Committee Clinical Sciences

Members:

Prof. Dr. Uzma Zareef	Professor – Oral Pathology
Dr. Sadaf Talha	Assistant Professor – Orthodontics
Dr. Samreen Wahab	Assistant Professor – Oral Medicine
Dr. Tazeen Zehra	Assistant Professor – Operative Dentistry
Dr. Khurram Zia	Associate Professor – General Surgery
Dr. Amna Rehman	Associate Professor – Oral Surgery
Prof. Dr. Irum Munir Raja	Professor – Prosthodontics
Dr. Muhammad Abid	Assistant Professor – Periodontology
Dr. Aisha Faisal	Assistant Professor – Pediatric Dentistry
Dr. Umair Bukhari	Senior Registrar – General Medicine & 3 rd Year Coordinator
Dr. Ismail Latif	Lecturer - Pediatric Dentistry & Final Year Coordinator

CO-OPT Members:

Prof. Dr. Irfan Ashraf	Head Of Department Student Affairs & Examination
Prof. Dr. Attiya Shaikh	Head Of Department Orthodontics
Dr. Asma Shahid	Incharge QEC – COD

Class Representatives From Third Year & Final Year BDS

Email Address: ccc.cod@lcmd.edu.pk



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ACADEMIC CALENDAR – FINAL YEAR BDS



MONTH	APRIL				MAY				JUNE					JULY				AUGUST	
WEEK	1	2	3	4	1	2	3	4	1	2	3	4	5	1	2	3	4	1	2
CUMULATIVE WEEK	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
DATES	7-Aug	14-Aug	21-Aug	28-Aug	5-May	12-May	19-May	26-May	2-Jun	9-Jun	16-Jun	23-Jun	30-Jun	7-Jul	14-Jul	21-Jul	28-Jul	4-Aug	11-Aug
OPERATIVE DENTISTRY	Introduction to Operative Dentistry	Patient Evaluation And Problem Oriented Treatment Planning	Preliminary Consideration In Operative Dentistry (Stabilization And Disinfection)	Pulp And Periapical Pathosis	Dental Caries (Etiology And Clinical Characteristics)	Biology Of Dental Pulp And Periapical Tissue	Preserving Pulp Vitality					Management of dental caries	Principles of Cavity Design and Preparation	Amalgam Restorations (Class II cavity preparation)	Bonding to enamel and dentine	Endodontic Diagnosis and Treatment Plan	Class 5 Restorations & Root caries (Class 5 Restorations)		
ORAL SURGERY	Principles of Asepsis & Infection Control	Pain & Anxiety Control in Surgical Practice	Principles of Management & Prevention of odontogenic Infection	Preoperative Health Status Evaluation	PREVENTION & MANAGEMENT OF MEDICAL EMERGENCIES	COMPLEX ODONTOLOGICAL INFECTIONS	COMPLEX ODONTOLOGICAL INFECTIONS					Wound Repair	Management of Hospitalized Patients	Odontogenic Diseases of Maxillary Sinus	Odontogenic Diseases of Maxillary Sinus	Post-Extraction Patient Management	Surgical Management of Oropathologic Lesions	Surgical Management of Oropathologic Lesions	
ORTHODONTICS	Introduction to Orthodontics	Development to Dentition	Diagnosis And Case History and clinical Examination	Diagnosis And Case History and clinical Examination	Growth and Development														
PROSTHODONTICS	Introduction	Physical and biomechanical considerations in complete dentures	History, examination and Treatment planning for complete denture	Biological considerations for impression	Introduction to FPD	Introduction to components of FPD	History and examination for FPD												
PEDIATRIC DENTISTRY	Introduction to Pediatric Dentistry	Pain and Anxiety Management of Pediatric Patient	Diagnosis and Prevention of Dental Caries in Pediatric Patient	History Examination, Risk Assessment & Treatment Planning in Pediatric Dentistry	Local Anesthesia technique for Children	Revision classes													
PDC SKILLS																			

MONTH	AUGUST				SEPTEMBER				OCTOBER				NOVEMBER				DECEMBER				JANUARY				FEBRUARY																																																																																																																																																											
WEEK	2	3	4	5	1	2	3	4	5	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19																																																																																																																																																								
CUMULATIVE WEEK	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46																																																																																																																																																								
DATES	11-Aug	18-Aug	25-Aug	1-Sep	8-Sep	15-Sep	22-Sep	29-Sep	6-Oct	13-Oct	20-Oct	27-Oct	3-Nov	10-Nov	17-Nov	24-Nov	1-Dec	8-Dec	15-Dec	22-Dec	29-Dec	5-Jan	12-Jan	19-Jan	26-Jan	2-Feb	9-Feb	16-Feb																																																																																																																																																								
OPERATIVE DENTISTRY	Local Anesthesia In Endodontics	Root Resorption	Infection, Endodontic Access, And Length Determination	Clearing And Shaping	Root Canal Obturation	Teeth Surface Loss	Endodontic And Periodontal Inter Relationship	Direct Composite Restorations (Composite Veneer)	Direct Composite Restorations (Fluoro Sealant & Preventive Resin Restorations)	Traumatic Injuries	Discoloration of Teeth	Restoration Of Endodontically Treated Teeth	Endodontic Retreatment (Endodontic Surgery)	Partial Coverage Indirect Restorations	Endodontic Emergencies	Review Of Restorative Materials	Full Coverage Indirect Restorations																																																																																																																																																																			
	Longitudinal Teeth Fractures					Direct Composite Restorations (Esthetic Considerations)	Direct Composite Restorations (Direct Posterior Composite Restorations Class I&II & IV)	Procedural Accidents	Endodontic Retreatment (Endodontic Retreatment)		Review Of Restorative Materials For Indirect Restoration	Review Of Restorative Materials																																																																																																																																																																								
	Teeth Surface Loss					Direct Composite Restorations (Class IV)	Direct Composite Restorations (Fluoro Sealant & Preventive Resin Restorations)	Discoloration of Teeth	Endodontic Retreatment (Endodontic Surgery)		Partial Coverage Indirect Restorations	Endodontic Emergencies	Implant Supported Restorations																																																																																																																																																																							
	Surgical Management of Oropathologic Lesions					Preprosthodontic Surgery	Management of Patients undergoing Radiotherapy & Chemotherapy	Management of Patients undergoing Radiotherapy & Chemotherapy	Management of Patients undergoing Radiotherapy & Chemotherapy		Management of Patients undergoing Radiotherapy & Chemotherapy	Management of Patients undergoing Radiotherapy & Chemotherapy	Management of Patients undergoing Radiotherapy & Chemotherapy	Management of Patients undergoing Radiotherapy & Chemotherapy	Management of Patients undergoing Radiotherapy & Chemotherapy	Management of Patients undergoing Radiotherapy & Chemotherapy		Management of Patients undergoing Radiotherapy & Chemotherapy	Management of Patients undergoing Radiotherapy & Chemotherapy	Management of Patients undergoing Radiotherapy & Chemotherapy	Management of Patients undergoing Radiotherapy & Chemotherapy	Management of Patients undergoing Radiotherapy & Chemotherapy	Management of Patients undergoing Radiotherapy & 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TIME TABLE



LIAQUAT COLLEGE OF MEDICINE & DENTISTRY

TIME TABLE FOR FINAL PROFESSIONAL BDS (BATCH - 23)

7th April 2025 TO 12th April 2025 (WEEK-1)



DAY	TIME	08:30 – 09:30	09:30 – 10:15	10:15 - 11:00	11:00 - 12:45	Lunch & Prayer Break 12:45 PM – 01:30 PM	01:30 – 2:30	02:30 – 03:30
MONDAY 7-04-25	OPERATIVE DENTISTRY	PROSTHODONTICS	PEDIATRIC DENTISTRY	OPD	OPD			
	Introduction to Operative Dentistry (Prof. Dr. Naheed Najmi)	Introduction to Prosthodontics (Prof. Dr. Irum Munir Raja)	Introduction to Pediatric Dentistry (Dr. Aisha Faisal)	Group A, Group B Group C, Group D Group E	Group A, Group B, Group C, Group D, Group E			
TUESDAY 8-04-25	PROSTHODONTICS	ORAL SURGERY	ORTHODONTICS	OPD	OPD			
	Biomechanical Considerations in Complete Denture (Prof. Dr. Irum Raja)	Prevention & Management of Medical Emergencies (Prof. Dr. Tahera Ayub)	Introduction to Orthodontics (Prof. Dr. Attiya Shaikh)	Group A, Group B Group C, Group D Group E	Group A, Group B, Group C, Group D, Group E			
WEDNESDAY 9-04-25	ORAL SURGERY	PROSTHODONTICS	PEDIATRIC DENTISTRY	OPD	OPD			
	Principles of Surgery (Prof. Dr. Navid Rashid Qureshi)	Biomechanical Considerations in Complete Denture (Prof. Dr. Irum Munir Raja)	Introduction to Pediatric Dentistry (Dr. Aisha Faisal)	Group A, Group B Group C, Group D Group E	Group A, Group B, Group C, Group D, Group E			
THURSDAY 10-04-25	ORTHODONTICS	OPERATIVE DENTISTRY	PROSTHODONTICS	OPD	OPERATIVE DENTISTRY		ORAL SURGERY	
	Diagnosis Aids, Case History and Clinical Examination (Dr. Sadaf Talha)	Patient evaluation and problem-oriented treatment planning (Prof. Dr. Naheed Najmi)	Introduction to Fixed Prosthodontics (Dr. Kamran Parvez)	Group A, Group B Group C, Group D Group E	Biologic Consideration in Operative Dentistry (Dr. Tazeen Zehra)		Pre-operative Health Status Evaluation (Dr. Summera Kanwal)	
FRIDAY 11-04-25	08:30 – 09:30	09:30 – 10:30	10:30 – 10:50	10:50 – 11:50	11:50 – 12:50		OFF GOOGLE ASSIGNMENT	
	OPERATIVE DENTISTRY	ORTHODONTICS		OPERATIVE DENTISTRY	ORAL SURGERY			
	Patient Evaluation & Problem-Oriented Treatment Planning (Prof. Dr. Naheed Najmi)	Diagnosis Aids, Case History and Clinical Examination (Dr. Sadaf Talha)	Tea Break	Patient Evaluation & Problem-Oriented Treatment Planning (Dr. Tazeen)	Pre-operative Health Status Evaluation (Dr. Summera Kanwal)			
SATURDAY 12-04-25	9:00-3:30							
	KKF ROTATION							
	Group A	Group B	Group C	Group D	Group E			
R.L= RESPECTIVE LAB R.D= RESPECTIVE DEPARTMENT L.H.4=LECTURE HALL 4*AUDITORIUM								
Dr. Ismail Latif Coordinator Final Year BDS								

R.L= RESPECTIVE LAB R.D= RESPECTIVE DEPARTMENT L.H.4=LECTURE HALL 4*AUDITORIUM

Dr. Ismail Latif
Coordinator Final Year BDS



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DAY	TIME	OPERATIVE DENTISTRY	PEDIATRIC DENTISTRY	ORAL SURGERY	PROSTHODONTICS	ORTHODONTICS
MONDAY 7-04-25		<ul style="list-style-type: none"> Introduction to OPD History, diagnosis and treatment planning Parts of the dental unit Chair positioning. (Dr. Sareema/ Dr. Hira)	<ul style="list-style-type: none"> Introduction to the Department of Pediatric dentistry (Dr. M. Ismail)	<ul style="list-style-type: none"> Introduction to the Department of Oral Surgery (Dr. Marium Khan)	<ul style="list-style-type: none"> Introduction and orientation of department (Dr. Anas)	<ul style="list-style-type: none"> History and Clinical Examination (Dr. Nazneen/ Dr.Siddique)
TUESDAY 8-04-25		OPERATIVE DENTISTRY	PEDIATRIC DENTISTRY	ORAL SURGERY	PROSTHODONTICS	ORTHODONTICS
		<ul style="list-style-type: none"> Demonstration of vitality tests. Instrument identification and uses (Dr. Sareema)	<ul style="list-style-type: none"> History, Examination & Diagnosis (Dr. M. Ismail)	<ul style="list-style-type: none"> History and Examination Form Demonstration (Dr. Fizza Bano)	<ul style="list-style-type: none"> Maxillary Denture base fabrication Steps of Complete denture fabrication (Dr. Anas)	<ul style="list-style-type: none"> Cephalostat and landmarks/Clinical Procedures (Dr. Aiman/ Dr. Madiha)
WEDNESDAY 9-04-25		OPERATIVE DENTISTRY	PEDIATRIC DENTISTRY	ORAL SURGERY	PROSTHODONTICS	ORTHODONTICS
		<ul style="list-style-type: none"> Disinfection and sterilization. Cavity preparation on phantom teeth. Class I and II. (Dr. Sareema)	<ul style="list-style-type: none"> Disinfection & Sterilization (Dr. M. Ismail)	<ul style="list-style-type: none"> Radiographs interpretation on X-ray films (Dr. Abdul Raffay)	<ul style="list-style-type: none"> Mandibular denture base fabrication (Dr. Anas)	<ul style="list-style-type: none"> Ceph Tracing and planes/Clinical Procedures (Dr. Aiman/ Dr. Madiha)
THURSDAY 10-04-25		OPERATIVE DENTISTRY	PEDIATRIC DENTISTRY	ORAL SURGERY	PROSTHODONTICS	ORTHODONTICS
		<ul style="list-style-type: none"> Breaking bad news. (Dr. Sareema)	<ul style="list-style-type: none"> OPD Test (Dr. M. Ismail)	<ul style="list-style-type: none"> History taking of Pain (Role-play) (Dr. Amna Afridi)	<ul style="list-style-type: none"> Occlusal rim fabrication (Dr. Anas)	<ul style="list-style-type: none"> Ceph Analysis (Dr. Aiman/ Dr. Madiha)



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OPD ROTATIONS



MONTH	OPERATIVE DENTISTRY	ORAL SURGERY	ORTHODONTICS	PROSTHODONTICS	PEDIATRIC DENTISTRY	ASSESSMENT DATES
7 TH APRIL 2025 TO 20 TH MAY 2025	A	B	C	D	E	21 ST MAY 2025
22 ND MAY 2025 TO 15 TH JULY 2025	E	A	B	C	D	16 TH JULY 2025
17 TH JULY 2025 TO 2 ND SEPTEMBER 2025	D	E	A	B	C	3 RD SEPTEMBER 2025
4 TH SEPTEMBER 2025 TO 14 TH OCTOBER 2025	C	D	E	A	B	15 TH OCTOBER 2025
16 TH OCTOBER 2025 TO 9 TH DECEMBER	B	C	D	E	A	10 TH DECEMBER 2025



ADULT LEARNING PRINCIPLES

1.	The learner should be an active contributor to the educational process
2.	Learning should closely relate to understanding and solving real life problems
3.	Learners' current knowledge and experience are critical in new learning situations and need to be taken into account
4.	Learners should be given the opportunity and support to use self-direction in their learning
5.	Learners should be given opportunities and support for practice, accompanied by self-assessment and constructive feedback from teachers and peers
6.	Learners should be given opportunities to reflect on their practice; this involves analyzing and assessing their own performance and developing new perspectives and options
7.	Use of role models by medical educators has a major impact on learners. As people often teach the way they were taught, medical educators should model these educational principles with their students and junior doctors. This will help the next generation of teachers and learners to become more effective and should lead to better care for patients



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HOLIDAY CALENDAR	
Labour Day	1 st May, 2025
*Eid-ul-Azha	07, 08 & 09 June 2025
*Ashura	05 & 06 July, 2025
*Chehlum	15 th August, 2025
Independence Day	14 th August, 2025
*Eid Milad un Nabi	5 th September, 2025
Allama Iqbal Day	9 th November, 2025
Quaid-e-Azam Day	25 th December, 2025
<p>*Holidays subject to sighting of Moon</p> <p>Note 1: All gazette holidays will be observed</p> <p>Note 2: Principal can make amendments in the Academic Calendar if the need arises.</p>	



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EVENT CALENDAR	
S. No	EVENTS
1.	Dental Digital Photography & Art / Literature Fest
2.	Annual Student Week (Sports, English/Urdu Debate, Qirat & Naat)
3.	14 th August Celebration
4.	Defence Day Celebration
5.	Annual Picnic & Gala
NOTE - THE CALENDAR IS TENTATIVE AND IS SUBJECT TO CHANGE AS PER THE INSTRUCTIONS OF COMPETENT AUTHORITIES	



ORAL SURGERY



LEARNING OUTCOMES

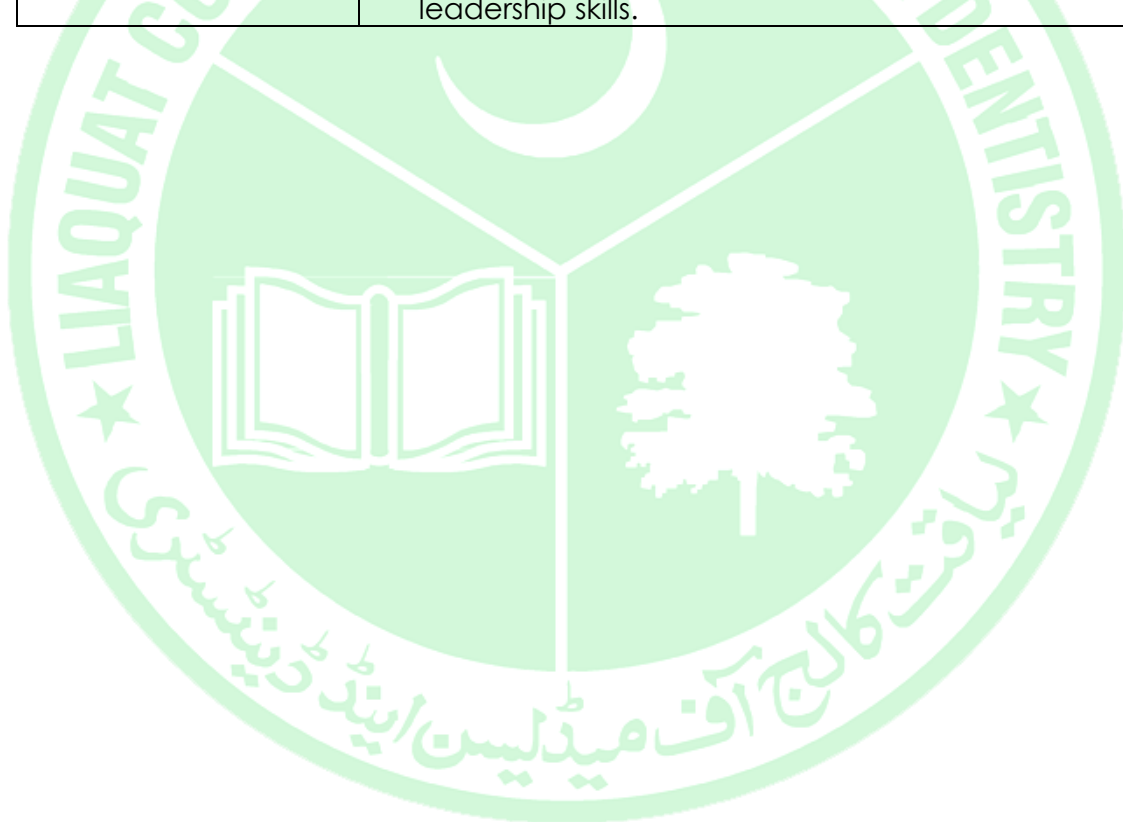
ORAL SURGERY	
By the end of Final Years of BDS Programme, the dental graduate will be able to:	
Knowledge:	<ul style="list-style-type: none">• Identify health status, and systemic illnesses and their impacts on Oral Surgical procedures with pre-operative management• Interpret clinical and radiographic findings of cases to recognize and differentiate between simple and surgical extraction.• Recognize the pre-requisites and basic principles of surgery.• Be competent in decision making, clinical reasoning and judgment of oral surgical problems in order to develop a differential provisional or definitive diagnosis by interpreting and co-relating findings from the history clinical and radiographic examination and other diagnostic tests taking into account the social and cultural backgrounds of the individuals.• Formulate a diagnosis and treatment plan for patients of all ages and should recognize those treatments that are beyond his/her skills and need to be referred to a specialist.• Manage conditions requiring simple reparative surgical procedures of the hard and soft tissues in patients of all ages including the extraction of teeth, the removal of roots where necessary and the performance of minor oral soft tissue surgery and to apply appropriate pharmaceutical agents to support the treatment.• Outline the indications and contraindications of routine and complicated Exodontia, post-extraction status and its clinical implications.• Employ appropriate techniques to manage oro-facial pain, discomfort and psychological distress.• Explain the dynamics of facial spaces, mode of infection spread, and outline protocol of management.• Diagnose the Temporomandibular Joint and salivary gland related disorders.
Skills:	<ul style="list-style-type: none">• Establish a patient-dentist relationship to identify patient expectations and goals of dental care for effective delivery of dental treatment.• Perform intra and extraoral examinations and advice relevant investigations.• Administer infiltration and nerve block of Local Anesthesia.• Perform clinical implications of simple and surgical



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	<p>extractions under local anesthesia.</p> <ul style="list-style-type: none">• Perform uncomplicated pre-prosthetic surgical procedures.• Manage common intra-operative and Post-operative minor oral surgical complications.• Evaluate and manage the medical emergencies on chair-side.• Management of trauma in deciduous and permanent dentition with surgical and non-surgical aspects
Attitude:	<ul style="list-style-type: none">• Display appropriate professional behavior towards their clinical practice and co-workers.• Manifest empathy and respect in his/her attitude and behavior towards patients.• Be compassionate towards patients while performing the medico-legal examination with care• Respect the patient and be professional when it comes to consent.• Exhibit discipline, open-mindedness and competent leadership skills.





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COURSE TOPIC: PRINCIPLES OF SURGERY

Lecture Topic	Learning Objectives	Mode of Teaching		Assessment Tools
		Lectures	Clinical	
Introduction to oral surgery Introduction History, Diagnosis and Treatment Planning	<ol style="list-style-type: none"> Develop a surgical diagnosis for the given patient Explain Basic necessities for Oral Surgery <p>By the end of the Oral surgery OPD rotation the student should be able to:</p> <ol style="list-style-type: none"> Take comprehensive medical & dental history of the patient present in the operative OPD Perform extra and intra oral examination on a patient presenting in operative OPD. Diagnose the cause of the problem in the patient presenting in OPD Formulate a treatment plan for the patient Refer the patient in different departments according to prioritizing needs. 	Lecture(1)	Practical demonstration during surgical rotation	Any one form of assessment - Quiz - Class Test - Class Participation - Individual - Assignment - Group Test - OSATS - MINI-CEX Form
Infection control in surgical practice	<ol style="list-style-type: none"> Define Aseptic technique Explain Communicable Pathogenic organisms <ol style="list-style-type: none"> Bacteria Viral organisms Myco bacterial organisms Outline Different Aseptic techniques & universal precautions Explain: <ol style="list-style-type: none"> Techniques of instrument Sterilization & Disinfection. Maintenance of sterility. Operating field disinfection. Surgical staff Preparation. Post surgical Asepsis <p>By the end of the Oral surgery OPD rotation the student should be able to:</p> <ol style="list-style-type: none"> Describe appropriate method of sterilization and disinfection of various instruments in OPD. Demonstrate the universal precautions on simulated/patient in OPD Demonstrate the use of PPE on simulated patients 	Lecture(2)		
Basic Principles of Surgery Segment 1:	<ol style="list-style-type: none"> Describe intraoral Incisions Classify intraoral flaps for minor oral surgical procedures Describe preventive measures for flap necrosis, dehiscence & tearing Differentiate between intraoral flap designs 	Lecture(1)		
Segment 2: Hemostasis Management and Suturing	<ol style="list-style-type: none"> Demonstrate <ol style="list-style-type: none"> Tissue handling Hemostasis Explain: <ol style="list-style-type: none"> Means of promoting wound hemostasis Dead space management <p>By the end of the Oral surgery OPD rotation the student should be able:</p>	Lecture(1)		



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	<ol style="list-style-type: none"> 1. Demonstrate different types of incisions. (OSCE/CLINICAL) 2. Classify different flap designs on clinical pictures/ patients 3. Apply different methods of hemostasis on patients (OSCE) 4. Perform different types of suturing techniques on Forms (OSCE/CLINICAL) 5. Diagnose the patient with nerve injury in simulated and real patient 6. Counsel the simulated patient/ given patient regarding post operative wound care 			
Segment 3: Post Operative Care, Nutrition, Prevention of Infection	<ol style="list-style-type: none"> 7. Describe Decontamination & debridement 8. Identify operative measures for Edema control <ol style="list-style-type: none"> i) Intra operative ii) Post operative 9. Outline Patient general health & nutrition status. 	Lecture(1)		
Wound repair	<ol style="list-style-type: none"> 1. Describe Wound repair 2. Classify different types of wounds 3. Manage infected socket 4. Explain epithelization 5. List causes of tissue damage & stages of Wound healing 6. Describe process of healing of extraction socket 7. Explain Surgical Significance of Wound Healing 8. Define Facial Neuropathy of traumatic origin 9. List the classifications of Nerve Injury 10. Explain healing of the nerve <ol style="list-style-type: none"> i) Physiological ii) Pathological 	Lecture(2)		



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COURSE TOPIC: PRINCIPLES OF SURGERY

Lecture Topic	Learning Objectives	Mode of Teaching		Assessment Tools
		Lectures	Clinical	
Prevention and Management of Medical Emergencies	<ol style="list-style-type: none">1. Take a comprehensive medical history of patients presenting to OPD.2. Demonstrate General Physical Examination on the given patient3. Identify medical condition which can exaggerate medical emergency on dental chair4. Identify factors which can lead to anxiety on dental chair5. Practice anxiety reduction protocol6. Identify preventive measure for medically compromised patients undergoing dental treatment <p>By the end of the Oral surgery OPD rotation the student should be able to:</p> <ol style="list-style-type: none">1. Diagnose and manage the patients in different medical emergencies (simulated patients/ case-based learning) (OSCE)	Lecture(3)	Practical demonstration during surgical rotation	Any one form of assessment - Quiz - Class Test - Class Participation - Individual - Assignment - Group Test
Preoperative Health Status Evaluation	<ol style="list-style-type: none">1. Analyze Dental problems in a Medically compromised patient2. Obtain informed /Written consent from all patients undergoing oral surgical procedures under Local/General Anesthesia3. Manage Medically Compromised patient undergoing extraction under Local Anesthesia4. Prescribe appropriate Medication for pregnant & postpartum patients after treatment.	Lecture(3)		



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COURSE TOPIC: BASIC PRINCIPLES OF SURGERY

Lecture Topic	Learning Objectives	Mode of Teaching		Assessment Tools
		Lecture s	Clinical	
Pain and anxiety control in surgical practice Segment 1: Introduction, types (local, general & sedative anesthesia)	1. Classify Anesthetic agents on the basis of i) Chemical structure ii) Mode of action 2. Classify different types of Anesthesia used in dentistry 3. Compare different types of Anesthetic solutions used in dentistry 4. Describe Mechanism of action of Local anesthesia 5. Describe mechanism of action of vasoconstrictors. 6. Elaborate different methods of sedation	Lecture (1)	Practical demonstration during surgical rotation	Any one form of assessment - Quiz - Class Test - Class Participation - Individual - Assignment Group Test - OSATS
Segment 2: Preoperative assessment (for local anesthesia and sedatives) Indication and contraindication of (LA, & Sedation)	1. Assess patients for L.A. with available information 2. Assess patients for sedation with nitrous oxide 3. List indications & contraindications of local Anesthesia and sedatives	Lecture (1)		
Segment 3: Administration and complications)	1. Explain conventional & specialized technique of LA 2. Identify reasons for failure of anesthesia 3. Demonstrate different chair positioning for LA administration 4. Demonstrate administration of infiltration & IDN Block on patients undergoing extraction using conventional technique By the end of the Oral surgery OPD rotation the student should be able to: 1. Classify different types of local anesthesia 2. Demonstrate different techniques on models 3. Choose proper armamentarium required according to different techniques 5. Administration of local infiltration, inferior alveolar and long buccal nerve blocks on models/given patients under supervision (OSCE/CLINICAL)	Lecture (1)		



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COURSE TOPIC: PRINCIPLES OF EXODONTIA

Lecture Topic	Learning Objectives	Mode of Teaching		Assessment Tools
		Lectures	Clinical	
Clinical and radiographic evaluation of teeth for removal	<ol style="list-style-type: none"> 1. Define pain 2. Classify different type of pain related to teeth 3. Demonstrate Anxiety control protocol 4. Relate Pre surgical Medical Assessment, Clinical evaluation & radiographic interpretation before extraction 5. Describe patient & surgeons preparation before tooth extraction <p>By the end of the Oral surgery OPD rotation the student should be able to:</p> <ol style="list-style-type: none"> 1. Identify the types of radiographs. (OSCE) 2. Identify the anatomical structures observed in the radiograph. (OSCE/CLINICAL) 3. Identify the pathological findings seen in the radiograph. (OSCE/CLINICAL) 4. Demonstrate application of radiation protection equipment on patient before taking radiograph on patient. 5. Counsel the simulated patient/ given patient regarding findings of radiographs, their implication and possible solution. 	Lecture(1)	Practical demonstration during surgical rotation	Any one form of assessment - Quiz - Class Test - Class Participation - Individual - Assignment Group Test - OSATS
Instrumentation For Basic Oral Surgery	<ol style="list-style-type: none"> 1. Enlist instruments for: <ol style="list-style-type: none"> i) Incising tissue ii) Elevating mucoperiosteum iii) Retracting soft tissue iv) Controlling hemorrhage v) Grasping tissue vi) Removing bone vii) Removing soft tissue from bony defects viii) Suturing mucosa ix) Mouth opening x) Providing suction xi) Transferring sterile instruments xii) Holding towel & drapes in position xiii) Irrigation xiv) Dental elevators for tooth extraction xv) Tooth extraction forceps 2. Choose appropriate instruments for extraction of given tooth <p>By the end of the Oral Surgery OPD rotation the student should be able to:</p> <ol style="list-style-type: none"> 1. Identify the instruments of exodontia. (OSCE/CLINICAL) 2. Describe the uses of the instrument. (OSCE/CLINICAL) 3. Demonstrate correct selection of an instrument for the required task (OSCE/CLINICAL) 	Lecture(1)		
Principles of Routine Exodontia	<ol style="list-style-type: none"> 1. Enlist the Indication and contraindications for extraction of teeth 2. Describe mechanical principles involved in tooth extractions 3. Demonstrate different Chair position for Forceps extraction 4. Demonstrate procedure for closed tooth extraction 5. Demonstrate specific technique for removal of each tooth 6. Manage post extraction socket 	Lecture(1)		



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	<p>7. Define postoperative complications of tooth extraction</p> <p>8. Manage postoperative complication of Extraction</p>			
Principles of More Complex Exodontia	<p>1. Define principles of flap design.</p> <p>2. Describe Principles of incision</p> <p>3. Illustrate parameters for soft tissue flaps.</p> <p>4. Describe different types of mucoperiosteal flaps.</p> <p>5. Compare advantages & disadvantages of mucoperiosteal flaps</p> <p>6. Explain principles of suturing</p> <p>7. Explain</p> <p style="padding-left: 20px;">i) Principles for surgical extraction</p> <p style="padding-left: 20px;">ii) Techniques for surgical extraction.</p> <p>8. Explain:</p> <p style="padding-left: 20px;">i) Indications for surgical extraction</p> <p style="padding-left: 20px;">ii) Technique for open extraction of single-rooted tooth</p> <p style="padding-left: 20px;">iii) Technique for surgical removal of multirooted teeth</p> <p>9. Describe policy of leaving root fragments.</p> <p>10. Plan Multiple extractions:</p> <p style="padding-left: 20px;">i) Timing</p> <p style="padding-left: 20px;">ii) Sequencing</p> <p>By the end of the Oral Surgery OPD rotation the student should be able to:</p> <p>1. Diagnose the indications required surgical extractions (OSCE)</p> <p>2. Explain the simulated patient/ given patient regarding findings, their implication and possible solution.</p> <p>3. Demonstrate ideal operating position for various exodontia procedures on patients in OPD.</p> <p>4. Identify the instruments used for exodontia in OPD.</p> <p>5. Apply proper instruments following its principles on models and in patients presenting in Oral OPD.</p> <p>6. Demonstrate/Perform the close removal of tooth on model/ given patient. (OSCE/CLINICAL)</p> <p>7. Counsel the patient about post operative care</p>	Lecture(3)		



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COURSE TOPIC: PRINCIPLES OF EXODONTIA

Lecture Topic	Learning Objectives	Mode of Teaching		Assessment Tools
		Lectures	Clinical	
Principles of management of impacted teeth Segment 1: Definition, Assessment & evaluation of impacted teeth	1. Define Impaction 2. List the indications & contraindications for removal of impacted teeth 3. Explain different Classification system of impacted teeth 4. Relate significance of classification system with surgical procedure	Lecture(1)	Practical demonstration during surgical rotation	Any one form of assessment - Quiz - Class Test - Class Participation - Individual - Assignment Group Test -OSATS
Segment 2: Indication contraindication & type of impaction	5. Identify factors that make removal of impacted teeth difficult 6. Calculate difficulty index for removal of impacted teeth 7. Describe surgical procedures for impacted teeth 8. Analyze patient preoperatively for removal of impaction	Lecture(1)		
Segment 3: Techniques of removal	9. Manage intra & postoperative bleeding after tooth extraction. 10. Manage postoperative pain and discomfort after extraction. 11. Plan postoperative follow up visits after surgical extraction of tooth. 12. Document the procedure 13. Manage record keeping	Lecture(2)		
Post-extraction patient management	14. Describe prevention of complications, after surgical tooth extraction. 15. Explain soft tissue injuries. 16. List complications associated with surgical removal of impacted teeth. 17. Describe oroantral communications. 18. Diagnose OAC & OAF 19. Compare delayed healing and infection. 20. Manage patient with Dry socket	Lecture(1)		
	By the end of the Oral Surgery OPD rotation the student should be able to: 1. Classify different types of impactions on radiographs 2. Assess the difficulty index on radiographs/given patients(OSCE/CLINICAL) 3. Formulate the treatment plan for patient 4. Formulate written consent for the procedure (role play) (OSCE) 5. Diagnose and manage post operative complications (OSCE/CLINICAL)			



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COURSE TOPIC: INFECTIONS

Lecture Topic	Learning Objectives	Mode of Teaching		Assessment Tools
		Lectures	Clinical	
Principles of management and prevention of odontogenic infections	<ol style="list-style-type: none"> 1. Identify the microbiology of odontogenic infections 2. Pathophysiology of Odontogenic infections 3. Outline the Principles of management 4. Elaborate principles of: <ol style="list-style-type: none"> i. Therapy of odontogenic infections ii. Prevention of infection 5. Enlist prescribed prophylactic antibiotics for infection 6. Describe principles of prophylaxis against metastatic infection 	Lecture(3)	Practical demonstration during surgical rotation	Any one form of assessment - Quiz - Class Test - Class Participation - Individual - Assignment Group Test -OSATS
Complex Odontogenic infections	<ol style="list-style-type: none"> 1. Outline the boundaries of facial spaces 2. Classify facial space infection 3. Enlist deep fascial space infections 4. Enlist specific infections (CST, NF, OM, Atinomyces, Candidiasis) 5. Describe various route of spread of Facial space infection 6. Apply management plan of complex odontogenic infection 	Lecture(5)		
	By the end of the Oral Surgery OPD rotation the student should be able to: <ol style="list-style-type: none"> 1. Classify the facial spaces 2. Explain the causes of spread of infections 3. Perform the examination of the swelling on simulated patients/OPD patients 4. Diagnose the patients with odontogenic infections (CBL/ Simulated/OPD patients) 5. Formulate the management plan (OSCE/CLINICAL) 6. Demonstrate culture and sensitivity testing 			
Management of patient undergoing radiotherapy or chemotherapy	<ol style="list-style-type: none"> 1. Outline dental management of patients undergoing radiotherapy of head and neck region 2. List types of radiation therapy 3. Identify indication & contraindication of radio & chemotherapy 4. Explain dental management of patients on systemic chemotherapy for malignant disease. 5. List complication of radiotherapy & chemotherapy 6. Define Osteoradionecrosis 7. Discuss pathophysiology of ORN 8. Describe management protocol of ORN 	Lecture(3)		



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COURSE TOPIC: MANAGEMENT OF ORAL PATHOLOGIC LESIONS

Lecture Topic	Learning Objectives	Mode of Teaching		Assessment Tools
		Lectures	Clinical	
Surgical management of oral pathologic lesion Segment 1: Diagnosis and management of cyst	1. Outline basic surgical goals of management of jaw cyst 2. Relate clinical findings with radiographic analysis 3. Elaborate on Surgical management of cysts and cyst like lesions of the jaws.	Lecture(2)	Practical demonstration during surgical rotation	Any one form of assessment - Quiz - Class Test - Class Participation - Individual - Assignment Group Test

COURSE TOPIC: MANAGEMENT OF ORAL PATHOLOGIC LESIONS

Lecture Topic	Learning Objectives	Mode of Teaching		Assessment Tools
		Lectures	Clinical	
Segment 2: Diagnosis and management of Odontogenic tumors	1. Classify Odontogenic tumors 2. Describe Principles of surgical management of benign jaw tumors	Lecture(3)	Practical demonstration during surgical rotation	Any one form of assessment - Quiz - Class Test - Class Participation - Individual - Assignment Group Test
Segment 3: Treatment modalities	1. Enumerate different type of resections 2. Describe indications of resection of jaw tumor 3. List various reconstructive options	Lecture(3)		



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COURSE TOPIC: MANAGEMENT OF ORAL PATHOLOGIC LESIONS

Lecture Topic	Learning Objectives	Mode of Teaching		Assessment Tools
		Lectures	Clinical	
Segment 4: Clinical features. Investigation & diagnosis of cancer.	<ol style="list-style-type: none"> 1. Identify appropriate investigations 2. Describe Principles of surgical management of malignant jaw tumors 3. List various treatment modality available to treat malignant tumor <p>By the end of the Oral Surgery OPD rotation the student should be able to:</p> <ol style="list-style-type: none"> 1. Differentiate between different types of jaw cyst and tumors (CBL/opd patients) 2. Perform the examination of swelling (Simulated patient/ given patients) (OSCE/CLINICAL) 3. Formulate the management plan (OSCE/CLINICAL) 4. Identify the clinical and radiographic sign and symptoms of malignancy (CBL) 5. Perform the examination of Lymph nodes (Simulated patient/ given patients) (OSCE/CLINICAL) 6. Break the bad news (simulated patient/role play) communication skills 7. Demonstrate different types of biopsies (videos/CBL/opd patients) 8. Write referral letter (OSCE) 9. Managements of dental needs in patients on radiotherapy/chemotherapy 	Lecture (2)	Practical demonstration during surgical rotation	Any one form of assessment - Quiz - Class Test - Class Participation - Individual - Assignment Group Test
Principles of differential diagnosis & Biopsy Principles of differential diagnosis & Biopsy.	<ol style="list-style-type: none"> 1. List indication for biopsy 2. List factors indicating sign of malignancy 3. Illustrate examination and diagnostic methods 4. Evaluate patient for biopsy 5. List different type of biopsy 6. Compare different available types of biopsies 7. Explain technique for each type of biopsy 8. Outline Principles of biopsy 9. Describe <ol style="list-style-type: none"> i) technique of soft tissue biopsy ii) surgical principles of soft tissue biopsy iii) intraosseous or hard tissue biopsy technique iv) Surgical principles of hard tissue biopsy 10. Demonstrate referral writing 11. Write test for biopsy on sheet 12. Document premalignant & malignant cases for record purpose 	Lecture(1)		



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COURSE TOPIC: INFECTIONS

Lecture Topic	Learning Objectives	Mode of Teaching		Assessment Tools
		Lectures	Clinical	
Diagnosis and management of salivary gland disorders Segment 1: Salivary gland infection, obstructive disease & tumors.	1. Describe Embryology, Anatomy and Physiology of salivary gland. 2. Enlist Diagnostic Modalities 3. Define Mucous retention and extravasation phenomenon 4. Describe: <ol style="list-style-type: none"> Salivary gland infections Necrotizing sialometaplasia Sjogren's syndrome Traumatic salivary gland injuries Salivary gland disorders Obstructive salivary gland diseases 	Lecture(2)	Practical demonstration during surgical rotation	Any one form of assessment - Quiz - Class Test - Class Participation - Individual - Assignment Group Test
Segment 2: Clinical features, investigation & management of salivary gland disorders.	By the end of the Oral Surgery OPD rotation the student should be able to: <ol style="list-style-type: none"> Classify the disorders of salivary glands Diagnose and manage the patients with sialoliths (CBL) (OSCE) 	Lecture(2)		

COURSE TOPIC: INFECTIONS

Lecture Topic	Learning Objectives	Mode of Teaching		Assessment Tools
		Lectures	Clinical	
Principles of Endodontic Surgery	1. Describe the techniques of drainage of an abscess (RCT, I&D) 2. Define: <ol style="list-style-type: none"> Periapical surgery and its indications, contraindications, and surgical procedure. Corrective surgery and its indications, contraindications, considerations, and surgical procedure. 3. Describe <ol style="list-style-type: none"> Healing of periapical pathology Adjunct method (GTR, fiberoptics, bone augmentation) 4. Make referral when needed	Lecture(2)	Practical demonstration during surgical rotation	Any one form of assessment - Quiz - Class Test - Class Participation - Individual - Assignment Group Test



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COURSE TOPIC: PRE-PROSTHETIC AND IMPLANT SURGERY

Lecture Topic	Learning Objectives	Mode of Teaching		Assessment Tools
		Lectures	Clinical	
Preprosthetic Surgery	<ol style="list-style-type: none"> Define the objectives of pre prosthetic surgery Outline principles of patient evaluation and treatment planning Describe different procedure including: <ol style="list-style-type: none"> recontouring of alveolar ridges tori removal soft tissue abnormality correction over denture surgery soft tissue surgery for ridge extension of the mandible Define immediate dentures Explain: <ol style="list-style-type: none"> mandibular augmentation maxillary augmentation procedure for correction of abnormal ridge relationships 	Lecture(3)	Practical demonstration during surgical rotation	Any one form of assessment - Quiz - Class Test - Class Participation - Individual - Assignment Group Test
Implants treatment: Basic concepts and techniques Implant treatment: Advanced concepts and complex cases	<ol style="list-style-type: none"> Enlist: <ol style="list-style-type: none"> Biologic considerations for osseo integration clinical implant components implant prosthetic options complications Assess preoperative medical condition of implant patient Describe surgical phase: treatment planning Explain basic surgical techniques Describe advanced surgical techniques <p>By the end of the Oral Surgery OPD rotation the student should be able to do:</p> <ol style="list-style-type: none"> Preoperative assessment of implant patients (CLINICAL /OSCE) Identify the hard and soft tissue abnormalities (OSCE). 	Lecture(2)		



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COURSE TOPIC: TEMPOROMANDIBULAR AND OTHER FACIAL PAIN DISORDERS

Lecture Topic	Learning Objectives	Mode of Teaching		Assessment Tools
		Lectures	Clinical	
Management of temporomandibular disorders Segment 1: Classification of TMJ disorders	1. Enlist TMJ disorders 2. Classify temporomandibular Joint disorders	Lecture(2)	Practical demonstration during surgical rotation	Any one form of assessment - Quiz - Class Test - Class Participation - Individual - Assignment Group Test
Segment 2: Clinical features, investigation & treatment modalities.	1. Identify sign & symptoms of TMJ disease 2. Prescribe relevant investigation 3. Enlist different treatment options 4. Explain permanent occlusion modification 5. Enlist types of temporomandibular joint surgery 6. Identify patient for long term follow up By the end of the Oral Surgery OPD rotation the student should be able to: 1. Perform TMJ examination (CLINICAL) 2. Diagnose a patient presenting with TMJ disorder in OPD (CLINICAL /OSCE)	Lecture(2)		

COURSE TOPIC: TEMPOROMANDIBULAR AND OTHER FACIAL PAIN DISORDERS

Lecture Topic	Learning Objectives	Mode of Teaching		Assessment Tools
		Lectures	Clinical	
Facial Neuropathology Segment 1: Diagnosis and management of Orofacial pain	1. Enlist different type of orofacial pain 2. Explain: i) Basics of pain neurophysiology ii) neuropathic facial pains iii) Chronic headache iv) other Chronic headache of dental interest	Lecture(1)	Practical demonstration during surgical rotation	Any one form of assessment - Quiz - Class Test - Class Participation - Individual - Assignment Group Test -OSATS
Segment 2: Clinical evaluation and management of trigeminal neuralgia.	1. Identify patient with trigeminal neuralgia 2. List sign & symptoms of TN 3. Take complete history 4. Diagnose patient with TN 5. Compare treatment options for TN 6. Enlist complication for each treatment option	Lecture(1)		



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COURSE TOPIC: TEMPOROMANDIBULAR AND OTHER FACIAL PAIN DISORDERS

Lecture Topic	Learning Objectives	Mode of Teaching		Assessment Tools
		Lectures	Clinical	
Segment 3: Diagnosis and management of facial palsy.	1. Enlist different causes of facial nerve pathology 2. Describe management for facial palsy By the end of the Oral Surgery OPD rotation the student should be able to do: 1. Take comprehensive history of the patient present in the OPD with facial pain 2. Classify different types of facial pain 3. Identify the cause of facial pain (CBL) (OSCE). 4. Perform cranial nerves examination (CLINICAL / OSCE)	Lecture(1)	Practical demonstration during surgical rotation	Any one form of assessment - Quiz - Class Test - Class Participation - Individual - Assignment Group Test

COURSE TOPIC: DENTOFACIAL DEFORMITIES

Lecture Topic	Learning Objectives	Mode of Teaching		Assessment Tools
		Lectures	Clinical	
Management of patients with orofacial clefts	1. Describe: i) Embryology ii) Problems of the cleft affected individuals iii) Dental needs of cleft affected individuals 2. Enlist Causative factors 3. Explain treatment options of cleft lip and palate	Lecture(2)	Practical demonstration during surgical rotation	Any one form of assessment - Quiz - Class Test - Class Participation - Individual - Assignment Group Test



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COURSE TOPIC: DENTOFACIAL DEFORMITIES

Lecture Topic	Learning Objectives	Mode of Teaching		Assessment Tools
		Lectures	Clinical	
Correction of dentofacial deformities/Orthognathic surgery	<ol style="list-style-type: none"> 1. Classify orthognathic procedures 2. Evaluate patient for Orthognathic surgery 3. List the procedures to correct jaw abnormalities 	Lecture(1)	Practical demonstration during surgical rotation	Any one form of assessment - Quiz - Class Test - Class Participation - Individual - Assignment - Group Test
Surgical reconstruction of defect of the jaws	<ol style="list-style-type: none"> 1. Classify type of flaps use for reconstruction of jaw 2. Describe reconstructive ladder 3. Explain basic reconstructive principles <p>By the end of the Oral Surgery OPD rotation the student should be able to:</p> <ol style="list-style-type: none"> 10. Differentiate between different types of jaw cyst and tumors (CBL/opd patients) 11. Perform the examination of swelling (Simulated patient/ given patients) (OSCE/CLINICAL) 12. Formulate the management plan (OSCE/CLINICAL) 13. Identify the clinical and radiographic sign and symptoms of malignancy (CBL) 14. Perform the examination of Lymph nodes (Simulated patient/ given patients) (OSCE/CLINICAL) 15. Break the bad news (simulated patient/role play) communication skills 16. Demonstrate different types of biopsies (videos/CBL/opd patients) 17. Write referral letter (OSCE) 18. Explain management options of dental needs in patients on radiotherapy/chemotherapy 	Lecture(1)		



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COURSE TOPIC : ORAL AND MAXILLOFACIAL TRAUMA

Lecture Topic	Learning Objectives	Mode of Teaching		Assessment Tools
		Lectures	Clinical	
Management of facial fractures Segment 1: BLS and ATLS.	1. Evaluate patients with facial trauma 2. Demonstrate BLS & ATLS 3. Describe ABCDE	Lecture(1)	Practical demonstration during surgical rotation	Any one form of assessment - Quiz - Class Test - Class Participation - Individual - Assignment - Group Test - OSATS
Soft tissue and dentoalveolar injury: Segment 1: Traumatic injuries of teeth	1. Describe: i) soft tissue injuries ii) dentoalveolar injuries	Lecture(2)		
Segment 2: Management of soft tissue injuries.		Lecture(2)		
Management of facial fractures Segment 2: Management of mandibular fractures	1. Outline causes, classification, sign & symptoms & Management of mandibular fractures 2. Identify complication of mandibular fracture	Lecture(4)		
Segment 3: Clinical features, investigation & management of ZMC	1. Outline causes, classification, sign & symptoms & Management of ZMC fractures 2. Describe appropriate investigation for given fracture case 3. Enlist complication of ZMC fracture	Lecture(2)		
Segment 4: Nasal & Orbital fractures.	1. Describe detailed anatomy of orbit 2. Outline causes, classification, sign & symptoms & Management of Orbital & Nasal fractures 3. Enlist complication of Orbital & Nasal fracture	Lecture(2)		
Segment 5: Mid face fracture.	1. Explain causes, classification, sign & symptoms & Management of midface fractures 2. Enlist complication of midface fracture By the end of the Oral Surgery OPD rotation the student should be able to do: 1. Identify basic instruments for Intermaxillary fixation (OSCE). 2. Identify the instrument used for mid face trauma (OSCE) 3. State the uses of the instruments. (OSCE) 4. Demonstrate the technique of Intermaxillary fixation on models (OSCE) 5. Diagnose and management of patients with dentoalveolar fractures (CBL) (OSCE) 6. Diagnose and formulate the management plan for patients with maxillofacial injuries (OSCE)	Lecture(2)		



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CLINICAL TEACHING

Clinical Hours: 14 hrs. /week

Each student will receive clinical teaching at the department of oral and maxillofacial surgery, ward, operating room & skills lab for a period of 2 months. During the clinical rotation students will be taught following topics.

- Obtain surgical history
- Prevention & management of medical emergencies
- Principles of surgery
- Cross infection control
- Armamentarium for basic oral surgery
- Perform local anesthesia
- Clinical & radiological evaluation of a tooth for extraction
- Extraction under local anesthesia
- Assist/observe in minor surgical procedures
- Postoperative patient management
- Management of surgical complications
- Observe dental implant placement
- Suturing on foam
- Incision and drainage of dental abscess
- Clinical & radiological evaluation of maxillary sinus
- Biopsy taking
- Emergency management of trauma patients
- Clinical and radiological evaluation of facial fractures
- Perform inter-maxillary fixation on dentures
- Clinical and radiological evaluation of TMJ problems
- Extraction under local Anesthesia (Observe and Assist complicated Exodontia and Impaction)
- Radiographic problems of TMJ and observe Manual Reduction of TMJ Dislocation
- History Taking and Clinical Observations of Pathological lesions
- History Taking and Clinical Observations of Orofacial Pain Problems
- Clinical and Radiographic Evaluation of Dentoalveolar Trauma

The methods of teaching will be demonstrations on anatomical models, case-based learning, role play, tutorials and small group discussions.



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REQUIREMENT FOR THE CLINICAL ROTATION

Following are the minimum requirements of the clinical work in the department of oral and maxillofacial surgery, to be completed within 9 months of clinical rotation before his/her name is sent to the University for the final year BDS examination.

A log book is also to be maintained, completed and signed by the head of department before the end of clinical rotation.

History taking/Clinical Examination/Informed Consent	50 cases
Local Anesthesia Infiltration	50 cases
Block anesthesia under supervision	7 cases
Extraction under local anesthesia	50 cases
Surgical Extraction /Impactions (assistance)	02 cases
Inter-maxillary fixation on model	01 cases
Dental implant (observe)	01 cases
Suturing on Rexene	05 cases
Prescription writing	50 cases
Simple incisional biopsy	1 case(observe)
Preprosthetic Surgery	1 case(observe)
Splinting of teeth and management of Dentoalveolar Fracture	1 case(observe)
Reduction of TMJ Dislocation (Diagnosis and Treatment Planning)	1 case(observe)
Apicectomy	1 case(observe)



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CLINICAL ROTATION

1ST WEEK	
<ul style="list-style-type: none"> • Introduction to OPD <ul style="list-style-type: none"> ◦ Discipline, protocols and ground rules ◦ Patient allotment • Log book/vaccination • History, examination (Intraoral, Extraoral) • Diagnosis and treatment planning • Instruction identification and uses 	FACILITATOR
PRACTICAL DEMONSTRATION	
<ul style="list-style-type: none"> • Cross infection control • Waste management • Protocol & reporting of Needle stick injury • Patient receiving, seating and chair positioning 	
SOFT SKILL PRACTICES	
ROLE PLAY/CASE SCENARIO	
<ul style="list-style-type: none"> • Patient counseling 	
2ND WEEK	
CASE BASED LEARNING	FACILITATOR
<ul style="list-style-type: none"> • Management of Medical emergencies on dental chair • Radiographic interpretation 	
PRACTICAL DEMONSTRATION	
<ul style="list-style-type: none"> • Choice of Anesthesia <ul style="list-style-type: none"> ◦ Local Anesthesia ◦ Different types • Techniques 	
SKILLS PERMORMANCE	
<ul style="list-style-type: none"> • Exodontia <ul style="list-style-type: none"> ◦ Definition ◦ Classification ◦ Clinical examination ◦ Radiographic evaluation ◦ Diagnosis and treatment planning 	
SOFT SKILL PRACTICES	
ROLE PLAY/CASE SCENARIO	
<ul style="list-style-type: none"> • Conflict resolution 	
3RD WEEK	
PRACTICAL DEMONSTRATION	FACILITATOR
<ul style="list-style-type: none"> • Demonstration of medical emergencies • Demonstration of prescription writing • How to take consent from the patient • Preventive measures and counseling of patient 	
SKILLS PERMORMANCE	
<ul style="list-style-type: none"> • Exodontia 	
CASE BASED LEARNING	
<ul style="list-style-type: none"> • Odontogenic infections • Impactions 	
SOFT SKILL PRACTICES	
ROLE PLAY/CASE SCENARIO/REAL PATIENT	
<ul style="list-style-type: none"> • Communication skills 	



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CLINICAL ROTATION

4 TH WEEK	
CASE BASED LEARNING	FACILITATOR
<ul style="list-style-type: none">• Complex Odontogenic infections• Alveoloplasty• Apicectomy	
SKILLS PERMORMANCE	
<ul style="list-style-type: none">• Exodontia	
PRACTICAL DEMONSTRATION	
<ul style="list-style-type: none">• Examination of swelling• Examination of TMJ, management of TMJ dislocation	
SOFT SKILL PRACTICES	
ROLE PLAY/STANDARDIZED PATIENT	
<ul style="list-style-type: none">• Negotiation & bargaining	
5 TH WEEK	
CASE BASED LEARNING	FACILITATOR
<ul style="list-style-type: none">• TRAUMATIC INJURIES<ul style="list-style-type: none">◦ Luxation◦ Subluxation◦ Intrusion◦ Extrusion• Avulsion FACIAL TRAUMA<ul style="list-style-type: none">◦ History◦ Examination◦ Investigation and diagnosis◦ 0Management	
SKILLS PERMORMANCE	
<ul style="list-style-type: none">• Exodontia	
PRACTICAL DEMONSTRATION	
<ul style="list-style-type: none">• Cranial nerve examination• Lymph node examination	
SOFT SKILL PRACTICES	
CASE SCENARIO	
<ul style="list-style-type: none">• Documentation/Record keeping	
6 TH WEEK	
TUTORIAL	FACILITATOR
<ul style="list-style-type: none">• Diagnosis of premalignant lesion	
PRACTICAL DEMONSTRATION FOLLOWED BY WORK ON MODELS	
<ul style="list-style-type: none">• Method of fixation• Suturing techniques	
SKILLS PERFORMANCE	
<ul style="list-style-type: none">• Exodontia• Biopsy techniques	
CASE BASED LEARNING	
<ul style="list-style-type: none">• BENIGN & MALIGNANT LESIONS OF ORO-FACIAL REGION<ul style="list-style-type: none">◦ History◦ Examination◦ Investigation & diagnosis◦ Management	
ASSISTANCE	
<ul style="list-style-type: none">• Assisting senior during surgical extraction and impactions• Assisting senior during procedure of suturing	



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SOFT SKILL PRACTICES	
CASE SCENARIO	
<ul style="list-style-type: none">Dealing with ethical dilemma	
7TH WEEK	
ASSISTANCE	
<ul style="list-style-type: none">Assisting senior during OPD procedure	
SKILLS PERFORMANCE	
<ul style="list-style-type: none">ExodontiaRevisionEnd of rotation assessmentFeedback session	
3 TESTS BASED ON CLINICAL SCENARIOS & OSCEs IN CLINICAL ROTATION	





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DEPARTMENT ORIENTATION

DEPARTMENT ORIENTATION DOCUMENT FOR STUDENTS (YEAR 2024)

This orientation document outlines Oral and Maxillofacial Surgery Departmental policies, procedures and work practices providing students with opportunity to perform at an optimal standard within a given period of rotation.

INTRODUCTION TO DEPARTMENT





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FACULTY ORIENTATION:

HEAD OF DEPARTMENT: Prof. Dr. Tahera Ayub

FACULTY:

PROFESSOR: Prof. Dr. Navid Rashid Qureshi

ASSOCIATE PROFESSOR: Dr. Amna Rehman

SENIOR REGISTRAR: Dr. Summera Kanwal

REGISTRAR: Dr. Amna Afridi & Dr. Mohsin Khan

RESIDENT: Dr. Sana Zainab, Dr. Abdul Karim, Dr. Fizza Bano Zaidi, Dr. Marium Khan, Dr. Arshia Rauf, Dr. Abdul Raffay, Dr. Rafia Ashraf, Dr. Arif, Dr. Iqra Ali, Dr. Shabana

GOALS AND OBJECTIVES OF DEPARTMENT:

Our aim is to teach the students about how to treat the patients with highest possible standards of care and always treat patients with kindness, respect and dignity. For that students should follow the following steps for an effective treatment planning which includes:

- History and Examination
- Diagnosis
- Treatment planning
- Referral to the respective department
- Oral Surgical Procedures

DEPARTMENT RULES AND REGULATIONS:

- All students should be punctual and should come in department on time, only 5 minutes relaxation is allowed.
- All students should wear face masks all the time in OPD premises and maintain social distancing.
- All Students should wear labcoats with their ID cards, male students should wear dress pants and shirts, Female students should tie their hairs.
- Nails should be cleaned and properly cut.
- All students should get their Hep B Vaccination done within 1 week of departmental rotation.
- Only 3 leaves are allowed in their rotation period, if they absent more than 3 days student should submit their explanation letter to the department.

INFECTION CONTROL POLICIES:

- If the patient is suspected or known case of Hep B or C, Student should inform to their respective supervisor and perform whole procedure under supervision.
- Student should inform and ask the nursing staff for separate instruments.
- Students should follow the infection controls protocols which includes separate units for Hep B and C patients, double mask, double gloves eye wears and disposable gowns.

STUDENT SAFETY SOP'S:

- If Student is having any symptoms (e.g Dry cough, fever, body aches, loss of taste or smell), given the condition looks contagious such Viral flu, he/she should immediately inform to their respective supervisor
- Students should follow Recommended Sops in Department whenever infected:
 - a) Wear face mask in OPD premises, and maintain social distance.
 - b) Wash your hands regularly with soap and water, or clean them with alcohol-based hand rub before and after every procedure.
 - c) Maintain at least 1 meter distance between you and people coughing or sneezing.
 - d) Avoid touching your face.
 - e) Cover your mouth and nose when coughing or sneezing.
 - f) Stay home if you feel unwell.
 - g) Wear Personnel Protective Equipment during any procedure
 - h) Practice physical distancing by avoiding unnecessary travel and staying away from large groups of people.
- Do not dispose of waste by yourself, ask the assistant to dispose off.
- In case of needle stick injury student should inform his/her respective supervisor and incident report to nursing office extension 337, QA Ext 203 or nursing shift supervisor.



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PATIENT SAFETY PROTOCOLS:

- Improve the accuracy of patient identification
- Improve the safety of using high alert medications
- Eliminate wrong site ,wrong patient ,wrong procedure surgery
- Avoid Reuse of Tools and Packaging Material meant for Treatment Only
- Report the problem adverse event to supervisor , according to policy and procedure
- Practice safety protocol to protect yourself and limit spread of contamination
- Sterilized instruments must be used on every patient
- Patient should be questioned about their vaccination status and the suspected ones or known cases should be screened for Hepatitis and antibody titer respectively.

PATIENT CONFIDENTIALITY:

- Patient confidentiality should not be discussed with anyone
- Cases should not be published, discussed or posted in any journal, seminar or social networking sites respectively without patient consent.

MEDICAL EMERGENCIES

- In case of medical emergency, deferred the patient, informed supervisor and follow his/her instructions.
- Do not use medications without the appropriate supervision.
- For any serious emergency clinical staff should be directed to call the following numbers.
- For emergency DSH : 229 & 209

TUTORIALS:

- A tutorial is a method of transferring knowledge and used as a part of a learning process. More interactive and specific than a book or a lecture, a tutorial seeks to teach by example and supply the information to complete a certain task.
- Tutorials are conducted on daily basis for students in department to enhance their knowledge.
- Some topics will be in format of live demonstration and case based learning.
- These tutorials could be blend of physical or online teaching depending upon Covid related circumstances

LOG BOOK MAINTAINANCE:

- Logbook should be filled by students at the end of every working day and should be signed by their respective supervisor.

ASSESSMENT TEST:

- During rotation verbal and written test should be taken after every 2 weeks to check the progress of the students.
- At the end of rotation final assessment of the student should be done through OSCE and interactive stations.

FEEDBACK FORMS:

At the end of rotation, students should be provided with the feedback forms in which they give feedback about the department and supervisors.

SKILL LAB:

The skills and simulation laboratory of Liaquat College of Medicine and Dentistry will serve the purpose of developing student's skills and attitudes during clinical training. Students of BDS should attend the sessions of skill lab according to curriculum



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STUDENT'S RECORD SHEET

EXTRA CREDITS

Biopsies/Impactions/Alveoloplasty/Apisectomy/Frenectomy

Date	P.R No	Treatment Done	Competency Level	Grade	Initials



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DEPARTMENT OF ORAL & MAXILLOFACIAL SURGERY FINAL PROFESSIONAL BDS

Date: _____ Group: _____ Allotted time: _____ Total marks: _____

Marks obtained: _____ Student name: _____ roll no.: _____

Examiner name & signature: _____

OBJECTIVE: ASSESSMENT OF HISTORY TAKING & EXAMINATION SKILLS

Not Done=0, Unsatisfactory=1, Satisfactory=2, Fair=3, Good=4, Outstanding=5

SR.	POINTS OBSERVED	0	1	2	3	4	5
1	Asked about personal information of the patient						
2	Presenting complain was documented						
3	History of presenting complain was taken						
4	Recorded medical history about						
	• Cardiovascular system						
	• Respiratory system						
	• Gastrointestinal system						
	• Rheumatology						
	• Circulatory system						
	• Endocrine system						
	• Nervous system						
	• Allergies						
5	Drug history						
6	Previous hospitalization/Blood transfusion						
7	Past dental history						
8	Family/social history						
9	Habitual history						
	Examination						
10	Extraoral examination was done which includes						
	• General appearance						
	• TMJ examination						
	• Lymph nodes						
11	Intraoral examination of oral hard and soft tissues						
12	Clinical findings were recorded						
13	Provisional diagnosis						
14	Investigation						
	Final diagnosis						
	Treatment plan with referrals						
	Written consent taken on the form						

FEEDBACK _____



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OSATS FORMS



GROUP _____
STATION NO. _____
NAME _____
ROLL NO. _____

DATE _____
TIME _____
TOTAL MARKS _____

KEY: HOW TO QUIT THE HABIT EATING PAN & BETEL QUID

Scale: Not done=0, Unsatisfactory=1, Satisfactory=2, Fair=3, Good=4, Outstanding=5

S.NO	POINTS OBSERVED	0	1	2	3	4	5
1	Ask the patient, how many pan and betel quid he/she eats per day?						
2	Ask the patient, for how many years he/she is eating pan and betel quid?						
3	Counsel the patient to avoid the company of people who eat pan and betel quid.						
4	Counsel the patient that if craving occurs then have a sugar free gum.						
5	Inform the patient about the side effects of eating pan and betel quid.						
6	Inform the patient that pan and betel quid chewing can cause deep red staining on your teeth and even black stains, gum irritation and tooth decay, attrition and enamel defects.						
7	Counsel the patient to reduce the quantity of packets he/she eats per day, the patient should be counselled to eat half the amount that he/she currently eats, and when the patient feels a craving, wait as long as possible.						
8	Inform the patient that chewing tobacco can be expensive, and it is a waste of time and money.						
9	Inform the patient that if he/she didn't quit this habit, they might have a problem in opening mouth, which may lead to OSF.						
10	Inform the patient about OSF, its treatment and tell the patient that if OSF is not treated then it can progress and cause oral cancer (SCC).						
11	Patient should be informed that pan and betel quid can cause cancer on the lateral borders of the tongue and buccal mucosa.						
12	Inform the patient that if the cancer progress, then the only option left for treatment would be surgery.						
13	Inform the patient about the surgical options that the doctor might have to remove the major part of his /her tongue, or any other part which is affected by cancer.						



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14	Inform the patient that even after surgery the prognosis depends on the stage of cancer, and in late stages survival rate is only 5 years.						
	Total						

FEEDBACK _____





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OSATS FORMS

GROUP _____
STATION NO. _____
NAME _____
ROLL NO. _____

DATE _____
TIME _____
TOTAL MARKS _____

KEY: ORTHOGNATHIC SURGERY
OBJECTIVE: ASSESSMENT OF COUNSELLING SKILLS

Scale: Not done=0, Unsatisfactory=1, Satisfactory=2, Fair=3, Good=4, Outstanding=5

S.NO	POINTS OBSERVED	0	1	2	3	4	5
1.	Discuss the treatment plan with the patient and family.						
2.	Recovery is complete after anesthesia.						
3.	Informing him/her about the advantages of this surgery and how it is going to improve their appearance and hence their confidence.						
4.	Sequelae of surgery.						
5.	Make him/her aware of the severity of condition and that it cannot be corrected with conservative treatment.						
6.	Show other patient's pre and post-treatment pictures to motivate them and enhance their confidence.						
7.	Informing about the clinical results of this surgery.						
8.	Make him/her aware it's a reliable and safe procedure.						
9.	Results of surgery are more effective and stable as compared to conservative treatment.						
10.	Informing them about improvement of occlusal function after surgery.						
	Total						

FEEDBACK _____



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OSATS FORMS

GROUP _____
STATION NO. _____
NAME _____
ROLL NO. _____

DATE _____
TIME _____
TOTAL MARKS _____

KEY: WRONG TOOTH EXTRACTION

OBJECTIVE: ASSESMENT OF COUNSELLING SKILLS

Scale: Not done=0, Unsatisfactory=1, Satisfactory=2, Fair=3, Good=4, Outstanding=5

S.NO	POINTS OBSERVED	1	2	3	4	5	6
1	Introducing him/herself.						
2	Taking consent.						
3	Patient informed that instead of tooth to be extracted wrong tooth extracted.						
4	Wrong tooth requires extraction as it is infected BDR.						
5	It will be going to cause pain further as it is infected and pus discharging.						
6	May be the pain occurring in the area of the tooth to be extracted is because of infected BDR.						
7	Sometime pain radiates and patient can't localize.						
8	The tooth you want to be extracted can also be extracted after few days as it is grossly carious.						
9	It is necessary to remove infected BDR Primarily.						
10	Medication prescribed for 5 days.						
11	Post operative instruction given.						
12	Recall after 5 days for extraction of adjacent grossly carious tooth. Which patient want to be extracted, as the prognosis of the tooth is not good RCT can't be advised.						
	Total						

FEEDBACK _____



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OSATS FORMS



GROUP _____
STATION NO. _____
NAME _____
ROLL NO. _____

DATE _____
TIME _____
TOTAL MARKS _____

KEY: POST SURGICAL PARESTHESIA AFTER THIRD MOLAR EXTRACTION
OBJECTIVE: COUNCELING OF PATIENT WITH POST SURGICAL PARESTHESIA

Scale: Not done=0, Unsatisfactory=1, Satisfactory=2, Fair=3, Good=4, Outstanding=5

S.N O	POINTS OBSERVED	0	1	2	3	4	5
1	Introducing him/herself						
2	Ask the patient to relax						
3	Ask the patient to locate the area where he/she is feeling altered sensation						
4	Ask the patient about the area he/she is feeling altered, diminished or total loss of sensation						
5	Ask for other sensations associated with it e.g., tingling, numbness or "pins and needles"						
6	Observe if patient's chewing and speaking function is affected						
7	Perform different types of sensory tests to estimate the extent of nerve damage						
8	Explain the patient about what is paresthesia						
9	Explain the patient why does he have paresthesia						
10	Inform the patient about the signs of paresthesia						
11	Inform the patient about the symptoms of paresthesia						
12	Inform the patient about the extent of nerve damage						
13	Inform the patient about duration of recovery e.g., spontaneous, persistent or permanent						
14	Explain the patient that if paresthesia is spontaneous, complete recovery will occur in 8 weeks						
15	Explain the patient that paresthesia is persistent, complete recovery might take up to 6 months						
16	Explain the patient that paresthesia is permanent, it would not resolve on its own and would need surgical treatment						
17	Explain the patient about surgical repair in case of severe nerve damage and its success rate						
18	Explain the patient about when can he get the surgical treatment						



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	Total							
--	-------	--	--	--	--	--	--	--

FEEDBACK _____





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DEPARTMENT OF ORAL & MAXILLOFACIAL SURGERY FINAL PROFESSIONAL BDS

Date: _____ Group: _____ Allotted time: _____ Total marks: _____ Marks
obtained: _____ Student name: _____ roll no.: _____ Examiner name &
signature: _____

LOCAL ANESTHESIA OSATS FORM

Not Done=0, Unsatisfactory=1, Satisfactory=2, Fair=3, Good=4, Outstanding=5

SR.	POINTS OBSERVED	0	1	2	3	4	5
1	Obtain written consent for infiltrate						
2	Demonstrate an appropriate pre procedure 1. Chair positioning 2. Light setting						
3	Follow aseptic technique						
Technical ability to be checked for given safe and effective infiltration							
4	Prepares the instruments						
5	Applies topical anesthesia						
6	Informs about the prick						
7	Retracts the cheek appropriately						
8	Inserts needle in the mucogingival junction						
9	Inserts one third of the needle						
10	Aspirates the plunger						
11	Injects two third of the solution						
12	Pull the needle out						
13	Inserts the needle at right angle on the palatal mucosa assuming the estimated apex of the tooth						
14	Inserts remainder of the solution slowly with pressure						
15	Waits for 3 to 5 mins for the anesthesia to be effective						
16	Check for efficacy of the anesthesia						
17	Post op instructions						
18	Communication skills						
19	Professionalism						
20	Overall ability to perform the procedure						

Feedback if any:

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COLLEGE OF DENTISTRY
FINAL PROFESSIONAL BDS



Date: _____ Group: _____ Allotted Time: _____ Total Marks: _____ Marks
Obtained: _____ Student Name: _____ Roll NO: _____
Examiner name & Sign _____

IDN BLOCK ANESTHESIA OSATS FORM

Scale: Not Done=0, Unsatisfactory=1, Satisfactory=2, Fair=3, Good=4, Outstanding=5

SR.NO	POINTS OBSERVED	0	1	2	3	4	5
1.	Obtains written consent for ID block						
2.	Demonstrate appropriate procedure 1. Chair positioning 2. Light setting						
3.	Aseptic technique						
4.	Technical ability to check safe and effective IDN block						
5.	Prepares the instrument						
6.	Applies topical anesthesia						
7.	Informs about the prick						
8.	Palpate the external oblique ridge						
9.	Inserts needle between ridge at midpoint of raphe at mandibular notch						
10.	Inserts two-thirds of the needle						
11.	Aspirated the plunger						
12.	Injects two third of the solution						
13.	Retracts the syringe						
14.	Changes the position of the needle						
15.	Inserts remainder of the solution to block lingual nerve						
16.	Waits for five minutes to check anesthesia to be effective						
17.	Post operative instructions						
18.	Maintain verbal contact with patient						
19.	Maintain professionalism throughout procedure						
	Overall ability to perform the procedure						

Feedback if any:



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ORAL AND MAXILLOFACIAL SURGERY



OSATS FORMS

GROUP _____
STATION NO. _____
NAME _____
ROLL NO. _____

DATE _____
TIME _____
TOTAL MARKS _____

KEY: EXAMINATION OF A SWELLING

Scale: Not done=0, Unsatisfactory=1, Satisfactory=2, Fair=3, Good=4, Outstanding=5

S.NO.	POINTS OBSERVED	0	1	2	3	4	5
1	Greet the patient						
2	Introduce himself/ herself						
3	Takes consent						
4	Correct chair position						
5	Inspection:						
	• Site						
	• Size						
	• Shape						
	• number,						
	• surface color						
	• overlying skin						
	• any discharge of fluid						
	• transillumination						
6	Palpation:						
	• Temperature						
	• Tenderness						
	• Consistency						
	• Fluctuant						
	• Pulsatile						
	• Reducibility						
	• compressibility						
7	Auscultation for vascular swellings						
8	Make 3 differential diagnosis						
	Total						

Feedback if any:



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ORAL AND MAXILLOFACIAL SURGERY OSATS FORMS

GROUP _____
STATION NO. _____
NAME _____
ROLL NO. _____

DATE _____
TIME _____
TOTAL MARKS _____

KEY: EXAMINATION OF A ULCER

Scale: Not done=0, Unsatisfactory=1, Satisfactory=2, Fair=3, Good=4, Outstanding=5

S. NO.	POINTS OBSERVED	0	1	2	3	4	5
1	Greets the patient						
2	Introduce himself/ herself						
3	Takes consent						
4	Properly positions the patient						
5	Inspection:						
	• Site						
	• Size						
	• Shape						
	• Number						
	• Margins						
	• Base						
	• Colour						
6	Exudate or discharge						
	Palpation:						
	• Temperature						
	• Tenderness						
	• Induration						
	• Fixation						
	• Bleeding						
	• Base						
7	Margins						
	Make 3 differential diagnosis of intra oral ulcer						
Total							



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ORAL AND MAXILLOFACIAL SURGERY

OSATS FORMS

GROUP _____
STATION NO. _____
NAME _____
ROLL NO. _____

DATE _____
TIME _____
TOTAL MARKS _____

KEY: EXAMINATION OF FACIAL NERVE

Scale: Not done=0, Unsatisfactory=1, Satisfactory=2, Fair=3, Good=4, Outstanding=5

S.NO.	POINTS OBSERVED	0	1	2	3	4	5
1	Greets the patient						
2	Introduce himself/ herself						
3	Takes consent						
4	Properly positions the patient						
5	Test motor function by asking patient to						
	crease up forehead						
	close eyes against pressure						
	puffing out cheek						
	reveal the teeth						
	test the function of stapedius muscle by tuning fork						
6	Able to Test the sense of taste						
7	Able to differentiate between upper and lower motor neuron lesion						
8	Make 3 differential diagnosis of lower motor neuron lesion						
	Total						



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ORAL AND MAXILLOFACIAL SURGERY

OSATS FORMS

GROUP _____
 STATION NO. _____
 NAME _____
 ROLL NO. _____

DATE _____
 TIME _____
 TOTAL MARKS _____

KEY: EXAMINATION OF NECK LYMPH NODE

Scale: Not done=0, Unsatisfactory=1, Satisfactory=2, Fair=3, Good=4, Outstanding=5

S.NO.	POINTS OBSERVED	0	1	2	3	4	5
1	Greets the patient						
2	Introduce himself/ herself						
3	Takes consent						
4	Properly positions the patient and do gentle palpation						
5	Inspection:						
	Site						
	Size						
	Shape						
	Number						
	Surface						
	Color						
	overlying skin						
	any discharge of fluid						
	Palpation:						
6	Temperature						
	Tenderness						
	Consistency						
	Fluctuant						
	Fixation						
	Induration						
	Central necrosis						
	Matty						
7	Able to describe the levels of lymph node and sequence of lymph node examination						
8	Make 3 differential diagnosis of enlarged lymph node						
Total							



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OSATS FORMS

GROUP _____
STATION NO. _____
NAME _____
ROLL NO. _____

DATE _____
TIME _____
TOTAL MARKS _____

KEY: EXAMINATION OF TMJ

Scale: Not done=0, Unsatisfactory=1, Satisfactory=2, Fair=3, Good=4, Outstanding=5

S. NO.	POINTS OBSERVED	0	1	2	3	4	5
1	Greets the patient						
2	Introduce himself/ herself						
3	Takes consent						
4	Properly positions the patient						
5	Measures inter-incisal opening						
6	Measures lateral excursions						
7	Palpate muscles of mastication						
8	Make 3 differential diagnosis of limited mouth opening						
	Total						



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ORAL AND MAXILLOFACIAL SURGERY

DOPS FORMS

GROUP _____
 STATION NO. _____
 NAME _____
 ROLL NO. _____

DATE _____
 TIME _____
 TOTAL MARKS _____

DIRECT OBSERVATION OF PROCEDURAL SKILLS

EXTRACTION OF MANDIBULAR IMPACTED THIRD MOLAR – FOURTH YEAR BDS STUDENT IN ORAL SURGERY SETTING

	Below expectation		pass		Above expectation	Well above average		Uc
	Well below (very poor) 1	Below (poor) 2	Borderline pass 3	Meet expectation 4	Good 5	Very good 6	Outstanding 7	8
Obtains informed consent for extraction								
Demonstrates appropriate pre procedure 1. chair positioning 2. lights setting								
Aseptic technique								
Selection of appropriate								
Prepares the instrument								
Demonstrate appropriate technique of ID block local anesthesia								
Select appropriate								



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e incision and flap								
Demonstrate proper technique of incision								
Reflects adequate flap								
Protects the reflected flap								
Placement of lingual guard								
Removes overlying bone using a hand piece								
Sectioning of the tooth using a hand piece								
Delivery of the sectioned tooth using elevators								
Debridement of the wound								
Proper closure of the wound with sutures								
Hemostasis achieved								
Post op instructions								
Communication skills								
Consideration of patient/profession								



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alism								
Overall ability to perform								
Follow up								





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ORAL AND MAXILLOFACIAL SURGERY OSATS FORMS

GROUP _____
STATION NO. _____
NAME _____
ROLL NO. _____

DATE _____
TIME _____
TOTAL MARKS _____

KEY: MYOFACIAL PAIN DYSFUNCTION SYNDROME (MPDS) OBJECTIVE – ASSESSMENT OF HISTORY TAKING SKILLS

S.	POINTS OBSERVED	1	2	3	4	5
1	Introducing him/herself					
2	Taking consent					
3	Recording chief complaint in patient's words					
4	Where is the pain?					
5	When did the pain start? Is it getting better or worse?					
6	Ask your patient to describe the pain, is it dull, aching? Or sharp, stabbing, tingling or burning					
7	Does the pain radiate to any other part of the head and neck?					
8	Any other signs and symptoms associated with the pain					
9	When is the pain the worst? Morning, night or is it continuous?					
10	What sets the pain off? Does anything make it better? Painkillers help?					
11	How severe is the pain, perhaps ask your patient to put it on a scale from 1-10					
12	Does pain aggravates on chewing?					
13	Is he or she emotionally disturbed?					
14	Is there a history of previous trauma?					
15	Is there a history of any parafunctional habits? Eg pan chewing, areca nut chewing,					
16	Is there any disturbance in sleeping pattern?					
17	Have you experienced similar kind of pain previously?					
18	Do you experience any difficulty in mouth opening?					



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ORAL AND MAXILLOFACIAL SURGERY

OSATS FORMS

GROUP _____
STATION NO. _____
NAME _____
ROLL NO. _____

DATE _____
TIME _____
TOTAL MARKS _____

KEY- ODONTOGENIC INFECTIONS

OBJECTIVE- ASSESSMENT OF HISTORY TAKING SKILLS

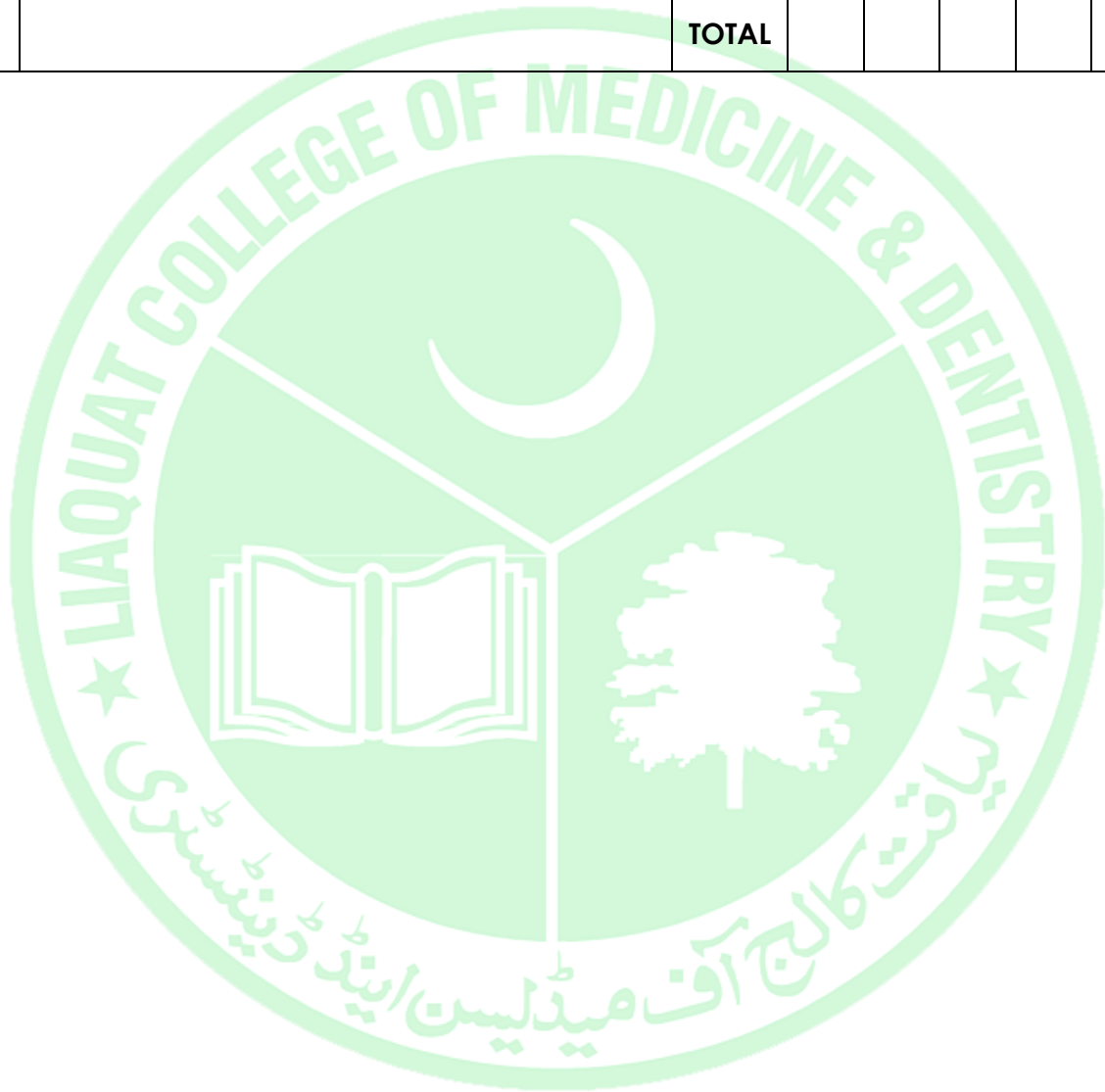
S.	POINTS OBSERVED	0	1	2	3	4	5
1	Introducing him/herself						
2	Taking consent						
3	Recording chief complaint in patient's words						
4	Where is the pain? Localize to at least a quadrant						
5	When did the pain start? Is it getting better or worse?						
6	Does the pain radiate to any other part of the head and neck?						
7	Any other signs and symptoms associated with the pain						
8	How severe is the pain, perhaps ask your patient to put it on a scale from 1-10						
9	Have you experienced fever?						
10	Do you feel bad taste or foul odor in your mouth?						
11	Does pain aggravates on chewing?						
12	Have you experienced similar kind of pain previously?						
13	Have you taken any treatment for this before?						
14	Have you experienced any trauma to soft tissue in that region?						
15	Have you experienced any trauma to hard tissue in that region?						
16	Where is the swelling? Localize to at least a quadrant						



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17	Has the swelling increased in size since first noticed?						
18	Does the swelling disappear at anytime of the day?						
19	Any other signs and symptoms associated with the swelling?						
20	What do you think is the cause of this swelling?						
21	Have you experienced any difficulty in breathing?						
		TOTAL					





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ORAL AND MAXILLOFACIAL SURGERY

OSATS FORMS

GROUP _____
STATION NO. _____
NAME _____
ROLL NO. _____

DATE _____
TIME _____
TOTAL MARKS _____

KEY: DENTOALVEOLAR FRACTURES

OBJECTIVE: ASSESMENT OF HISTORY TAKING SKILLS

Scale: Not done=0, Unsatisfactory=1, Satisfactory=2, Fair=3, Good=4, Outstanding=5

S.	POINTS OBSERVED	0	1	2	3	4	5
1	Introducing him/herself						
2	Taking consent						
3	Recording chief complaint in patient's words						
4	How did the injury occur?						
5	When did the injury occur?						
6	Where did the injury occur?						
7	What was the object contacted?						
8	What was the direction of the hit?						
9	Was there loss of consciousness?						
10	Was any part of tooth dislodged during/ after trauma?						
11	Are you experiencing any altered sensation?						
12	Are you experiencing any visual disturbances?						
13	Are you experiencing any change in occlusion?						
14	Do you any difficulty in mouth opening?						
15	Can you open your mouth to the same extend as you could before the trauma?						
16	What treatment has been provided since the injury? If any?						
	Total						



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ORAL AND MAXILLOFACIAL SURGERY

OSATS FORMS

GROUP _____
 STATION NO. _____
 NAME _____
 ROLL NO. _____

DATE _____
 TIME _____
 TOTAL MARKS _____

KEY: WHITE LESIONS

OBJECTIVE: ASSESMENT OF HISTORY TAKING SKILLS

Scale: Not done=0, Unsatisfactory=1, Satisfactory=2, Fair=3, Good=4, Outstanding=5

S.	POINTS OBSERVED	0	1	2	3	4	5
1	Introducing him/herself						
2	Taking consent						
3	Recording chief complaint in patient's words						
4	Where is the white lesion? Localize to at least a quadrant						
5	When did you notice the white lesion?						
6	Since when is the lesion present?						
7	Is there any change in the size of the lesion?						
8	Is there any change in the texture of the lesion?						
9	Do you feel any roughness in your mouth? E.g., cheek, tongue						
10	Do feel burning sensation on eating spicy food?						
11	Any other signs and symptoms associated with the lesion?						
12	Have you experienced similar kind of problem previously?						
13	History of trauma in that region?						
14	History of any fungal infection?						
14	Have you taken any treatment for this before?						
15	Presence of parafunctional habits?						
16	Do you feel a sharp cusp or tooth in that region?						



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17	Do you wear any removable prosthesis? (denture)						
18	Do you smoke? E.g., cigarette, pipe						
19	Are you suffering from any immunocompromising disease? E.g., diabetes, HIV						
	Total						

FEEDBACK _____





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ORAL AND MAXILLOFACIAL SURGERY

OSATS FORMS

GROUP _____
STATION NO. _____
NAME _____
ROLL NO. _____

DATE _____
TIME _____
TOTAL MARKS _____

KEY: PULP NECROSSED TOOTH

OBJECTIVE: ASSESMENT OF HISTORY TAKING SKILLS

Scale: Not done=0, Unsatisfactory=1, Satisfactory=2, Fair=3, Good=4, Outstanding=5

S.	POINTS OBSERVED	0	1	2	3	4	5
1	Introducing him/herself						
2	Taking consent						
3	Recording chief complaint in patient's words						
4	Where is the pain? Localize to at least a quadrant						
5	When did the pain start? Is it getting better or worse?						
6	Ask your patient to describe the pain, is it dull, aching? Or sharp, stabbing, tingling or burning						
7	Does the pain radiate to any other part of the head and neck?						
8	Any other signs and symptoms associated with the pain						
9	When is the pain the worst? Morning, night or is it continuous?						
10	What sets the pain off? Does anything make it better? Painkillers help?						
11	How severe is the pain, perhaps ask your patient to put it on a scale from 1-10						
12	Is there any disturbance in salivary flow?						
	Total						

FEEDBACK _____



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ORAL AND MAXILLOFACIAL SURGERY

OSATS FORMS

GROUP _____
STATION NO. _____
NAME _____
ROLL NO. _____

DATE _____
TIME _____
TOTAL MARKS _____

KEY: IMPACTED 3rd MOLAR

OBJECTIVE: ASSESMENT OF HISTORY TAKING SKILLS

Scale: Not done=0, Unsatisfactory=1, Satisfactory=2, Fair=3, Good=4,
Outstanding=5

S.	POINTS OBSERVED	0	1	2	3	4	5
1	Introducing him/herself						
2	Taking consent						
3	Recording chief complaint in patient's words						
4	Where is the pain? Localize to at least a quadrant						
5	When did the pain start? Is it getting better or worse?						
6	Does the pain radiate to any other part of the head and neck?						
7	Any other signs and symptoms associated with the pain						
8	How severe is the pain, perhaps ask your patient to put it on a scale from 1-10						
9	Have you experienced fever?						
10	Do you feel bad taste or foul odor in your mouth?						
11	Does pain aggravate on chewing?						
12	Have you experienced similar kind of pain previously?						
	Total						

FEEDBACK _____



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ORAL AND MAXILLOFACIAL SURGERY

OSATS FORMS

GROUP _____
STATION NO. _____
NAME _____
ROLL NO. _____

DATE _____
TIME _____
TOTAL MARKS _____

KEY: FRACTURED TOOTH

OBJECTIVE: ASSESMENT OF HISTORY TAKING SKILLS

Scale: Not done=0, Unsatisfactory=1, Satisfactory=2, Fair=3, Good=4, Outstanding=5

S.	POINTS OBSERVED	0	1	2	3	4	5
1	Introducing him/herself						
2	Taking consent						
3	Recording chief complaint in patient's words						
4	Where is the pain? Localize to at least a quadrant						
5	When did the pain start? Is it getting better or worse?						
6	Ask your patient to describe the pain, is it dull, aching? Or sharp, stabbing, tingling or burning?						
7	Does the pain radiate to any other part of the head and neck?						
8	Any other signs and symptoms associated with the pain						
9	Any history of trauma to the tooth?						
10	Was any part of tooth dislodged during/ after trauma?						
11	How severe is the pain, perhaps ask your patient to put it on a scale from 1-10						
12	Does the pain aggravate when on biting/chewing?						
	Total						

FEEDBACK _____



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ORAL AND MAXILLOFACIAL SURGERY

OSATS FORMS

GROUP _____
STATION NO. _____
NAME _____
ROLL NO. _____

DATE _____
TIME _____
TOTAL MARKS _____

KEY: PERICORONITIS

OBJECTIVE: ASSESMENT OF HISTORY TAKING SKILLS

Scale: Not done=0, Unsatisfactory=1, Satisfactory=2, Fair=3, Good=4, Outstanding=5

S.	POINTS OBSERVED	0	1	2	3	4	5
1	Introducing him/herself						
2	Taking consent						
3	Recording chief complaint in patient's words						
4	Where is the pain? Localize to at least a quadrant						
5	When did the pain start? Is it getting better or worse?						
6	Does the pain radiate to any other part of the head and neck?						
7	Any other signs and symptoms associated with the pain						
8	Difficulty in Mouth opening?						
9	Have you experienced fever?						
10	Do you feel bad taste or foul odor in your mouth?						
11	Does pain aggravate on chewing?						
12	Have you experienced similar kind of pain previously?						
	Total						

FEEDBACK _____



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OSATS FORMS

GROUP _____
 STATION NO. _____
 NAME _____
 ROLL NO. _____

DATE _____
 TIME _____
 TOTAL MARKS _____

KEY: ORAL ULCER

OBJECTIVE: ASSESMENT OF HISTORY TAKING SKILLS

S.	POINTS OBSERVED	Insufficient	Below Expectations	Borderline	Meet observations	Outstanding
1	Introducing him/herself					
2	Taking consent					
3	Recording chief complaint in patient's words					
4	Where is the pain? Localise to at least a quadrant					
5	When did the pain start? Is it getting better or worse?					
6	Since when is the ulcer present?					
7	Is there any change in the size of the ulcer?					
8	Do feel burning sensation on eating spicy food?					
9	Any other signs and symptoms associated with the ulcer?					
10	Have you experienced similar kind of problem previously?					
11	History of trauma in that region?					
12	Presence of parafunctional habits?					

FEEDBACK _____



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OSATS FORMS

GROUP _____
STATION NO. _____
NAME _____
ROLL NO. _____

DATE _____
TIME _____
TOTAL MARKS _____

KEY: AVULSED TOOTH

OBJECTIVE: ASSESMENT OF HISTORY TAKING SKILLS

S.	POINTS OBSERVED	Insufficient	Below Expectations	Borderline	Meet observations	Outstanding
1	Introducing him/herself					
2	Taking consent					
3	Recording chief complaint in patient's words					
	When did the injury happen?					
4	How did the injury take place? Is there any associated injury?					
5	Where did the injury take place ?					
7	Previous dental history, including previous injuries, crowns or prostheses					
8	Location of permanent tooth fragments; suggest someone look for missing fragments or teeth at the site of injury.					
9	Where was the tooth kept after it came out of the oral cavity?					
10	Was there any sign of loss of consciousness, neck or head pain, and numbness?					

FEEDBACK _____



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ORAL AND MAXILLOFACIAL SURGERY

OSATS FORMS

GROUP _____
STATION NO. _____
NAME _____
ROLL NO. _____

DATE _____
TIME _____
TOTAL MARKS _____

KEY: AVULSED TOOTH

OBJECTIVE: ASSESMENT OF EXAMINATION SKILLS

Scale: Not done=0, Unsatisfactory=1, Satisfactory=2, Fair=3, Good=4, Outstanding=5

S.	POINTS OBSERVED	0	1	2	3	4	5
1	Examine the tooth for any dirt particle or debris						
2	Look for the Symmetry in the mouth						
3	Bite; check for malocclusion						
4	Examine TMJ						
5	Numbness, intra-or extra oral bruising						
6	Bony steps in maxilla or mandible						
7	Lift the lips to look for gingival or oral mucosal injury						
8	Type of tooth and whether permanent or primary						
9	Look for any torn soft tissue, foreign body or fracture of the alveolar bone						
10	All lost teeth and fragments should be accounted for, including examining chest and soft tissues of mouth						
	Total						

FEEDBACK _____



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DEPARTMENT OF ORAL AND MAXILLOFACIAL SURGERY

FINAL PROFESSIONAL BDS

SUTURING OSAT FORM

DATE: _____ GROUP: _____ ALLOTTED TIME: _____ TOTAL MARKS: _____ MARKS OBTAINED: _____

STUDENT NAME: _____ ROLL #: _____ EXAMINER NAME & SIGN _____

SCALE: NOT DONE=0, UNSATISFACTORY=1, SATISFACTORY=2, FAIR=3, GOOD=4, OUTSTANDING=5

SR.NO	POINTS OBSERVED	0	1	2	3	4	5
1.	THE SELECTION OF APPROPRIATE SUTURE MATERIAL.						
2.	SUTURE PACK IS OPENED IN CORRECT MANNER.						
3.	SUTURE NEEDLE IS BEING HELD IN TWO THIRDS OF ITS POSITION.						
4.	HOLDING OF SOFT TISSUE ATRAUMATICALLY.						
5.	NEEDLE IS BEING PASSED THROUGH THE TISSUE AT PERPENDICULAR LEVEL.						
6.	<u>SIMPLE INTERRUPTED (IF NEEDED):</u> PASSING OF SUTURE NEEDLE FROM MOBILE TO IMMOBILE TISSUE.						
7.	<u>HORIZONTAL MATRESS (IF NEEDED):</u> NEEDLE IS PASSED FROM ONE EDGE OF INCISION LINE TO ANOTHER & AGAIN FROM THE LATTER EDGE TO THE FIRST EDGE & KNOT IS TIED.						
8.	<u>VERTICAL MATRESS (IF NEEDED):</u> NEEDLE IS PASSED FROM ONE EDGE OF INCISION LINE TO ANOTHER DEEPLY THAN AGAIN LATTER EDGE TO THE FIRST EDGE SUPERFICIALLY AND KNOT IS TIED.						
9.	KNOT IS TIED TWO TURNS CLOCKWISE & ONE TURN ANTICLOCKWISE.						
10.	SUTURE IS PLACED AT EQUAL DISTANCE ON BOTH SIDES OF INCISION LINE.						
11.	SUTURE IS PLACED AT EQUAL DEPTH ON BOTH SIDES OF INCISION LINE.						
12.	SUTURE CLOSED WITHOUT TENSION ON INCISION LINE.						
13.	PLACEMENT OF KNOT AWAY FROM INCISION LINE.						
14.	THERE IS NO EVERSION OF INCISION LINE AFTER SUTURE PLACEMENT						
15.	OVERALL ABILITY TO PERFORM THE PROCEDURE						

FEEDBACK _____



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DEPARTMENT OF ORAL AND MAXILLOFACIAL SURGERY

FINAL PROFESSIONAL BDS

Date: _____ Group: _____ Allotted Time: _____ Total Marks: _____ Marks Obtained: _____

Student Name: _____ Roll NO: _____ Examiner name & Sign: _____

INTERMAXILLARY FIXATION (TO MAKE AN EYELET)

Scale: Not Done=0, Unsatisfactory=1, Satisfactory=2, Fair=3, Good=4, Outstanding=5

SR.NO	POINTS OBSERVED	0	1	2	3	4	5
1.	Selection of appropriate wire gauge						
2.	Wire stretched in appropriate manner with the appropriate instrument.						
3.	Cut a wire inch length of wire						
4.	Equalizing both legs of wire						
5.	Give 3-4 turns to make an eyelet						
6.	Holding of eye with appropriate instrument						
7.	Both ends pass Buccogingivally through gingival embrasure and drawn lingually						
8.	One end taken circumferentially around distal tooth and drawn to buccal side through distal embrasure						
9.	One end taken circumferentially around mesial tooth and drawn to buccal side through mesial embrasure						
10.	Distal end passed through the loop						
11.	Both ends tied by twisting clockwise on mesial side with twister						
12.	Twisted ends are cut with wire cutter and bend away from gingival						

FEEDBACK _____



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ORAL AND MAXILLOFACIAL SURGERY

ORAL AND MAXILLOFACIAL SURGERY

SUPERVISOR EVALUATION				
Name of the supervisor				
Department			Date	
Name of the supervisee				
Excellent	Very good	Good	Fair	Unsatisfactory
<i>Use the rankings above to rate the supervisor in relation to the following statements.</i>				
1. Very prompt when supervising & is dependable in times of any consultation.				
2. Very committed & interested in his supervision work.				
3. Displays respect on personal individual differences on his supervisee.				
4. Examines supervisor-supervisee relationship.				
5. Delivers relevant information on time.				
6. Helps in improving your personal & professional growth.				
7. Demonstrates interest & awareness of your professional & developmental levels.				
8. Able to identify & call attention to errors in a tactful manner.				
9. Makes specific suggestion to you when you need them.				
10. Delivers presentation on time.				
<i>Using on rating level provided in the scale above, give your overall rating of the performances of the supervisor.</i>				



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STUDENT FEEDBACK FORM



The supervisor should evaluate the student as objective as possible by circling the number in each range that best describes the student performance for that character.

STUDENT'S NAME: _____

ROLL NO.: _____

GROUP: _____

DATE: _____

ATTITUDE (DESIRE TO LEARN, ENTHUSIASM, CURIOSITY)	EXCELLENT	5	4	3	2	1	UNSATISFACTORY
SKILLS & ACCURACY IN WORK (DECISION-MAKING)	EXCELLENT	5	4	3	2	1	UNSATISFACTORY
QUANTITY OF WORK <ul style="list-style-type: none">• NO. OF DIAGNOSIS• NO. OF EXTRACTIONS1. UNDER SUPERVISION2. INDEPENDENTLY• NO. OF SURGICAL CASES ASSISTED	EXCELLENT	5	4	3	2	1	UNSATISFACTORY
QUALITY OF WORK <ul style="list-style-type: none">• ACCURACY• THOROUGHNESS• READINESS	EXCELLENT	5	4	3	2	1	UNSATISFACTORY
INTERPERSONAL RELATIONS (FACULTY, COLLEAGUES, STAFF) <ul style="list-style-type: none">• COURTEOUS• FRIENDLY	EXCELLENT	5	4	3	2	1	UNSATISFACTORY
ATTENDANCE (PRODUCTIVITY, RELIABILITY)	EXCELLENT	5	4	3	2	1	UNSATISFACTORY
COMMUNICATION SKILLS <ul style="list-style-type: none">• WRITTEN• VERBAL	EXCELLENT	5	4	3	2	1	UNSATISFACTORY
SOPs FOLLOWED <ul style="list-style-type: none">• INFECTION CONTROL• COVID-19	EXCELLENT	5	4	3	2	1	UNSATISFACTORY
TASKS ACCOMPLISHED <ul style="list-style-type: none">• PRESENTATIONS GIVEN• LOG BOOK MAINTENANCE• SEMINARS/WEBINARS/CONFERENCES ATTENDED	EXCELLENT	5	4	3	2	1	UNSATISFACTORY
EXTRA-CURRICULAR ACTIVITY <ul style="list-style-type: none">• RESEARCH PUBLISHED• DEBATES• POSTER COMPETITION• SPORTS PARTICIPATION• CHARITY WORK							



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SCORE:

EXCELLENT: 40-50

VERY GOOD: 35-39

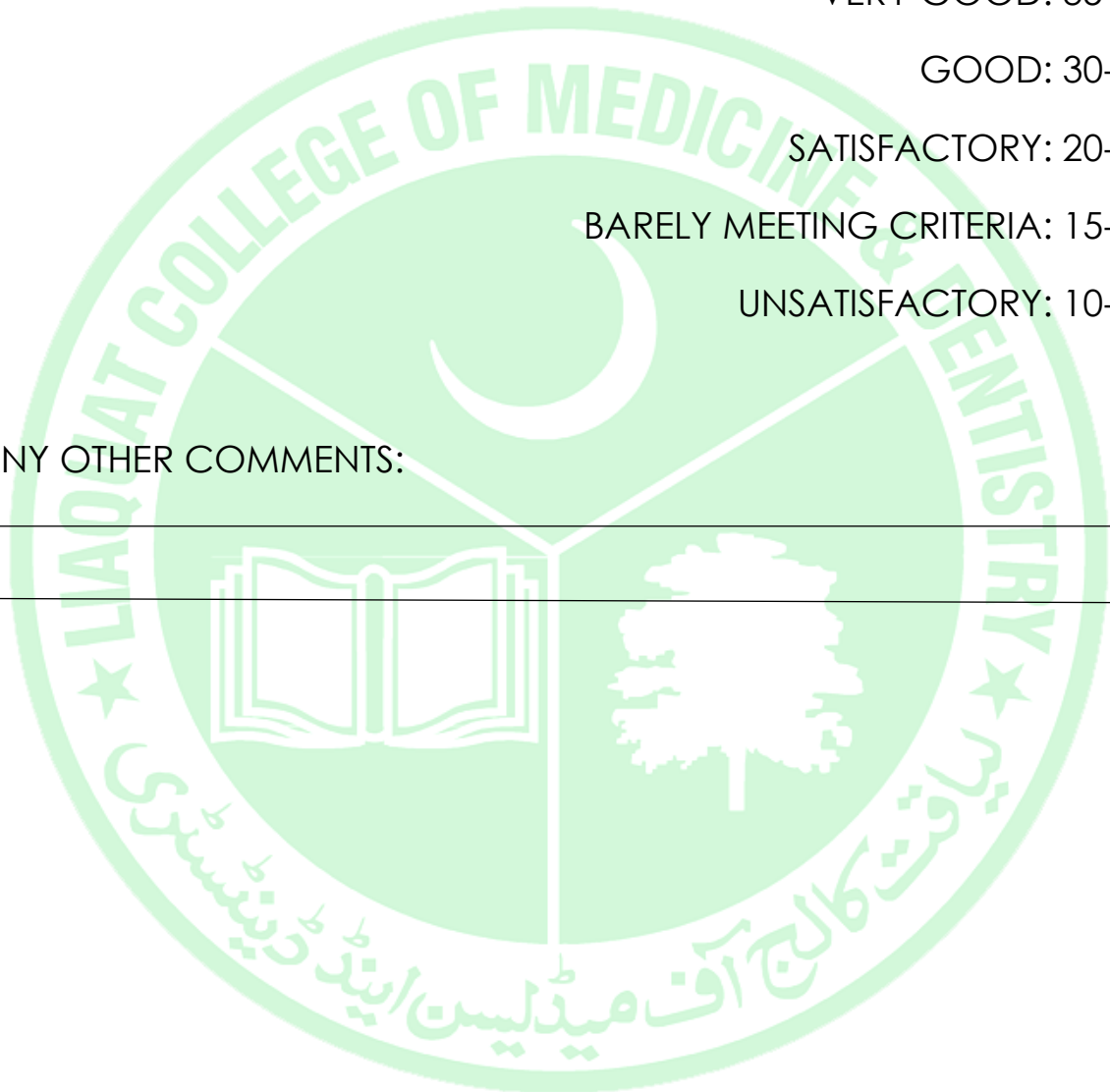
GOOD: 30-35

SATISFACTORY: 20-29

BARELY MEETING CRITERIA: 15-20

UNSATISFACTORY: 10-15

ANY OTHER COMMENTS:





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Mini-Clinical Evaluation Exercise

(mini-CEX) Rating Form

Basic Training

Trainee information

Trainee's/Student's name : Date of assessment : ____ / ____ / ____
 Year of Training/Studies : 1 2 3 4 Case number for that year : ☐ 1 ☐ 2 ☐ 3 ☐ 4
 (Full time equivalent)
 Assessor's name : Assessor's position :
 Assessor's email : Hospital/Location :
 Setting : ☐ In-patient ☐ Out-patient ☐ Emergency ☐ Other (please specify) :
 Patient problem/Dx(s) : Specialty :
 Patient age : Patient gender : ☐ Male ☐ Female Case complexity : ☐ Low ☐ Medium ☐ High

Strengths

Suggestions for development

If a trainee or student receives a rating that is unsatisfactory, the assessor must complete this section or the form will not be submitted.

Rate the trainee/student against what you'd expect of a trainee/student in that year of term.

	Unsatisfactory			Satisfactory			Superior			Not observed
1. Medical interviewing skills	1	2	3	4	5	6	7	8	9	n/o
2. Physical examination skills	1	2	3	4	5	6	7	8	9	n/o
3. Professional qualities/communication	1	2	3	4	5	6	7	8	9	n/o
4. Counselling skills	1	2	3	4	5	6	7	8	9	n/o
5. Clinical judgement	1	2	3	4	5	6	7	8	9	n/o
6. Organisation/efficiency	1	2	3	4	5	6	7	8	9	n/o
Overall clinical performance	1	2	3	4	5	6	7	8	9	

Time taken for observation : min

Time taken for feedback : min

Assessor satisfaction using mini-CEX LOW 1 2 3 4 5 6 7 8 9 HIGH

Trainee/Student satisfaction using mini-CEX LOW 1 2 3 4 5 6 7 8 9 HIGH

Data from formative assessments is collated for the purpose of evaluation. Individual, identifiable data will not be presented in any published reporting.

Assessor's signature : Trainee's/ Student's signature :

Input validated by supervisor :

(Supervisor to initial once they have checked electronic record against this paper record)

Ratings

Unsatisfactory - gaps in knowledge or skills that you would not expect at this level of training. Some concerns about professionalism or patient safety.

Satisfactory - what you would expect for a trainee at this level at this stage of their training year. Generally clinically competent and with satisfactory communication skills and professionalism.

Superior - performing well above the level they are at. No concerns about their clinical method, professionalism, organisation, communication etc.

The details below outline the skills associated with each domain in this mini-CEX rating form and the mini-CEX framework. Please note that not all skills may be examined during each encounter—this is a guide to show what may be observed and rated.

Medical Interviewing Skills

- Ability to interact with patient
- Ability to direct questions at key problem
- Ability to use second order of questioning to optimise focus
- Ability to incorporate information from questions with other information
- Ability to identify and respond appropriately to non-verbal cues
- Ability to retain a range of diagnostic options

Physical Examination Skills

- Ability to conduct a systematic and structured physical examination
- Shows sensitivity to patient's comfort and modesty
- Ability to detect abnormal signs when present and weigh the significance of these findings
- Informs patient
- Ability to focus the examination on the most important components
- Ability to integrate findings on examination with other information to clarify diagnosis

Professional Qualities / Communication

- Shows respect for patient at all times
- Explains as well as asks
- Listens as well as tells
- Conscious of potentially embarrassing or painful components of interaction
- Shows awareness of issues surrounding confidentiality
- Able to adapt questioning and examination to patient's responses

Counselling Skills

- Explains rationale for test/treatment
- Addresses the transfer of information in a way which is clear and tailored to the patient's needs
- Able to respond to patient and modify or repeat information in a different way
- Recognises patient's own wishes and gives them priority
- Avoids personal opinion and bias

Clinical Judgement

- Ability to weigh importance of potentially conflicting clinical data
- Ability to determine best choice of investigations and management
- Ability to relate management options to the patient's own wishes or situation
- Considers the risks and benefits of the chosen management/treatment options
- Ability to come to a firm decision based on available evidence

Organisation / Efficiency

- Ability to synthesise a collection of data quickly and efficiently
- Demonstrates appropriate judgement and synthesis
- Demonstrates optimal use of time in collection of clinical and investigational data



OPERATIVE DENTISTRY



LEARNING OUTCOMES

OPERATIVE DENTISTRY	
By the end of Final Years of BDS Programme, the dental graduate will be able to:	
Knowledge:	<ul style="list-style-type: none">• Apply basic concepts of Operative Dentistry to practice dentistry.• Independently assess patients presenting with defects of teeth; caries, dental trauma, tooth wear and developmental, while carrying out examination and relevant investigations to diagnose the problem.• Assess the patient for risk of caries, trauma and tooth wear and implement their preventive strategies.• Critically analyze clinical and radiographic findings of cases to recognize and differentiate between pulpal and periapical diseases.• Develop critical thinking to implement management plan for pulpal and periapical diseases.• Assess and refer patients with difficulty indices requiring consultation or treatment by specialist.• Articulate principles of scientific research required to practice evidence-based dentistry.
Skills:	<ul style="list-style-type: none">• Record comprehensive history including medical , social , psychological and past dental information alongwith identifying the presenting complaint• Perform thorough extra-oral and intra-oral examination and record the findings.• Formulate a treatment plan based on the patient-oriented problem list.• Demonstrate ability to obtain informed consent for all operative procedures.• Perform cavity preparation, utilizing minimally invasive procedures under rubber dam isolation, including proper instrument selection as well as manipulation, placement and finishing of restorative material so as to reconstruct and restore the tooth back to its normal shape, form and function.• Perform root canal treatment under rubber dam isolation including, access cavity preparation, root canal preparation and obturation followed by core buildup.• Restore an endodontically treated teeth including placement of endodontic post and crown where indicated so as to restore the form and function of the tooth.• Demonstrate management of medical or dental emergency in a dental setup• Write a referral letter for a treatment to be carried out by specialists
Attitude:	<ul style="list-style-type: none">• Educate patient regarding diet relevant to improve oral health.• Show empathy and respect in his/her attitude and behavior towards patients.• Draw upon existing knowledge and update through continuing dental education programmes thereby being a lifelong learner.• Demonstrate leadership while working in team with other health care professionals as dentists, dental assistants, hygienists and lab technicians etc.• Demonstrate honesty and integrity in all interactions with patients, families, colleagues and others.



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COURSE TOPIC: INTRODUCTION TO OPERATIVE DENTISTRY

Lecture Topic	Learning Objectives	Mode of Teaching		Assessment Tools
		Lectures	Clinical	
The field of Operative Dentistry	<ul style="list-style-type: none">➤ Define the term operative dentistry➤ Explain the significance of the operative dentistry	Lecture (1)		

COURSE TOPIC: BIOLOGIC CONSIDERATIONS IN OPERATIVE DENTISTRY

Lecture Topic	Learning Objectives	Mode of Teaching		Assessment Tools
		Lectures	Clinical	
Review of dental anatomy/ Biologic Considerations in Operative Dentistry	<ul style="list-style-type: none">➤ Discuss the chemical composition & structure of the following:<ul style="list-style-type: none">i) Enamelii) Dentiniii) Pulpiv) Cementumv) Gingiva➤ Describe the morphologic and histological structure of tooth tissues with their clinical impact on restorative dentistry➤ Explain the importance of dentogingival complex and biologic width in restorative dentistry.	Lecture (1)		Class Test Class Participation Final Examination

[illegible]



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COURSE TOPIC: PRELIMINARY CONSIDERATIONS IN OPERATIVE DENTISTRY

Lecture Topic	Learning Objectives	Mode of Teaching		Assessment Tools
		Lectures	Clinical	
Operating Positions	<ul style="list-style-type: none"> ➤ Justify the need for correct patient and operator positions when carrying out restorative procedures. <p>By the end of the Operative OPD rotation the student should be able to:</p> <ul style="list-style-type: none"> ➤ Demonstrate ideal operating position for various restorative procedures on patients in OPD. 	Lecture (2)	Tutorial/ Small Group Discussion	Class Test Class Participation Group Assignment Final Examination OSATS
Isolation	<ul style="list-style-type: none"> ➤ List the advantages of isolation for restorative procedures. ➤ Describe different methods used for isolation. ➤ List the armamentarium required for rubber dam isolation. ➤ Enumerate the advantages and disadvantages of rubber dam application. <p>By the end of the Operative OPD rotation the student should be able to:</p> <ul style="list-style-type: none"> ➤ Identify the instruments used for isolation in OPD. ➤ Demonstrate application and removal of rubber dam on model/simulated patient / given patient. 		Small Group Discussion On patient/ simulated patient	OSATS
Cross infection control	<ul style="list-style-type: none"> ➤ Define cross infection. ➤ Explain the exposure risks in dentistry. ➤ Discuss different methods of cross infection control in dental office. ➤ List universal/ standard precautions ➤ Describe blood borne infections ➤ Describe methods of hand hygiene ➤ Discuss vaccination/ immunization of dental health care professionals ➤ Discuss elements of personal protective equipment (PPE) ➤ Discuss management of dental sharps ➤ Discuss prevention of needle stick injury ➤ Discuss needle stick injury management ➤ Discuss dental waste disposal 	Lecture (1)	Orientation class in OPD	
Sterilization and Disinfection	<ul style="list-style-type: none"> ➤ Differentiate the following terms: <ol style="list-style-type: none"> i) Sterilization, ii) Disinfection, iii) Asepsis. ➤ Discuss the importance of sterilization and disinfection. ➤ List critical, semi critical and non-critical items. ➤ Discuss disinfection of dental unit water lines. ➤ List elements of a sterilization plan. ➤ List various methods used for sterilization. ➤ List chemicals that are used for disinfection. ➤ Discuss methods to monitor sterilization. <p>By the end of the Operative OPD rotation the</p>	Lecture (2)		

	<p>student should be able to :</p> <ul style="list-style-type: none"> ➤ Perform appropriate methods of sterilization, storage and removal of instruments from the autoclave. ➤ Demonstrate disinfection of dental units, instruments and impressions. ➤ Perform appropriate methods of disinfection of instruments used in OPD. ➤ Demonstrate the dental unit water line purging before use of hand piece. 		Tutorial/ Small Group Discussion	
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COURSE TOPIC: OCCLUSION

[illegible]



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COURSE TOPIC: ASSESSMENT OF RADIOGRAPHS

Lecture Topic	Learning Objectives	Mode of Teaching		Assessment Tools
		Lectures	Clinical	
Processing And Interpretation Of Radiographs	<ul style="list-style-type: none"> ➤ Describe x-ray equipment, films and processing of x-rays. ➤ Describe importance of radiographs in operative dentistry. ➤ Discuss ADA guidelines for prescribing radiographs. ➤ Identify anatomical and pathological structures of maxilla and mandible on a: <ol style="list-style-type: none"> Peri apical x-ray, Bite wing x-ray, Occlusal x-ray, Orthopantomogram (OPG) ➤ Discuss the indications and limitations of the following x-rays views for diagnostic purposes: <ol style="list-style-type: none"> Periapical x-ray, Bite wing x-ray, Occlusal x-ray, Orthopantomogram (OPG) ➤ List indications of CBCT in restorative dentistry and endodontics ➤ Interpret pathological findings seen on radiographs. ➤ Describe the biological effects of radiation ➤ Enumerate extra oral and intra oral radiographic films. By the end of the Operative OPD rotation the student should be able to: <ul style="list-style-type: none"> ➤ Identify the type of radiograph. ➤ Identify the anatomical structures observed in the radiograph. ➤ Identify the pathological findings seen in the radiograph. ➤ Demonstrate application of radiation protection equipment on patient before taking radiographs on patient. ➤ Demonstrate the radiograph taking and processing under supervision. ➤ Counsel the simulated patient/ given patient regarding findings of radiographs, their implication and possible solution. 	Lecture (2)	Tutorial/ Small Group Discussion On patient/ Simulated patient	Quiz Class Participation Final Examination (OSCE) OSATS



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COURSE TOPIC: DENTAL CARIES

Lecture Topic	Learning Objectives	Mode of Teaching		Assessment Tools
		Lectures	Clinical	
Etiology and Clinical Characteristics	<ul style="list-style-type: none"> ➤ Define dental caries ➤ Classify caries according to the ADA classification, ICDAS I and II, GJ Mount (others include classifications based on site, severity, tissue involved, occurrence, caries activity etc.) ➤ Discuss the etiology and pathogenesis of dental caries ➤ Describe factors influencing dental caries process ➤ Discuss the role of plaque/biofilm in progression of dental caries ➤ List the names of microorganisms responsible for dental caries ➤ Explain the Stephan's curve ➤ Explain clinical characteristics and progression of carious lesions as seen in: <ol style="list-style-type: none"> Pit and fissures Smooth surfaces Root surfaces ➤ Describe the progression of carious lesions in: <ol style="list-style-type: none"> Enamel and Dentin ➤ Discuss the different zones of enamel and dentin caries in an histological section 	Lecture (5)		Class Test Quiz Class Participation Final Examination
Diagnosis and Management	<ul style="list-style-type: none"> ➤ Differentiate between detection and diagnosis of dental caries ➤ Discuss methods of detection and diagnosis of dental caries in patients on the bases of clinical and radiographic examination ➤ Explain International Caries Detection and Assessment System (ICDAS II) ➤ Discuss principles of minimal invasive dentistry ➤ Describe Caries Management by Risk Assessment (CAMBRA). ➤ Discuss significance of caries risk assessment. ➤ Discuss caries management by the medical model ➤ Discuss protocols and strategies for prevention of dental caries ➤ Explain non-invasive options for treatment of existing lesions / resin infiltration technique ➤ Define caries control restorations and ART ➤ Describe the clinical protocol for caries control restorations ➤ Justify a logical treatment plan sequence for restoring a patient's dentition ➤ Discuss maintenance care and recall visit intervals for individuals based on risk assessment ➤ State the role of saliva in protection against caries ➤ Justify the use of pits and fissure sealant. ➤ Discuss the indication of preventive resin restoration. ➤ By the end of the Operative OPD rotation the student should be able to: ➤ Take comprehensive medical & dental history of the patient present with dental caries in the OPD. 	Lecture (3)		Class Test Quiz Class Participation Final Examination
			Tutorial/ Small Group Discussion	



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	<ul style="list-style-type: none"> ➤ Perform extra and intraoral examination on a patient presenting with dental caries in the OPD. ➤ Diagnose dental caries based on clinical and radiographic examination. ➤ Assess dental caries risk for a patient. ➤ Formulate a treatment plan for the patient present with dental caries in the OPD. ➤ Counsel patients regarding measures to prevent dental diseases. ➤ Make a maintenance care and recall visit interval plan for patients based on risk assessment. ➤ Demonstrate application of fissure sealants in children presenting in OPD. 		(CBL)	On patient/ simulated patient	Mini CEX/ OSATS
Management of Deep Carious Lesion	<ul style="list-style-type: none"> ➤ Define the following terms: <ol style="list-style-type: none"> Stepwise excavation Indirect pulp cap Direct pulp cap (carious and iatrogenic) ➤ Describe the rationale of stepwise excavation of carious lesion ➤ Discuss various possible reactions of pulp-dentin complex to deep carious lesion ➤ Enumerate materials that can be used for direct and indirect pulp cap ➤ Describe the clinical protocol for direct and indirect pulp cap procedures ➤ By the end of the Operative OPD rotation student should be able to: <ul style="list-style-type: none"> ➤ Plan treatment according to the extent of carious lesion. ➤ Demonstrate the clinical protocol for direct and indirect pulp cap on patients. 	Flip Classroom (1)		Tutorial/ Small Group Discussion	Class Test Quiz Class Participation Final Examination

COURSE TOPIC: PRINCIPLES OF CAVITY DESIGN AND PREPARATION

Lecture Topic	Learning Objectives	Mode of Teaching		Assessment Tools
		Lectures	Clinical	
Principles of Cavity Design and Preparation	<ul style="list-style-type: none"> ➤ Enumerate the objectives of tooth preparation ➤ List factors that need to be considered before tooth preparation. ➤ Describe G.V Black's principle of tooth preparation and compare with current concepts. ➤ List the steps in the initial and final stages of tooth preparation. ➤ State shortcomings of Black's cavity classification. ➤ Describe the advances in material science that have made cavity preparation minimally invasive. 	Lecture (1) TBL (1)		Class Participation Group Assignment Final Examination



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COURSE TOPIC: INSTRUMENTS AND EQUIPMENT FOR TOOTH PREPARATION

Lecture Topic	Learning Objectives	Mode of Teaching		Assessment Tools
		Lectures	Clinical	
Instruments and Equipment for Tooth Preparation	<ul style="list-style-type: none"> ➤ List various cutting and non cutting hand instruments. ➤ Discuss the design features for hand cutting instruments. ➤ Discuss common design characteristics of rotary cutting instruments (dental burs) ➤ Discuss the nomenclature for hand cutting instruments. ➤ Describe sharpening procedure of hand instruments. ➤ Describe rotary cutting equipment and instruments ➤ Describe the various instrument grasp techniques that can be employed. ➤ Describe latest developments for tooth preparation and caries removal including: <ol style="list-style-type: none"> i) Lasers, ii) Ozone, iii) Air abrasion. ➤ Discuss hazards with cutting instruments and their prevention. <p>By the end of the Operative OPD rotation the student should be able to:</p> <ul style="list-style-type: none"> ➤ Identify the hand and rotatory instrument. ➤ Demonstrate correct selection of an instrument for the required task. ➤ Demonstrate various instrument grasp techniques that can be employed. 	Lecture (2)	<p>Tutorial/ Small Group Discussion</p> <p>On Patient</p>	Class Participation Final Examination OSCE

COURSE TOPIC: DIRECT RESTORATIVE MATERIALS

Lecture Topic	Learning Objectives	Mode of Teaching		Assessment Tools
		Lectures	Clinical	
Review of Restorative Materials	<ul style="list-style-type: none"> ➤ State the composition of following direct filling materials: <ol style="list-style-type: none"> i) Amalgam, ii) GIC, (RMGIC) iii) Composite. ➤ List the properties, uses, merits and shortcomings of following direct filling materials: <ol style="list-style-type: none"> i) Amalgam, ii) GIC, (RMGIC) iii) Composite. <p>By the end of the Operative OPD rotation the student should be able to:</p> <ul style="list-style-type: none"> ➤ Demonstrate mixing of dental cements. ➤ Demonstrated clinical handling of restorative materials while restoring teeth on patients. 	Lecture (4)	<p>Tutorial/ Small Group Discussion</p> <p>On Patient</p>	Quiz Class Participation Final Examination OSCE



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COURSE TOPIC: AMALGAM RESTORATIONS

Lecture Topic	Learning Objectives	Mode of Teaching		Assessment Tools
		Lectures	Clinical	
Amalgam Restorations	<ul style="list-style-type: none"> ➤ Discuss chemistry of dental amalgam. ➤ List advantages and disadvantages of amalgam restorations. ➤ Discuss mercury hazards and hygiene. 	Lecture (5)	Tutorial/ Small Group Discussion	Class Test Class Participation Final Examination
Class I cavity preparation for amalgam restoration.	<ul style="list-style-type: none"> ➤ Describe the outline form of a class I cavity for amalgam restoration. ➤ Discuss ways of improving resistance and retention form of a simple class I restoration. ➤ Justify ways of improving resistance and retention of complex class I restorations. ➤ Describe bonded amalgam restorations. ➤ Describe the mechanism of amalgam bonding. ➤ Describe placement of amalgam in simple and complex class I cavities. <p>By the end of the Operative OPD rotation the student should be able to:</p> <ul style="list-style-type: none"> ➤ Demonstrate the cavity preparation of class I and restoration on phantom teeth and patients in operative OPD. ➤ Demonstrate the handling and manipulation of amalgam restoration on phantom teeth and patients in operative OPD. ➤ Demonstrate the handling and disposal of mercury waste in class I. 			OSATS
Class II cavity preparation for amalgam restoration.	<ul style="list-style-type: none"> ➤ Describe class II cavity preparation for amalgam restoration. ➤ Explain outline form of a class II cavity for amalgam restoration. ➤ Discuss other cavity preparation designs e.g. box only preparation, tunnel preparation, slots preparation. ➤ Justify ways of improving resistance and retention form of a simple class II restoration. ➤ Discuss ways of improving resistance and retention of complex class II restorations. ➤ Justify the need for cuspal coverage with special reference to rule of thirds. ➤ Enumerate types of dentin pins. ➤ Describe method of placement of dentin pins. ➤ Discuss importance of matrices and wedging. ➤ List various types of matrix band systems. ➤ List various parts of a tofflemire. ➤ Describe the method of using a tofflemire. <p>By the end of the Operative OPD rotation the student should be able to:</p> <ul style="list-style-type: none"> ➤ Demonstrate the cavity preparation of class II and restoration on phantom teeth and patients in operative OPD. ➤ Placement of tofflemire and wedge on patient when restoring multi surface cavities. ➤ Demonstrate the handling and manipulation of amalgam restoration on phantom teeth and patients in operative OPD. ➤ Demonstrate the handling and disposal of mercury waste in class II 	Lecture (2)	Tutorial/ Small Group Discussion On Patient	OSATS



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COURSE TOPIC: BONDING TO ENAMEL AND DENTINE

Lecture Topic	Learning Objectives	Mode of Teaching		Assessment Tools
		Lectures	Clinical	
Bonding to enamel and dentine	<ul style="list-style-type: none">➤ List advantages of adhesive techniques, over conventional/ non-adhesive methods.➤ Describe the structure of enamel,➤ Justify why it is a favorable substrate for bonding.➤ Describe the structure of dentin➤ Differentiate between the structure of enamel and dentine➤ Discuss the effect of smear layer on dentin bonding.➤ Explain the effect of Configuration Factor (C factor) on bonding.➤ List scientific classification of modern adhesives.➤ Explain the effect of acid conditioning on enamel.➤ Discuss difficulties in dentine conditioning.➤ Discuss chemistry of primers and adhesive resin (bonding agent).➤ Explain the importance of hybridization for effective dentine bonding.➤ Discuss Self-etch adhesives.➤ Describe 1st - 7th generation adhesives.➤ Summarize steps involved in enamel bonding.➤ Summarize steps in dentin bonding.➤ Describe the bond strength under optimal conditions.	Lecture (3)		Class Test Class Participation Final Examination



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COURSE TOPIC: DIRECT COMPOSITE RESTORATIONS

Lecture Topic	Learning Objectives	Mode of Teaching		Assessment Tools
		Lectures	Clinical	
Esthetic considerations	<ul style="list-style-type: none"> ➤ Discuss esthetic considerations in diagnosis and treatment planning ➤ Describe different esthetic parameters to be taken into account before planning a restoration. 	Lecture (6)		Quiz Class Participation Final Examination
Direct Anterior Composite Restorations Class III & IV	<ul style="list-style-type: none"> ➤ Discuss the chemistry of anterior composites. ➤ List factors influencing shade selection. ➤ Explain guidelines for shade matching. ➤ Describe various methods of shade selection. ➤ Outline cavity preparation for class 3 & 4 restorations. ➤ Discuss importance of matrices and wedges in anterior restoration. ➤ Outline composite placement technique for class 3 and 4 restorations. ➤ List various type of matrices and wedges use for composite restoration. ➤ Discuss different instruments used for finishing and polishing of composite restorations and their use By the end of the Operative OPD rotation the student should be able to: ➤ Perform preoperative evaluation before placing an anterior composite restoration. ➤ Prepare Class III and IV cavity for composite placement. ➤ Demonstrate placement of appropriate matrix and wedges on patients when restoring teeth with composite. ➤ Demonstrate placement of composite resin in the prepared cavity. ➤ Perform finishing and polishing of composite restorations 		Tutorial/ Small Group Discussion On patient	OSATS
Composite veneers	<ul style="list-style-type: none"> ➤ List indications, contraindications, advantages and disadvantages of direct composite veneers. ➤ List clinical steps for placing direct resin composites veneer. ➤ Explain the technique for diastema closure with direct composite. ➤ Enumerate different instruments used for finishing and polishing of composite veneers and their use. 			
Direct Posterior Composite Restorations Class I,II & VI	<ul style="list-style-type: none"> ➤ Discuss indications, contraindications, advantages and disadvantages of composite resin as a posterior restorative material. ➤ Describe preoperative evaluation for a posterior composite restoration. ➤ Outline features of a class 1 and 2 cavity for composite restoration. ➤ Justify the need for of pre-wedging in class 2 composites. ➤ Explain bonded base technique. ➤ Describe for composite restorations: 	Lecture (5)		Quiz Class Participation Final Examination



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	<p>I. Box only preparation, II. Tunnel preparation, III. Slot preparation.</p> <ul style="list-style-type: none"> ➤ Classify matrix systems available for composite restorations. ➤ Compare circumferential and sectional matrix systems. ➤ Outline placement technique of class I and II cavity for composite restoration ➤ Justify different methods to minimize polymerization shrinkage when placing composite. ➤ List different methods to create a tight contact for class 2 composite restorations. ➤ List various resin polymerization equipment. ➤ Summarize other cavity preparation designs e.g. box only preparation, tunnel preparation. ➤ Describe cavity preparation and restoration of a class 6 lesion <p>By the end of the Operative OPD rotation the student should be able to:</p> <ul style="list-style-type: none"> ➤ Perform preoperative evaluation for a posterior composite restoration. ➤ Prepare Class I, II and VI cavity preparation for composite restorations. ➤ Perform placement of appropriate matrix and wedges on patients when restoring teeth with composite. ➤ Demonstrate placement of composite resin in the prepared cavity. ➤ Perform finishing and polishing of composite restorations 			
Fissure sealants	<ul style="list-style-type: none"> ➤ Discuss indications, contraindications of fissure sealants. ➤ List factors affecting retention of fissure sealants. ➤ Describe placement technique for fissure sealants. <p>By the end of the Operative OPD rotation the student should be able to:</p> <ul style="list-style-type: none"> ➤ Place fissure sealant on extracted tooth and on patients. 		Tutorial/ Small Group Discussion On patient	OSATS
Preventive resin restoration	<ul style="list-style-type: none"> ➤ Discuss indications and advantages of preventive resin restoration. ➤ Outline placement technique of preventive resin restoration <p>By the end of the Operative OPD rotation the student should be able to:</p> <ul style="list-style-type: none"> ➤ Place preventive resin restoration on extracted tooth and on patients. 		Extracted Tooth/On patient Extracted Tooth/On patient	



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COURSE TOPIC: CLASS 5 RESTORATIONS & ROOT CARIES

Lecture Topic	Learning Objectives	Mode of Teaching		Assessment Tools
		Lectures	Clinical	
Class 5 Restorations	<ul style="list-style-type: none"> ➤ Describe cavity preparation for class 5 restorations. ➤ Explain non-surgical and surgical techniques for isolating class 5 restorations. ➤ Discuss restorative materials available for restoring class 5 lesions. ➤ List ways of improving retention of class 5 composite restorations. <p>By the end of the Operative OPD rotation the student should be able:</p> <ul style="list-style-type: none"> ➤ Prepare class V cavity and restore with appropriate material 	Lecture (2)	Extracted Tooth/On patient	Class Participation Final Examination OSATS
Diagnosis and Treatment of Root Caries	<ul style="list-style-type: none"> ➤ Define root caries. ➤ Describe appearance and location of root caries. ➤ List etiology and risk factors associated with root caries. ➤ Discuss preventive and chemotherapeutic strategies to manage root caries. ➤ Discuss available restorative materials for treating root caries. <p>By the end of the Operative OPD rotation the student should be able to:</p> <ul style="list-style-type: none"> ➤ Diagnose root caries based on clinical and radiographic findings ➤ Demonstrate removal of root caries on patients followed by preparation of root surface and restoration with appropriate material. 	Lecture (1)	On patient	Quiz Class Test Class Participation Final Examination



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COURSE TOPIC: TOOTH SURFACE LOSS

Lecture Topic	Learning Objectives	Mode of Teaching		Assessment Tools
		Lectures	Clinical	
Tooth Surface Loss	<ul style="list-style-type: none"> ➤ Define the following types of tooth surface loss: <ol style="list-style-type: none"> Abrasion, Attrition, Erosion, Abfraction. ➤ State the etiology of. <ol style="list-style-type: none"> Abrasion, Attrition, Erosion, Abfraction. ➤ Describe the pathogenesis, prevention and management of tooth surface loss. 	Lecture (2) Flip Class Room (1)		Class Test Class Participation Final Examination
Dentinal Hypersensitivity	<ul style="list-style-type: none"> ➤ Define dentinal hypersensitivity. ➤ List etiology of dentinal hypersensitivity ➤ Explain pathogenesis, prevention and management of dentine hypersensitivity. <p>By the end of the Operative OPD rotation the student should be able to:</p> <ul style="list-style-type: none"> ➤ Diagnose case with tooth surface loss ➤ Formulate treatment plan for patients having advanced tooth wear. ➤ Treat the dentition with tooth surface loss. ➤ Manage patient with tooth surface loss. 		Tutorial/ Small Group Discussion On patient/ Simulated patient	

COURSE TOPIC: DISCOLORATION OF TEETH

Lecture Topic	Learning Objectives	Mode of Teaching		Assessment Tools
		Lectures	Clinical	
Discoloration of Teeth	<ul style="list-style-type: none"> ➤ Classify tooth discoloration according to etiology ➤ Describe mode of action of bleaching agent on stains. ➤ Discuss complications of bleaching ➤ Discuss commonly used bleaching agents and their strengths. ➤ List indications and contraindications of various types of bleaching techniques. ➤ Explain technique for: <ol style="list-style-type: none"> In-office vital bleaching At-home vital bleaching Non-vital bleaching. ➤ Outline brief procedure for microabrasion and macro abrasion. <p>By the end of the Operative OPD rotation the student should be able to:</p> <ul style="list-style-type: none"> ➤ Take comprehensive history of patients coming with discolored teeth. ➤ Diagnose the cause of discoloration in patients presenting with discolored teeth. ➤ Formulate treatment plan for the patient coming with discolored teeth ➤ Counsel patients about procedure and prognosis of treatment. 	Lecture (2) Flip Class Room (1)	Tutorial/ Small Group Discussion On patient/ Simulated patient	Quiz Class Participation Final Examination



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COURSE TOPIC: ENDODONTICS

Lecture Topic	Learning Objectives	Mode of Teaching		Assessment Tools
		Lectures	Lectures	
Biology of Dental Pulp and Periradicular Tissue	<ul style="list-style-type: none"> ➤ Recognize the anatomic regions of pulp and their clinical importance. ➤ List the functions of the pulp dentin complex. ➤ Give brief overview of the blood vessels and lymphatics of pulp. ➤ Discuss distribution and function of the neural components of pulp. ➤ Discuss changes in pulp morphology with age. ➤ Describe the structure and function of periradicular tissues. 	Lecture (2)		Class Test Quiz Class Participation Final Examination
Pain Activation And Transmission	<ul style="list-style-type: none"> ➤ Define pain. ➤ Explain the process of pain activation and transmission. ➤ Discuss theories of dentin sensitivity. ➤ Describe the features of different pulpal nerve fibers. ➤ Explain pathway of efferent nerves from pulp to central nervous system. ➤ Differentiate between odontogenic and non odontogenic pain. ➤ Manage dentinal hypersensitivity. <p>By the end of the Operative OPD rotation the student should be able:</p> <ul style="list-style-type: none"> ➤ Formulate treatment plan for patients coming with dentinal hypersensitivity. 	Lecture (2)	Tutorial/ Small Group Discussion (CBL) On Patient	Class Test Quiz Class Participation Final Examination
Preserving Pulp Vitality	<ul style="list-style-type: none"> ➤ Describe physiologic and structural characteristics of pulp and how it affects pulp response to injury. ➤ Give physical, chemical, bacterial cause of pulpal inflammation. ➤ Explain iatrogenic effects on the dental pulp by: <ul style="list-style-type: none"> i) Local anesthetics with vasoconstrictor, ii) Cavity/ crown preparation (thermal shock) iii) Depth of cavity preparation, iv) Various restorative materials, v) Placement of pins, vi) Polishing restorations, vii) Post-restoration hypersensitivity, viii) Orthodontic tooth movement, ix) Vital bleaching. ➤ Discuss the formation and role of tertiary dentin in pulp protection. ➤ Summarize preventive measures adopted during dental restorative procedures to preserve pulp vitality. 	Lecture (4)		Class Test Quiz Class Participation Final Examination



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COURSE TOPIC: PULPITIS AND ITS SEQUELAE

Lecture Topic	Learning Objectives	Mode of Teaching		Assessment Tools
		Lectures	Clinical	
Pulpitis and Its Sequelae	<p>By the end of lecture the student should be able :</p> <ul style="list-style-type: none">➤ Explain mechanism of spread of inflammation in the pulp.➤ Explain anatomical feature of pulp responsible for irreversible inflammation to injurious stimuli.➤ Diagnose pulp with different pathological status.➤ List treatment options for different pulpal status.	Lecture (2) Flip Class Room (1)		Class Test Quiz Class Participation Final Examination

COURSE TOPIC: ENDODONTIC MICROBIOLOGY

Lecture Topic	Learning Objectives	Mode of Teaching		Assessment Tools
		Lectures	Clinical	
Endodontic Microbiology	<ul style="list-style-type: none">➤ Describe the routes of entry of microorganisms to the pulp and peri radicular tissues.➤ Enumerate different types of endodontic infections.➤ List the various microbial species involved in different types of endodontic infections.➤ Describe ecology of endodontic microbiota and features of endodontic ecosystem.	Lecture (1)		Class Test Class Participation

COURSE TOPIC: PULP AND PERIRADICULAR PATHOSIS

Lecture Topic	Learning Objectives	Mode of Teaching		Assessment Tools
		Lectures	Clinical	
Pulp and Periradicular Pathosis	<ul style="list-style-type: none"> ➤ Classify pulpal diseases ➤ Classify periradicular lesions of pulpal origin. ➤ Describe etiological factors of pulp inflammation. ➤ Explain mechanism of spread of inflammation in pulp. ➤ Explain why the pulp has difficulty in recovering from severe injury. ➤ List specific and non-specific indicators of pulpal inflammation. ➤ Describe the clinical and histological features of pulp diseases. ➤ Describe the mechanisms and consequences of spread of pulpal inflammation into periradicular tissues. ➤ Describe the clinical and histological features of periradicular lesions of pulp diseases. ➤ Explain steps involved in repair of periapicalpathosis. ➤ Distinguish non-endodontic lesions that may simulate endodontic periradicularpathosis. <p>By the end of the Operative OPD rotation the student should be able to:</p> <ul style="list-style-type: none"> ➤ Diagnose a patient presenting with pulpal and periapical disease in OPD. ➤ Formulate treatment plan for patients presenting with pulpal and periapicalpathosis. 	Lecture (1) Flip Class Room (1)	<p></p> <p>Tutorial/ Small Group Discussion</p> <p>On patient/ Simulated patient</p>	<p>Class Test Quiz Class Participation Final Examination Group Assignment</p> <p>Mini CEX / DOPS</p>



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COURSE TOPIC: ENDODONTIC RADIOLOGY

Lecture Topic	Learning Objectives	Mode of Teaching		Assessment Tools
		Lectures	Clinical	
Endodontic Radiology	<ul style="list-style-type: none"> ➤ Describe importance of radiographs in endodontics. ➤ Identify normal anatomic structures of maxilla and mandible on periapical radiographs. ➤ Differentiate between endodontic and non-endodontic radiolucencies & radiopacities according to their characteristics. ➤ Explain radiographic characteristics of periapical lesions of endodontic origin. ➤ Justify reasons for varying horizontal and vertical cone angulations to create image shift. ➤ Describe the SLOB rule. ➤ Describe new technologies for radiographic imaging. By the end of the Operative OPD rotation the student should be able to: ➤ Identify endodontic and non endodontic finding on x-rays. ➤ Demonstrate the proper cone position for the paralleling technique according to the site of examination. ➤ Demonstrate the proper cone position for the bisecting technique according to the site of examination. ➤ Demonstrate SLOB rule of radiography while taking x-ray. 	Lecture (2)	<p>Tutorial/ Small Group Discussion</p> <p>On Patient</p>	<p>Class Test</p> <p>Class Participation</p> <p>Group Assignment</p> <p>Final Examination</p> <p>OSATS</p>



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COURSE TOPIC: ENDODONTIC DIAGNOSIS AND TREATMENT PLAN

Lecture Topic	Learning Objectives	Mode of Teaching		Assessment Tools
		Lectures	Clinical	
Endodontic Diagnosis and Treatment Plan	<ul style="list-style-type: none"> ➤ Discuss importance of medical and dental history in formulation of treatment plan ➤ Discuss elements of clinical examination. ➤ List various vitality tests and sensibility test along with advantages and limitations. ➤ Correlate radiographic findings to the history and clinical examination. ➤ Discuss factors affecting case selection in endodontics. ➤ Describe the common medical diseases that may influence endodontic treatment planning. ➤ Elaborate special considerations in planning treatment for geriatric patients. ➤ State the importance of an informed consent before any treatment. ➤ Assess endodontic case difficulty. ➤ Describe the importance of referral to an endodontist in certain cases. <p>By the end of the Operative OPD rotation the student should be able to:</p> <ul style="list-style-type: none"> ➤ Take medical and dental history of patient presenting to dental OPD. ➤ Perform extra and intraoral examination on patients. ➤ Demonstrate vitality/sensibility testing on simulated patients and given patients. ➤ Interpret findings of various vitality tests in clinical settings. ➤ Diagnose pulpal and periapical pathosis in patients based on history, clinical and radiographic examination. ➤ Develop a treatment plan. ➤ Take an informed consent before any treatment. ➤ Formulate a referral letter to an endodontist when required based on endodontic case difficulty assessment 	Lecture (4) Flip Class Room (1)	<p>Tutorial/ Small Group Discussion</p> <p>On patient/ Simulated patient</p>	<p>Class Test Class Participation Group Assignment Final Examination</p> <p>Mini CEX/ OSATS</p>



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COURSE TOPIC: PULP ANATOMY

Lecture Topic	Learning Objectives	Mode of Teaching		Assessment Tools
		Lectures	Clinical	
Pulp Anatomy	<ul style="list-style-type: none">➤ Correlate the shape of pulp system to root anatomy.➤ Define pulp space.➤ List significance of iatrogenic or developmental defects with age factors that may cause alterations in pulp anatomy.➤ List major components of pulp space.➤ Determine variations in the pulp system in apical third.➤ Determine radiographic distance from occlusal/incisal surface to the roof of chamber.➤ Describe accessory canals.➤ Discuss relationship between anatomic, radiographic and actual location of apical foramen.➤ By the end of the Operative OPD rotation the student should be able to:➤ Identify the internal and external anatomy of teeth in sagittal and cross section.	Lecture (2)	Tutorial/ Small Group Discussion	Class Test Quiz Class Participation Individual Assignment Final Examination

COURSE TOPIC: INSTRUMENTS IN ENDODONTICS

Lecture Topic	Learning Objectives	Mode of Teaching		Assessment Tools
		Lectures	Clinical	
Instruments in Endodontics	<ul style="list-style-type: none">➤ List basic sets of instruments appropriate for various endodontic procedures.➤ State the general physical properties of instruments.➤ Describe the design of common canal preparation instruments and their use to prevent breakage within the canal.➤ Explain the basis for sizing and taper of hand operated instruments (ISO)➤ Describe proper use of instruments to prevent breakage within the canal.➤ Recognize visible changes in instruments that will predispose them to breakage.➤ Explain techniques for sterilization and disinfection of endodontic instruments.➤ Describe nickel titanium rotary instruments.➤ By the end of the Operative OPD rotation the student should be able to:➤ Identify different types of endodontic instruments.➤ Demonstrate correct selection of an endodontic instrument for the required task.	Lecture (3)	Tutorial/ Small Group Discussion	Class test Quiz Class Participation Final Examination OSCE

COURSE TOPIC: LOCAL ANESTHESIA IN ENDODONTIC

Lecture Topic	Learning Objectives	Mode of Teaching		Assessment Tools
		Lectures	Clinical	
Local Anesthesia in Endodontic	<ul style="list-style-type: none"> ➤ Define pain threshold ➤ Explain factors affecting pain threshold. ➤ List techniques that are helpful in giving "painless" injections. ➤ Describe the "routine" approach to conventional local anesthesia. ➤ Describe circumstances that create difficulties in obtaining profound anesthesia. ➤ List indications and contraindications of local anesthesia ➤ List complications of local anesthesia ➤ Justify use of obtaining pulpal anesthesia. ➤ Summarize techniques of intraosseous, periodontal ligament, and intrapulpal injections. By the end of the Operative OPD rotation the student should be able to: ➤ Demonstrate the administration of intraosseous, periodontal ligament and intra pulpal anesthesia. ➤ Perform administration of topical anesthesia before starting root canal treatment on patients. ➤ Perform local anesthesia (infiltration and block) before starting root canal treatment on patients. ➤ Perform administration of intrapulpal anesthesia on patients. 	Lecture Clinical Teaching (2)	Tutorial/ Small Group Discussion On patient	Class Test Quiz Class Participation Final Examination



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COURSE TOPIC: ISOLATION, ENDODONTIC ACCESS, AND LENGTH DETERMINATION

Lecture Topic	Learning Objectives	Mode of Teaching		Assessment Tools
		Lectures	Clinical	
Isolation	<ul style="list-style-type: none"> ➤ Describe various methods of isolation in endodontics with emphasis on rubber dam isolation. 	Lecture Clinical Teaching (5)		Class Test Quiz Class Participation Individual Assignment Final Examination OSATS
Endodontic Access Cavity Preparation	<ul style="list-style-type: none"> ➤ Describe the importance of preoperative assessment as prerequisite for treatment success. ➤ State the importance of pre endodontic buildup. ➤ Describe the objectives, general principles, the procedure, armamentarium and sequence for access cavity preparation. ➤ Identify errors during access cavity preparation. ➤ Explain how to correct errors during access cavity preparation. ➤ Describe technique for locating canal orifices 			
Working Length Determination	<ul style="list-style-type: none"> ➤ Describe average length and canal configuration of various teeth with reference to the laws of canal orifice location. ➤ Describe various methods of working length determination. <p>By the end of the Operative OPD rotation the student should be able to:</p> <ul style="list-style-type: none"> ➤ Demonstrate rubber dam application prior to endodontic treatment. ➤ Draw outline of access cavity of given tooth. ➤ Prepare access cavity on single rooted teeth (extracted teeth/patients). ➤ Determine working length of single rooted teeth (extracted teeth/patients) with the help of radiograph & apex location. 		<p>Tutorial/ Small Group Discussion</p> <p>On patient/ Extracted Tooth</p>	



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COURSE TOPIC: CLEANING AND SHAPING

Lecture Topic	Learning Objectives	Mode of Teaching		Assessment Tools
		Lectures	Clinical	
Cleaning and Shaping	<ul style="list-style-type: none"> ➤ Differentiate pulp space infection and other body tissue infection. ➤ Describe biological and mechanical objectives of cleaning and shaping of pulp space. ➤ Explain the concept of apical patency. ➤ Describe various instruments movements. ➤ Describe different techniques of canal preparation. ➤ Explain how to minimize preparation errors in curved canal. ➤ Discuss management of calcified canals. ➤ Justify use of Nickel Titanium (NiTi) rotary instruments and efficacy over stainless steel files. ➤ Explain the importance, properties and irrigation technique of root canal irrigants. ➤ List commonly used root canal irrigants <p>By the end of the Operative OPD rotation the student should be able to:</p> <ul style="list-style-type: none"> ➤ Perform pulpectomy of single rooted teeth (extracted teeth/patients), with conventional endodontic instruments ➤ Demonstrate correct irrigation technique during root canal preparation. ➤ Perform cleaning and shaping of root canal on extracted, endoblock and patients. 	Lecture Clinical Teaching (4) TBL (1)	Tutorial/ Small Group Discussion On patient/ Extracted Tooth	Class Test Quiz Class Participation Final Examination OSATS

COURSE TOPIC: INTRA CANAL MEDICAMENTS AND TEMPORARY FILLING MATERIALS

Lecture Topic	Learning Objectives	Mode of Teaching		Assessment Tools
		Lectures	Clinical	
Intra Canal Medicaments and Temporary Filling Materials	<ul style="list-style-type: none"> ➤ List different microorganisms involved in endodontic pathosis. ➤ Define intra canal medicament. ➤ Discuss the properties, role, method of application and instruments used in intra-canal, inter-appointment medicaments. ➤ Categorize various agents used as intra-canal medicament. ➤ Describe the method of application used in intra-canal medication. ➤ List temporary filling materials ➤ Describe techniques for placement and removal of temporary material. <p>By the end of the Operative OPD rotation the student should be able to:</p> <ul style="list-style-type: none"> ➤ Demonstrate the placement of intracanal medicament inside the canal using appropriate instruments. ➤ Demonstrate the placement and removal of temporary filling. 	Lecture (2)	Tutorial/ Small Group Discussion On patient	Class Test Class Participation Final Examination



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COURSE TOPIC: ROOT CANAL OBTURATION

Lecture Topic	Learning Objectives	Mode of Teaching		Assessment Tools
		Lectures	Clinical	
Root Canal Obturation	<ul style="list-style-type: none"> ➤ Describe the rationale of obturation. ➤ Give reasons why inadequate obturation may result in treatment failure. ➤ Recognize the clinical criteria that determine time of obturation. ➤ List the properties of ideal core obturation material and sealers. ➤ Name core obturation materials, sealer and obturation. ➤ Describe the composition and properties of guttapercha. ➤ Write down advantages and disadvantages of each core material. ➤ List properties of ideal sealer. ➤ Justify the need for using a sealer during obturation. ➤ Outline briefly lateral condensation technique. ➤ Describe briefly other techniques used for obturation. ➤ Discuss the radiographic criteria for evaluating the quality of Obturation. <p>By the end of the Operative OPD rotation the student should be able to:</p> <ul style="list-style-type: none"> ➤ Perform obturation of single rooted teeth (extracted teeth/patients) with cold lateral condensation method. 	Lecture (4)	<p>Tutorial/ Small Group Discussion</p> <p>On patient/ Extracted Tooth</p>	<p>Quiz</p> <p>Class Participation</p> <p>Final Examination</p> <p>OSATS</p>



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COURSE TOPIC: PROCEDURAL ACCIDENTS

Lecture Topic	Learning Objectives	Mode of Teaching		Assessment Tools
		Lectures	Clinical	
Procedural Accidents	<ul style="list-style-type: none">➤ Describe causes, prevention and treatment of procedural accidents during :<ul style="list-style-type: none">i) Access cavity preparation,ii) Cleaning and shaping,iii) Obturation.➤ Describe the following errors including their management:<ul style="list-style-type: none">i. Transportation,ii. Ledging,iii. Elbow,iv. Zipping,v. Root perforations- apical,vi. middlevii. and coronal,viii. Separated instruments,ix. Aspiration and ingestion,x. Hypochlorite accident,xi. Air Emphysema.➤ Identify various procedural errors on clinical and/or radiographic slides➤ Justify how procedural errors can affect the prognosis of treatment. <p style="text-align: center;">By the end of the Operative OPD rotation the student should be able to:</p> <ul style="list-style-type: none">➤ Counsel patients after clinical mishap.(breaking bad news)	Lecture (3)		Class Test Class Participation Individual Assignment Final Examination
			Tutorial/ Small Group Discussion	



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COURSE TOPIC: ENDODONTIC EMERGENCIES

Lecture Topic	Learning Objectives	Mode of Teaching		Assessment Tools
		Lectures	Clinical	
Endodontic Emergencies	<ul style="list-style-type: none"> ➤ Identify causes of endodontic emergencies pretreatment, inter-appointment and post obturation. ➤ Discuss the difficulties in diagnosing and treating a patient presenting with an endodontic emergency. ➤ Explain the importance of sequential approach of management of endodontic emergencies. ➤ Describe how to manage various endodontic emergencies including: <ol style="list-style-type: none"> Painful irreversible pulpitis, Necrotic pulp with symptomatic apical periodontitis, Acute apical abscess, Symptomatic apical periodontitis. ➤ Identify inter-appointment and post-obturation flare up. ➤ Describe management of inter-appointment and post-obturation flare up. ➤ Explain pharmacological therapy used in emergency and its role in controlling pain and infection. ➤ List the indications and contraindications for prescribing analgesics, antibiotics, anti-inflammatory agents and anxiolytics. <p>By the end of the Operative OPD rotation the student should be able to:</p> <ul style="list-style-type: none"> ➤ Develop a treatment plan consisting of appropriate endodontic and pharmacologic strategies for managing pain, anxiety, and infection. ➤ Write down a prescription for pain and infection control in patients presenting with endodontic pain. ➤ Write a reference letter to physician. 	Lecture (3) Flip Class Room (1)	Tutorial/ Small Group Discussion	Quiz Class Participation Final Examination



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COURSE TOPIC: RESTORATION OF ENDODONTICALLY TREATED TOOTH

Lecture Topic	Learning Objectives	Mode of Teaching		Assessment Tools
		Lectures	Clinical	
Restoration of Endodontically Treated Tooth	<ul style="list-style-type: none">➤ Differentiate between endodontically treated teeth from vital teeth.➤ Explain the importance of coronal seal.➤ Illustrate options available for restoring endodontically treated teeth.➤ Explain ferrule effect.➤ Describe indications of post placement in anterior and posterior teeth.➤ Describe Nayyar Core.➤ Classify post according to their characteristics.➤ Describe ideal dimensions of a post.➤ Describe common post systems, their advantages and disadvantages.➤ Describe the method of placement of prefabricated and cast post.➤ Discuss core materials and their placement.➤ Discuss complications that can occur during placement of post.	Lecture (3) TBL (1)		Class Participation Final Examination



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COURSE TOPIC: ENDODONTIC RETREATMENT

Lecture Topic	Learning Objectives	Mode of Teaching		Assessment Tools
		Lectures	Clinical	
Nonsurgical Endodontic Retreatment	<ul style="list-style-type: none">➤ State rationale of endodontic retreatment and indication.➤ Discuss the alternatives to endodontic retreatment.➤ Explain technique of accessing root canal through extra coronal restorations.➤ Explain technique of removing crown and posts.➤ Discuss various types of canal obstructions and their management.➤ Explain the techniques for guttapercha removal.➤ Explain the role of intra-canal medicament in retreatment.	Lecture (2)		Class Test Class Participation Final Examination
Endodontic Surgery	<ul style="list-style-type: none">➤ Justify the need of endodontic surgery alone or in combination with nonsurgical root canal therapy.➤ Describe situations when endodontic surgery is contraindicated.➤ Define the terms:<ul style="list-style-type: none">i) Incision for drainage,ii) Apical curettage,iii) Root-end resection,iv) Root-end preparationv) Root-end filling,vi) Root amputation,vii) Hemisection,viii) Bicuspidization.➤ Discuss indications and steps for the above mentioned procedures.➤ State principles of flap design.➤ Illustrate various flap designs.➤ Describe in brief procedures involved in periradicular surgery.➤ Explain prognosis of endodontic surgical cases.	Lecture (4)		Class Participation Final Examination



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COURSE TOPIC: MANAGEMENT OF TRAUMATIC DENTAL INJURIES

Lecture Topic	Learning Objectives	Mode of Teaching		Assessment Tools
		Lectures	Clinical	
MANAGEMENT OF TRAUMATIC DENTAL INJURIES	<p>➤ Describe the clinical and radiographic features of</p> <ul style="list-style-type: none"> • enamel fractures, • uncomplicated crown fractures, • complicated crown fractures, • crown root fracture, • root fractures, • luxation injuries: <p>concussion, subluxation, luxation (lateral, extrusive, and intrusive),</p> <ul style="list-style-type: none"> • avulsion, and • alveolar fracture. <p>➤ Describe possible short- and long-term responses of pulp & periradicular tissues to injuries listed previously.</p> <p>➤ List pertinent information needed when examining patients with dental injuries (health history, nature of injury, and symptoms).</p> <p>➤ Describe the diagnostic tests and procedures used in examining patients with dental injuries and interpret the findings.</p> <p>➤ Describe appropriate treatment strategies (immediate and long term) for various types of traumatic injuries.</p> <p>➤ Recognize surface resorption, inflammatory (infection related) resorption, and replacement (ankylosis-related) resorption, and</p> <p>➤ Describe their respective treatment strategies.</p> <p>➤ Describe the differences on treatment strategies for traumatic dental injuries in primary and permanent dentition.</p> <p>By the end of the Operative OPD rotation the student should be able to:</p> <p>➤ Take medical and dental history of patient presenting with dental traumatic injury to dental OPD.</p> <p>➤ Perform extra and intraoral examination on patients.</p> <p>➤ Interpret findings of various types of traumatic injuries in clinical settings.</p> <p>➤ Diagnose pulpal and periapical status in patients with traumatic injury to teeth based on history, clinical and radiographic examination.</p> <p>➤ Formulate treatment plan for the patient coming with traumatic dental injuries.</p> <p>➤ Counsel patients about procedure and prognosis of treatment.</p> <p>➤ Take an informed consent before any treatment.</p>	Lecture (3) TBL (1)		Quiz Class Participation Final Examination
			Tutorial/ Small Group Discussion (CBL)	Mini CEX / DOPS
			On patient	



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COURSE TOPIC: ROOT RESORPTION

Lecture Topic	Learning Objectives	Mode of Teaching		Assessment Tools
		Lectures	Clinical	
ROOT RESORPTION	<ul style="list-style-type: none">➤ Define the following types of root resorption.<ul style="list-style-type: none">i) External inflammatory resorptionii) External cervical resorptioniii) Internal root resorption.➤ Describe the etiology and pathogenesis of<ul style="list-style-type: none">i) External inflammatory resorptionii) External cervical resorptioniii) Internal root resorption.➤ Describe the clinical and histological features of<ul style="list-style-type: none">i) External inflammatory resorptionii) External cervical resorptioniii) Internal root resorption.➤ Describe the management of.<ul style="list-style-type: none">i) External inflammatory resorptionii) External cervical resorptioniii) Internal root resorption.➤ Explain the follow-up and prognosis of root resorption.	Lecture (1)		Class Participation Final Examination



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COURSETOPIC: LONGITUDINAL TOOTH FRACTURES

Lecture Topic	Learning Objectives	Mode of Teaching		Assessment Tools
		Lectures	Clinical	
Longitudinal Tooth Fractures	<ul style="list-style-type: none"> ➤ Differentiate among the following: <ol style="list-style-type: none"> Craze line, Cusp fracture, Cracked tooth, Split tooth, Vertical root fracture. ➤ List the causes of various types of longitudinal tooth fracture mentioned above. ➤ Describe symptoms and clinical features of fracture tooth. ➤ Discuss the treatment, prognosis and prevention of a crack/ fracture at various levels. <p>By the end of the Operative OPD rotation the student should be able to:</p> <ul style="list-style-type: none"> ➤ Diagnose longitudinal tooth fractures in patients based on history, clinical and radiographic examination. 	Lecture (2)	Tutorial/ Small Group Discussion (CBL) On patient	Quiz Class Participation Final Examination Mini CEX / DOPS

COURSETOPIC: ENDODONTIC AND PERIODONTAL INTER RELATIONSHIP

Lecture Topic	Learning Objectives	Mode of Teaching		Assessment Tools
		Lectures	Clinical	
Endodontic and Periodontal Inter Relationship	<ul style="list-style-type: none"> ➤ Describe possible paths of communication between pulpal and periodontal tissue. ➤ Classify endodontic-periodontal lesions. ➤ Differentiate between lesions of endodontic or periodontal origin based on clinical, radiographic and histopathological features. ➤ Justify treatment options of endodontic and periodontal lesions. 	Lecture (1) Flip Class Room (1)		Quiz Class Participation Final Examination



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COURSETOPIC: INDIRECT RESTORATIONS

Lecture Topic	Learning Objectives	Mode of Teaching		Assessment Tools
		Lectures	Clinical	
Review of Restorative Materials	<ul style="list-style-type: none">➤ Discuss the composition, properties, merits and shortcomings of materials used for indirect restorations:<ul style="list-style-type: none">I. Metals,II. Ceramics.	Lecture (2)		Quiz Class Participation Final Examination

COURSETOPIC: PARTIAL COVERAGE INDIRECT RESTORATIONS

Lecture Topic	Learning Objectives	Mode of Teaching		Assessment Tools
		Lectures	Clinical	
Partial Coverage Indirect Restorations	<ul style="list-style-type: none">➤ List<ul style="list-style-type: none">I. Various partial and full coverage indirect restorations.II. Materials available for fabrication of these restorations,III. Materials that are used for cementation.➤ Explain the principles of tooth preparation for indirect restorations.➤ Discuss the indications and contraindications for provision of:<ul style="list-style-type: none">I. Inlay,II. Onlay.➤ Describe the clinical assessment required and the steps of preparation for:<ul style="list-style-type: none">I. Inlay,II. Onlay.➤ Explain soft tissue management and impression making for inlays and onlays.➤ List laboratory steps for partial coverage indirect restorations.➤ Describe the clinical procedure for cementation of indirect restoration.➤ Describe the latest innovations for fabrication of indirect restoration including CAD-CAM technology.	Lecture (2)		Quiz Class Participation Final Examination



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COURSETOPIC: PORCELAIN VENEERS

Lecture Topic	Learning Objectives	Mode of Teaching		Assessment Tools
		Lectures	Clinical	
Porcelain Veneers	<ul style="list-style-type: none">➤ List indications and contraindications for veneers.➤ Describe the diagnostic procedures involved in treatment planning of veneers.➤ Justify the importance of quality and quantity of enamel for predictable bonding.➤ Discuss tooth preparation, soft tissue management and impression making for veneers.➤ Explain methods of temporization after veneer preparation.➤ Describe step by step procedure of veneer placement.➤ Describe the importance of silane coupling agent and hydrofluoric acid in bonding of porcelain veneer.➤ Identify techniques for intra oral repair of indirect restorations.	Lecture (2)		Class Test Class Participation Final Examination

COURSETOPIC: FULL COVERAGE INDIRECT RESTORATIONS

Lecture Topic	Learning Objectives	Mode of Teaching		Assessment Tools
		Lectures	Clinical	
Full Coverage Indirect Restorations	<ul style="list-style-type: none">➤ List the indications and contraindications for:<ul style="list-style-type: none">i. Porcelain jacket crown,ii. Porcelain fused to metal crown,iii. All metal crown,iv. All ceramic crown.➤ Describe factors influencing shade selection.➤ Discuss guidelines for accurate shade matching.➤ Explain various methods of shade selection.➤ Describe the clinical assessment required and the steps of preparation for:<ul style="list-style-type: none">i. Porcelain jacket crown,ii. Porcelain fused to metal crown,iii. All metal crown,iv. All ceramic crown.➤ List materials available for these restorations.<ul style="list-style-type: none">i) Porcelain jacket crown,ii) Porcelain fused to metal crown,iii) All metal crowniv) All ceramic crown.➤ Discuss soft tissue management and impression making for full coverage restorations.➤ State the clinical steps for tooth preparation for full coverage restorations➤ Elaborate laboratory steps for full coverage indirect restorations.➤ Describe the clinical procedure for cementation of full coverage indirect restoration.➤ Discuss the latest innovations including CAD-	Lecture (3)		Class Test Class Participation Final Examination OSATS



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	<p>CAM technology By the end of Operative OPD rotation final year student would be able to:</p> <ul style="list-style-type: none">➤ Demonstrate the tooth preparation for crown on phantom/extracted teeth/patients.➤ Prepare anterior and posterior teeth (on phantom head/extracted) for full-coverage Porcelain-fused to metal crown and all ceramic crowns		<p>Tutorial/ Small Group Discussion</p> <p>On phantom head / Extracted Tooth</p>	
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COURSETOPIC: IMPLANT SUPPORTED RESTORATIONS

Lecture Topic	Learning Objectives	Mode of Teaching		Assessment Tools
		Lectures	Clinical	
Implant Supported Restorations	<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.	Lecture (2)		Class Test Class Participation Final Examination



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OPERATIVE DENTISTRY

1ST WEEK
Day 01:
<ul style="list-style-type: none">• ORIENTATION Introduction to OPD<ul style="list-style-type: none">◦ Discipline, protocols and ground rules◦ Patient allotment• Log book and Instruments• Practical demonstration of<ul style="list-style-type: none">◦ History taking◦ Extra and intra oral examination◦ vitality testing (thermal tests and electric pulp test)◦ PDL probing◦ Occlusal relations b/w teeth• Diagnosis and treatment planning.• Parts of dental unit• Patient receiving, seating and chair positioning
Day 02:
<ul style="list-style-type: none">• Instrument identification and uses
Day 03:
<ul style="list-style-type: none">• Disinfection and sterilization of instruments• Disinfection of dental units• Method of sterilization, storage and removal from autoclave.• Management of needle stick injury• Cavity preparation on phantom teeth - class i and ii
Day 04:
<ul style="list-style-type: none">• Learning Patient Counseling• Patients counsel after clinical mishap.(Breaking Bad News)
2ndWEEK
Day 01:
<ul style="list-style-type: none">• CARIES<ul style="list-style-type: none">◦ Definition◦ Classification◦ Clinical examination.◦ Radiographic evaluation◦ Diagnosis and treatment planning.◦ Choice of filling material according to cavity design• Demonstration of calcium hydroxide lining application on class II cavity
Day 02:
<ul style="list-style-type: none">• Demonstration Of Preparation And Filling Of Class I/II Cavity With Composite Resin• MATRICING:<ul style="list-style-type: none">◦ Different types◦ Parts.◦ Application.• Isolation techniques.<ul style="list-style-type: none">◦ Rubber dam◦ Parts.◦ Techniques.• Application
Day 03:
<ul style="list-style-type: none">• RADIOGRAPHS• Demonstration of different techniques and their indications along with use of different cone indicators<ul style="list-style-type: none">◦ Bisecting angle technique◦ Paralleling technique◦ Bite wing◦ Slob rule.◦ Steps of film processing◦ Identification of different periapicalxrays◦ X ray file.• Cavity Preparation And Filling
Day 04:
<ul style="list-style-type: none">• OPD Test



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OPERATIVE DENTISTRY



3rdWEEK
Day 01:
<ul style="list-style-type: none">• PULPAL AND PERIAPICAL PATHOSIS<ul style="list-style-type: none">◦ Types◦ Diagnosis◦ Treatment options• Feedback Session I
Day 02:
<ul style="list-style-type: none">• LONGITUDINAL TOOTH FRACTURE<ul style="list-style-type: none">◦ History.◦ Examination.◦ Investigation diagnosis.◦ Management.• Cavity preparation and filling
Day 03:
<ul style="list-style-type: none">• Introduction to endodontics• Endodontic instruments• Endodontic materials
Day 04:
<ul style="list-style-type: none">• OPD Test
4thWEEK
Day 01:
<ul style="list-style-type: none">• Endodontic access cavity preparation
Day 02:
<ul style="list-style-type: none">• Cleaning and shaping of root canals
Day 03:
<ul style="list-style-type: none">• Obturation of prepared roots
Day 04:
<ul style="list-style-type: none">• OPD Test
5thWEEK
Day 01:
<ul style="list-style-type: none">• Introduction Of Fixed Prosthesis
Day 02:
<ul style="list-style-type: none">• Tooth preparation for crown on phantom/extracted teeth/patients
Day 03:
<ul style="list-style-type: none">• Observing and assisting senior during root canal treatment of multirooted tooth• Observing and assisting senior during procedure of tooth preparation for crown• Cavity preparation and filling• Root canal treatment on single rooted endoblock, extracted tooth and patient
Day 04:
<ul style="list-style-type: none">• OPD Test
6thWEEK
Day 01:
<ul style="list-style-type: none">• X-ray file discussion• Spot file discussion
Day 02:
<ul style="list-style-type: none">• Observing and assisting senior during procedure of tooth preparation for crown• Cavity preparation and filling• Root canal treatment on single rooted endoblock, extracted tooth and patient.• Revision• End of rotation assessment second feedback session II



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DEPARTMENT OF OPERATIVE DENTISTRY/ENDODONTICS

FINAL YEAR STUDENT'S RECORD SHEET

HISTORY, EXAMINATION, DIAGNOSIS, TREATMENT PLANNING AND CONSENT TAKING

S.No	Date	P.R No.	History	Examination	Pulp Vitality Test Type	Investigation	Diagnosis	Treatment Planning	Consent Taking	Competency level†	Grade	Initial

	*PULP VITALITY TEST TYP	† Competency Level:
1.	Thermal Vitality Test (Tvt)	Have Observed/Assisted And Is Familiar With The Steps
2.	Electric Pulp Tester (Ept)	Can Perform Under Supervision
3.		Can Perform Independently



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DEPARTMENT OF OPERATIVE DENTISTRY/ENDODONTICS

FINAL YEAR STUDENT'S RECORD SHEET

RESTORATIONS

S. No.	DATE	P.R No.	TOOTH#	PATIENT AND OPERATOR POSITION	RUBBER DAM APPLICATION	PROCEDURE TYPE†		LINING/BASES / ADHESIVES	MATRICING	INSTRUMENT / MATERIAL SELECTION FOR FILLING	CONTURING & CARVING	INSTRUMENT SELECTION FOR FINISHING & POLISHING	OCCLUSION	MERCURY DISPOSAL	POST OPERATIVE INSTRUCTIONS	ORAL HYGIENE INSTRUCTION	COMPETENCY LEVEL†	GRADE	INITIAL
						TYPE	CLASS												

	*PULP VITALITY TEST TYPE	† Competency Level:
1.	Amalgam Restoration (AR)	Have observed/assisted and is familiar with the steps
2.	Composite Restoration (CR)	Can perform under supervision
3.	Preventive Resin Restoration (PRR)	Can perform independently
4.	Fissure Sealant (FS)	
5.	Core Buildup without Post (CB)	
6.	Core Buildup with Post (CPB)	



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DEPARTMENT OF OPERATIVE DENTISTRY/ENDODONTICS

FINAL YEAR STUDENT'S RECORD SHEET

ENDODONTIC THERAPY

S.No.	DATE	P.R.No.	TOOTH#	PATIENT AND OPERATOR POSITION	PERSONAL PROTECTIVE EQUIPMENT	LOCAL ANESTHESIA TYPE	PROCEDURE TYPE†	RUBBER DAM APPLICATION	INSTRUMENT / MATERIAL SELECTION FOR ACCESS OPENING	WORKING LENGTH (mm)		INSTRUMENT/MATERIAL SELECTION FOR ROOT CANAL PREP	INSTRUMENT / MATERIAL SELECTION FOR OBSTRUCTION	POST OPERATIVE INSTRUCTIONS	ORAL HYGIENE INSTRUCTION	COMPETENCY LEVEL†	GRADE	INITIAL
										X-RAY	APEX LOCATOR							

	†Procedures type:	*Local Anesthesia Type	† Competency Level:
1.	Pulpectomy(PECT)	Block anesthesia(BA)	Have observed/assisted and is familiar with the steps
2.	RCT single rooted tooth (RS)	Infiltration anesthesia (IA)	Can perform under supervision
3.	RCT multi rooted tooth (RM)	Intrapulpal anesthesia (IP)	Can perform independently
4.	Emergency chamber opening(ECO)		



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CLINICAL QUOTA FOR FINAL YEAR BDS



S. NO	PROCEDURE	COMPETENCY		
		OBSERVE	PERFORM UNDER SUPERVISION	PERFORM INDEPENDENTLY
1.	History taking and informed consent	2	10	
2.	Clinical examination	2	10	
3.	Diagnosis and treatment planning	2	2	
4.	Placement of dental dam	2	5	
5.	Restorations	15	10	10
6.	Vital pulp therapy	5	3	
7.	Single rooted root canal treatment	3	2	



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CARIES RISK ASSESSMENT FORM

b Caries Risk Assessment Form (Ages >6)

Patient Name:
Birth Date:
Age:

Score:
Date:
Initials:

		Low Risk (0)	Moderate Risk (1)	High Risk (10)	Patient Risk
Contributing Conditions					
I.	Fluoride Exposure (through drinking water, supplements, professional applications, toothpaste)	Yes	No		
II.	Sugary or Starchy Foods or Drinks (including juice, carbonated or non-carbonated soft drinks, energy drinks, medicinal syrups)	Primarily at mealtimes		Frequent or prolonged between meal exposures/day	
III.	Caries Experience of Mother, Caregiver and/or Other Siblings (for patients ages 6-14)	No carious lesions in last 24 months	Carious lesions in last 7-23 months	Carious lesions in last 6 months	
IV.	Dental Home: established patient of record, receiving regular dental care in a dental office	Yes	No		
General Health Conditions					
I.	Special Health Care Needs*	No	Yes (over age 14)	Yes (ages 6-14)	
II.	Chemo/Radiation Therapy	No		Yes	
III.	Eating Disorders	No	Yes		
IV.	Smokeless Tobacco Use	No	Yes		
V.	Medications that Reduce Salivary Flow	No	Yes		
VI.	Drug/Alcohol Abuse	No	Yes		
Clinical Conditions					
I.	Cavitated or Non-cavitated (incipient) Carious Lesions or Restorations (visually or radiographically evident)	No new carious lesions or restorations in last 36 months	1 or 2 new carious lesions or restorations in last 36 months	3 or more carious lesions or restorations in last 36 months	
II.	Teeth Missing Due to Caries in past 36 months	No		Yes	
III.	Visible Plaque	No	Yes		
IV.	Unusual Tooth Morphology that compromises oral hygiene	No	Yes		
V.	Interproximal Restorations - 1 or more	No	Yes		
VI.	Exposed Root Surfaces Present	No	Yes		
VII.	Restorations with Overhangs and/or Open Margins: Open Contacts with Food Impaction	No	Yes		
VIII.	Dental/Orthodontic appliances (fixed or removable)	No	Yes		
IX.	Severe Dry Mouth (Xerostomia)	No		Yes	
TOTAL:					

Patient Instructions:

*Patients with developmental, physical, medical or mental disabilities that prevent or limit performance of adequate oral health care by themselves or caregivers.

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LIAQUAT COLLEGE OF MEDICINE AND DENTISTRY

Mini-Clinical Evaluation Exercise

(mini-CEX) Rating Form

Basic Training

Trainee information

Trainee's/Student's name : Date of assessment : ____ / ____ / ____
 Year of Training/Studies : 1 2 3 4 Case number for that year : ☐ 1 ☐ 2 ☐ 3 ☐ 4
 (Full time equivalent)
 Assessor's name : Assessor's position :
 Assessor's email : Hospital/Location :
 Setting : ☐ In-patient ☐ Out-patient ☐ Emergency ☐ Other (please specify) :
 Patient problem/Dx(s) : Specialty :
 Patient age : Patient gender : ☐ Male ☐ Female Case complexity : ☐ Low ☐ Medium ☐ High

Strengths

Suggestions for development

If a trainee or student receives a rating that is unsatisfactory, the assessor must complete this section or the form will not be submitted.

Rate the trainee/student against what you'd expect of a trainee/student in that year of term.

	Unsatisfactory			Satisfactory			Superior			Not observed
1. Medical interviewing skills	1	2	3	4	5	6	7	8	9	n/o
2. Physical examination skills	1	2	3	4	5	6	7	8	9	n/o
3. Professional qualities/communication	1	2	3	4	5	6	7	8	9	n/o
4. Counselling skills	1	2	3	4	5	6	7	8	9	n/o
5. Clinical judgement	1	2	3	4	5	6	7	8	9	n/o
6. Organisation/efficiency	1	2	3	4	5	6	7	8	9	n/o
Overall clinical performance	1	2	3	4	5	6	7	8	9	

Time taken for observation : min

Time taken for feedback : min

Assessor satisfaction using mini-CEX LOW 1 2 3 4 5 6 7 8 9 HIGH

Trainee/Student satisfaction using mini-CEX LOW 1 2 3 4 5 6 7 8 9 HIGH

Data from formative assessments is collated for the purpose of evaluation. Individual, identifiable data will not be presented in any published reporting.

Assessor's signature : Trainee's/ Student's signature :

Input validated by supervisor :

(Supervisor to initial once they have checked electronic record against this paper record)

Ratings

Unsatisfactory - gaps in knowledge or skills that you would not expect at this level of training. Some concerns about professionalism or patient safety.

Satisfactory - what you would expect for a trainee at this level at this stage of their training year. Generally clinically competent and with satisfactory communication skills and professionalism.

Superior - performing well above the level they are at. No concerns about their clinical method, professionalism, organisation, communication etc.

The details below outline the skills associated with each domain in this mini-CEX rating form and the mini-CEX framework. Please note that not all skills may be examined during each encounter—this is a guide to show what may be observed and rated.

Medical Interviewing Skills

- Ability to interact with patient
- Ability to direct questions at key problem
- Ability to use second order of questioning to optimise focus
- Ability to incorporate information from questions with other information
- Ability to identify and respond appropriately to non-verbal cues
- Ability to retain a range of diagnostic options

Physical Examination Skills

- Ability to conduct a systematic and structured physical examination
- Shows sensitivity to patient's comfort and modesty
- Ability to detect abnormal signs when present and weigh the significance of these findings
- Informs patient
- Ability to focus the examination on the most important components
- Ability to integrate findings on examination with other information to clarify diagnosis

Professional Qualities / Communication

- Shows respect for patient at all times
- Explains as well as asks
- Listens as well as tells
- Conscious of potentially embarrassing or painful components of interaction
- Shows awareness of issues surrounding confidentiality
- Able to adapt questioning and examination to patient's responses

Counselling Skills

- Explains rationale for test/treatment
- Addresses the transfer of information in a way which is clear and tailored to the patient's needs
- Able to respond to patient and modify or repeat information in a different way
- Recognises patient's own wishes and gives them priority
- Avoids personal opinion and bias

Clinical Judgement

- Ability to weigh importance of potentially conflicting clinical data
- Ability to determine best choice of investigations and management
- Ability to relate management options to the patient's own wishes or situation
- Considers the risks and benefits of the chosen management/treatment options
- Ability to come to a firm decision based on available evidence

Organisation / Efficiency

- Ability to synthesise a collection of data quickly and efficiently
- Demonstrates appropriate judgement and synthesis
- Demonstrates optimal use of time in collection of clinical and investigational data



ORTHODONTICS



LEARNING OUTCOMES

ORTHODONTICS	
By the end of Final Years of BDS Program, the dental graduate will be able to:	
Knowledge:	<ul style="list-style-type: none">• Identify the branches of orthodontics and evaluate the need of orthodontic problems.• Describe different research designs.• Describe the concept of normal and abnormal pattern of growth and development of craniofacial complex.• Establish a comprehensive diagnosis.• Analyze the diagnostic records.• Identify the cause of malocclusion.• Identify orthodontic problems and its features• Formulate a treatment plan.• Identify and differentiate different orthodontic appliances.• List the biomechanical requirements of different orthodontic appliances and their anchorage requirements.• Choose appropriate retention protocol and post treatment stability.
Skills:	<ul style="list-style-type: none">• To perform Steiner's and Down's analysis on the given Cephalometric Radiograph• To construct Z-spring, canine retractors, labial bow and Adam's clasp• To perform OPG analysis.• To perform cast analysis, space analysis and Bolton's analysis.• To differentiate between different orthodontics appliances.• To construct problem list.• To propose treatment plan of different types of malocclusions.
Attitude:	<ul style="list-style-type: none">• Work collaboratively with member of a team in classroom and/or laboratory activities



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COURSE TOPIC: INTRODUCTION TO ORTHODONTICS

Lecture topic	Topic objectives	Mode of teaching		Assessment Tool
The definitions of orthodontics	By the end of lecture student will be able to: 1. Define orthodontics and its branches 2. Discuss the indications, contraindications and aims of various types of orthodontic treatments 3. Differentiate between different types of treatments i.e i) Preventive, ii) interceptive, iii) corrective and iv) surgical treatment 4. Explain the need for orthodontic treatment on the basis of IOTN (Index of Orthodontic Treatment Need) with their advantages and disadvantages 5. Define malocclusion	Lecture	Lecture and Small Group Discussion	<ul style="list-style-type: none">• VIVA• BCQ• OSPE
Branches of orthodontics including serial extractions and space maintainers				
Aims and needs for orthodontic treatment				
Prevalence of malocclusion				
Advantages and disadvantages of orthodontic treatment				



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COURSE TOPIC: DEVELOPMENT OF DENTITION & OCCLUSION

Lecture topic	Topic objectives	Mode of teaching		Assessment Tool
Prenatal development of dentition	By the end of lecture student will be able to: 1. Outline pre-natal development of dentition and features of primary dentition 2. Differentiate between mixed and permanent dentition period 3. Discuss the dimensional changes occurring in dental arches between mixed and primary dentition period 4. Explain variations in development including size, form, number and position of teeth 5. Classify all the factors affecting development of dentition 6. Describe Nolla's stages of tooth development	Lectures	Lecture and small group discussions Flipped classroom	<ul style="list-style-type: none">• BCQ• VIVA• OSPE
Features of primary Dentition				
Mixed dentition Period				
Permanent dentition Period				
Dimensional changes in Dental Arch				
Variations in development including size, form, number and position of teeth				



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COURSE TOPIC: BIOLOGY OF TOOTH MOVEMENT

Lecture topic	Topic objectives	Mode of teaching		Assessment Tool
Normal structures responsible for tooth movement	By the end of lecture student will be able to: 1. Analyze normal structure and function of periodontal ligament and bone 2. Specify the role of bone in the physiological process of eruption and stabilization 3. Explain the effects of orthodontic force over periodontium 4. Enumerate all the factors affecting tooth movement	Lecture	Lecture and small group discussions	<ul style="list-style-type: none">• BCQ• Viva• OSPE
Effects of orthodontic force				
Cellular events associated with orthodontic force				
Theories of tooth movement				
Eruption theories				



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COURSE TOPIC: SPACE MANAGEMENT				
Lecture topic	Topic objectives	Mode of teaching		Assessment Tool
Space Management	<p>By the end of lecture student will be able to:</p> <ol style="list-style-type: none">1. Define space maintainer2. Enlist the types of space maintainers3. Outline the indications of different space maintainers4. Discuss the indications of space supervision.5. Discuss the indications of space regaining.6. Compare the indications and contra indications of space maintenance, space supervision and space regaining.7. Discuss serial extractions.8. Discuss the indications of serial extractions and its different methods.9. Discuss the management of habits leading to orthodontic problems	Lecture	Lecture and small group discussions Flipped classroom	<ul style="list-style-type: none">• BCQ• VIVA• OSPE



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COURSE TOPIC: GROWTH				
Lecture topic	Topic objectives	Mode of teaching		Assessment Tool
Basic concepts and Definitions	<p>By the end of lecture student will be able to:</p> <ol style="list-style-type: none"> Define growth and development Categorize all the factors affecting the craniofacial growth Explain pre-natal and post-natal growth of: <ol style="list-style-type: none"> Skull Cranial base Maxillae Mandible Classify different methods of studying growth on the basis of physical and experimental methods Predict stages of growth on the basis of Cervical Vertebral Maturation, hand and wrist radiograph, physical, biological and chronological aspects Describe the etiology and clinical features of different syndromes affecting craniofacial region Discuss various theories of growth Discuss the development of Temporomandibular joint. 	Lecture	Lecture and small group discussions	<ul style="list-style-type: none"> BCQ VIVA OSPE
Variables Affecting Growth			Flipped classroom	
Prenatal and Postnatal Craniofacial Growth				
Methods of studying Growth				
Theories of Growth				
Clinical application of Growth and Development/ Growth predictions using CVM and hand wrist				
Different syndromes effecting craniofacial region				



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COURSE TOPIC: CEPHALOMETRICS

Lecture topic	Topic objectives	Mode of teaching		Assessment Tool
Introduction to cephalostat	By the end of lecture student will be able to: 1. Identify cephalostat and its parts. 2. Discuss the indications of cephalostat. 3. Demonstrate the procedure of tracing and interpretation of cephalometric X-ray on the basis of Downs, Stieners and McNamara analysis.	Lecture	Lecture Demonstration in OPD rotation	<ul style="list-style-type: none"> BCQ VIVA OSPE
Indications for cephalometric evaluation			Flipped classroom	
Evaluating cephalometric radiograph. <ul style="list-style-type: none"> General points Planes and reference lines Downs and Stieners analysis Soft tissue analysis Interpretation of cephalometric radiograph 				

COURSE TOPIC: DIAGNOSTIC AIDS, CASE HISTORY AND CLINICAL EXAMINATION

Lecture topic	Topic objectives	Mode of teaching		Assessment Tool
History	By the end of lecture student will be able to: 1. Compile different procedures used in orthodontic diagnosis like: i) Record keeping ii) History taking 2. Demonstrate extra and Intra oral examination on the given patient. 3. Describe the diagnostic importance of various radiograph: i) Ceph ii) OPG iii) Occlusal view iv) Periapical view	Lecture	Lecture, flipped classroom, Demonstration on patient and on clinical features in OPD rotation and small group discussion.	<ul style="list-style-type: none"> BCQ's OSPE VIVA
Clinical Evaluation			Flipped classroom	
Extra oral examination				
Intra oral examination				



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COURSE TOPIC: ORTHODONTIC FUNCTIONAL APPLIANCES				
Lecture topic	Topic objectives	Mode of teaching		Assessment Tool
Removable appliances + Expansion appliances	<p>By the end of lecture student will be able to:</p> <ol style="list-style-type: none">1. Define growth modification treatment2. List growth modification appliances3. Discuss the biomechanics of functional appliances and orthopedic appliances4. Compare the indications and contra indications of all appliances5. Identify the components of the appliances on the given model	Lecture	Lecture Demonstration of Functional Appliances on patient, activation and mechanism of action	<ul style="list-style-type: none">• BCQ's• VIVA• OSPE



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COURSE TOPIC: ORTHODONTIC REMOVABLE & FIXED APPLIANCES

Lecture topic	Topic objectives	Mode of teaching		Assessment Tool
Removable appliances + Expansion appliances	<p>By the end of lecture student will be able to:</p> <ol style="list-style-type: none"> 1. Classify removable functional appliances. 2. Describe class II and Class III functional appliances 3. Discuss concepts, indications, drawbacks, components and accessories of growth modification appliances. 4. Discuss the biomechanics of fixed and removable growth modification appliances (Expanders, Facemask and chin cup) 	Lecture	Lecture Demonstration on removable and fixed Appliances, activation and mechanism of action	<ul style="list-style-type: none"> • BCQ's • VIVA • OSPE
Fixed Appliances	<p>By the end of lecture student will be able to:</p> <ol style="list-style-type: none"> 1. Discuss the background of different fixed appliances system. 2. Discuss the indications, draw backs, components and accessories of fixed appliances. 3. Describe various types of wires and brackets used in orthodontics. 4. Describe various bonding and banding materials 5. Discuss orthodontic emergencies and their management (use of wax, sliding of wire, poking wire). 6. Describe the following: <ul style="list-style-type: none"> • Wire system • Bonding and banding material • Edgewise and straight 			



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COURSE TOPIC: ETIOLOGY OF MALOCCLUSION				
Lecture topic	Topic objectives	Mode of teaching		Assessment Tool
Specific factors causing malocclusion	<p>By the end of lecture student will be able to:</p> <ol style="list-style-type: none"> Define <ol style="list-style-type: none"> Cross bite Rotations Labioversion Transposition Linguoversion Torsiversion Mesioversion Distoversion. Describe the role and effect of Para functional habits in the development of malocclusion Explain the local, general and environmental factors leading to malocclusion Classify malocclusion according to Angle's, Moyer's, Ackerman Proffit's and Andrew's classification. Discuss the following syndromes/conditions: <ol style="list-style-type: none"> - Treacher-Collins; - Pierre-Robin Syndrome; - Ectodermal Dysplasia; - Down's Syndrome; - Cleido-cranial Dysplasia; - Hemifacial Microsomia; - Achondroplasia. - Crouzon and Apert Syndrome - Fetal alcohol syndrome 	Lecture	Lecture and small group discussions Flipped classroom	<ul style="list-style-type: none"> BCQ's VIVA OSPE
General factors causing malocclusion				
Local factors causing malocclusion				
Environmental factors causing malocclusion				



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COURSE TOPIC: ERUPTION THEORIES

Lecture topic	Topic objectives	Mode of teaching		Assessment Tool
Basic concepts and Definitions	By the end of lecture student will be able to: 9. Classify different eruption theories. 10. Describe different eruption theories.	Lecture	Lecture and Small Group Discussion	<ul style="list-style-type: none">• VIVA• BCQ• OSPE

COURSE TOPIC: THEORIES OF TOOTH MOVEMENT

Lecture topic	Topic objectives	Mode of teaching		Assessment Tool
Basic concepts and Definitions	By the end of lecture student will be able to: 1. Classify different theories. 2. Describe different theories of tooth movement <ul style="list-style-type: none">• Pressure Tension theory• Fluid dynamic theory• Bone bending theory	Lecture	Lecture and Small Group Discussion	<ul style="list-style-type: none">• VIVA• BCQ• OSPE



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COURSE TOPIC: MECHANICS OF TOOTH MOVEMENT				
Lecture topic	Topic objectives	Mode of teaching		Assessment Tool
Basic concepts of Force, moment, moment arm and couple	By the end of lecture student will be able to: 1. Summarize the structure and function of PDL. 2. Classify various types of wires and alloys used in orthodontics on the basis of material 3. Compare different types of alloys used in orthodontic brackets and wires. 4. List the orthodontic arch wire materials 5. Discuss the ideal properties of orthodontic wires 6. Outline the effects of different orthodontic forces on tooth. 7. State the deleterious effects of orthodontic treatment	Lecture	Lecture and small group discussions	<ul style="list-style-type: none">• BCQ• OSPE• Viva
Center of resistance				
Center of rotation				
Orthodontic Materials				
Effects of force and its effects on periodontium.				



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COURSE TOPIC: TOOTH MASS AND SIZE ANALYSIS

Lecture topic	Topic objectives	Mode of teaching		Assessment Tool
Cast analysis and space analysis of mixed dentition	By the end of lecture and demo in OPD student will be able to: 1. Determine tooth size discrepancies on 5 models. 2. Perform cast, space, Bolton & mixed dentition analysis on 5 models.	Lecture	Lecture, Demonstration on cast in OPD	<ul style="list-style-type: none"> BCQ VIVA OSPE

COURSE TOPIC: ANCHORAGE IN ORTHODONTICS

Lecture topic	Topic objectives	Mode of teaching		Assessment Tool
Assessing anchorage requirements	By the end of lecture student will be able to: 1. Define Anchorage 2. Explain the role of anchorage in orthodontic treatment 3. Distinguish different types of anchorage on the basis of tooth movement 4. Summarize management of anchorage.	Lecture	Lecture and small group discussions	<ul style="list-style-type: none"> BCQ's OSPE Viva
Classification of anchorage			Flipped Classroom	
Intra-oral anchorage				
Extra-oral anchorage				
Monitoring anchorage during treatment				
Common problems with anchorage				



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COURSE TOPIC: TREATMENT PLANNING				
Lecture topic	Topic objectives	Mode of teaching		Assessment Tool
Treatment objectives	By the end of lecture student will be able to:	Lecture	Lecture, Demonstration of formulation of problem list and treatment planning on different cases	<ul style="list-style-type: none"> • BCQ's • OSPE • VIVA
Management of Class I malocclusion	1. List the treatment objectives of the given case			
Management of Class II malocclusion	2. Formulate problem list of 5 cases.			
Div I	3. Formulate treatment plan of 5 cases.			
Div II	4. Distinguish various types of Non-skeletal and skeletal problems which include:			
Management of Class III malocclusion	i) Class I malocclusion			
Management of open bite	ii) Class II Div I and Div II			
Management of Cross bite	iii) Class III			
Problem List	iv) Crowding			
	v) Spacing			
	vi) Cross bite			
	vii) Open bite			
	viii) Deep bite			
	ix) Extractions			
	5. Summarize various extraction patterns in orthodontic treatment of class I, II and III malocclusions			
	6. Discuss the adjunctive treatment goals and principles for the management of malocclusion			



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COURSE TOPIC: ORTHOGNATHIC SURGERY				
Lecture topic	Topic objectives	Mode of teaching		Assessment Tool
Orthognathic Surgery	<p>By the end of lecture student will be able to:</p> <p>Define the following:</p> <ul style="list-style-type: none">• Principles of Orthognathic surgery• Class II surgical treatment options• Class III surgical treatment options• Indications and contraindications.	Lecture	Lecture, Demonstration of formulation problem list on different cases	<ul style="list-style-type: none">• BCQ• VIVA• OSPE



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COURSE TOPIC: RETENTION AND RELAPSE (SEMESTER II)

Lecture topic	Topic objectives	Mode of teaching		Assessment Tool
Factors responsible for relapse	<p>By the end of lecture student will be able to:</p> <ol style="list-style-type: none">1. Define retention and relapse2. Explain occlusal stability and factors related to retention3. Discuss strategies for prevention of relapse in different malocclusions like:<ol style="list-style-type: none">i) Class I malocclusionii) Class II Div I and Div II (Growing and non-growing)iii) Class III (Growing and non-growing)iv) Crowdingv) Spacingvi) Cross bitevii) Open biteviii) Deep bite4. List indications and contra indications of different retention appliances5. Discuss various strategies of management of patients during and after orthodontic treatment	Lecture	Lecture and small group discussions	<ul style="list-style-type: none">• BCQ• VIVA• OSPE



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COURSE TOPIC: CLEFT LIP AND PALATE (SEMESTER II)

Lecture topic	Topic objectives	Mode of teaching		Assessment Tool
Introduction and etiology of cleft lip and palate	<p>By the end of lecture student will be able to:</p> <ol style="list-style-type: none">1. Define cleft lip and palate2. State various genetic and environmental causes of cleft lip and palate3. Discuss the etiology, clinical features, general and orthodontic management of cleft lip and palate4. Describe the referral pathways5. Discuss multidisciplinary approach and the role of orthodontist in the management of cleft lip and palate	Lecture	Lecture and small group discussions	<ul style="list-style-type: none">• BCQ• VIVA• OSPE



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ADULT ORTHODONTICS AND PERIODONTAL CONSIDERATIONS				
Lecture topic	Topic objectives	Mode of teaching		Assessment Tool
Introduction and etiology of cleft lip and palate Anatomy of Periodontal Structures Etiology and Clinical Features of Periodontal Diseases Minor adjunctive Procedures in Orthodontics Clear aligner therapy Orthodontic management of Periodontal diseases	By the end of lecture student will be able to: 1. Discuss anatomy, etiology, clinical features of periodontal diseases. 2. Classify periodontal diseases. 3. Discuss role of orthodontist in management of periodontal Diseases	Lecture	Lecture and small group discussions Flipped classroom	<ul style="list-style-type: none">• BCQ• VIVA• OSPE



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COURSE TOPIC: IATROGENIC EFFECTS OF ORTHODONTIC TREATMENT

Lecture topic	Topic objectives	Mode of teaching		Assessment Tool
Iatrogenic Effects of Orthodontic Treatment	By the end of lecture student will be able to: 1. Identify iatrogenic effects of orthodontic treatment	Lecture	Lecture and small group discussions	<ul style="list-style-type: none">• BCQ• VIVA• OSPE



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COURSE TOPIC: DENTAL RADIOLOGY				
Lecture topic	Topic objectives	Mode of teaching		Assessment Tool
Dental radiology	<p>By the end of lecture student will be able to:</p> <ol style="list-style-type: none">1. Describe the roentgen anatomy of teeth, jaws, and TMJ2. Describe variations in normal limits and abnormalities3. Discuss proper patient positioning while taking the cephalometric radiograph4. Explain radiation hazards5. Discuss the advantages and indications of CBCT (Cone Beam Computer Tomography).	Lecture	Lecture and small group discussions	<ul style="list-style-type: none">• BCQ• VIVA• OSPE



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CLINICAL ROTATION PRACTICAL DEMONSTRATION CURRICULUM			
Lecture topic	Topic objectives	Mode of teaching	Assessment Tool
History and examination	At the end of the demo student must be able to: 1. Chart proper history of patient. 2. Demonstrate intra oral and extra oral examination on patient	Demonstration on pictures and on patient	<ul style="list-style-type: none">• OSPE•
Cephlometric Cephalostat and landmarks Cephalometric tracing and planes Cephalometric analysis Interpretation	At the end of the demo student must be able to: 1. Perform 5 Steiner and Down's cephalometric analysis on the given cephalometric radiograph. 2. Analyze the traced cephalograms of at least 05 patients complaining of orthodontic problems following the recommended steps; Cephalometric analysis, Sagittal analysis, Vertical analysis, Dental analysis, Soft tissue analysis	Demonstration on Cephalometric radiograph	<ul style="list-style-type: none">• OSPE• VIVA• BCQ
Wire Bending Z- spring Canine retractor Labial bow Adams Clasp Hawley's retainer Cantilever	At the end of the demo student must be able to: 1. Outline indications and components of Z-spring, Labial bow, Adam's clasp, Hawley's retainer, cantilever and canine retractor. 2. Construct 5 appliances each	Demonstration on 0.5mm and 0.7mm wire	<ul style="list-style-type: none">• OSPE



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Clinical procedures	<p>Execute simple orthodontic treatment procedures:</p> <ul style="list-style-type: none"> • Identify orthodontic materials and instruments • Identify different type of wires used in orthodontics • Insert and adjust active removable appliances to move a single tooth or to correct a cross bite, insert/adjust or remove different types of removable retainers, insert, adjust or remove a wire, ligature and separator. 		•
Radiographic Analysis	<p>At the end of the demo student must be able to:</p> <ol style="list-style-type: none"> 1. Perform OPG analysis of 5 patients 2. Identify relevant anatomical structures and landmarks on OPG, lateral ceph 3. Identify occlusal radiograph. 	Demonstration on Orthopantomogram and on occlusal view	• OSPE
Cast Analysis	<p>At the end of the demo student must be able to:</p> <ol style="list-style-type: none"> 1. Perform cast analysis of 5 patients 	Demonstration on cast	<ul style="list-style-type: none"> • OSPE • BCQ'S
Space Analysis	<p>At the end of the demo student must be able to:</p> <ol style="list-style-type: none"> 1. Perform space analysis and Bolton's analysis of 5 patients 	Demonstration on cast	<ul style="list-style-type: none"> • OSPE • BCQ'S
Space maintainer	<p>At the end of the demo student must be able to:</p> <p>1.Outline indications and components of different space maintainers.</p>	Demonstration on cast and on patient	• OSPE
Separator	<p>At the end of the demo student must be able to:</p> <p>1.Perform separator placement.</p>	Demonstration on typodont and patient.	• OSPE
Banding	<p>At the end of the demo student must be able to:</p> <p>1.Perform band placement.</p>	Demonstration on typodont and patient	• OSPE



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Bonding	At the end of the demo student must be able to: 1. Outline the bracket placement techniques.	Demonstration on typodont and patient	<ul style="list-style-type: none">• OSPE•
Hawley retainer	At the end of the demo student must be able to: 1. Outline indications and components of Hawley retainer.	Demonstration on cast and patient	<ul style="list-style-type: none">• OSPE
Appliances	At the end of the demo student must be able to: 1. List functional appliances 2. Discuss the mode of action of functional appliances 3. Illustrate concepts of growth modification treatment 4. Compare functional appliances and orthopedic appliances for growth modification 5. List the indications and contra indications of all appliances 6. Identify the major components of all appliances 7. Identify all functional appliances	Demonstration on Functional Appliances, activation and mechanism of action	<ul style="list-style-type: none">• OSPE• BCQ's• VIVA
Problem List	At the end of the demo student must be able to: 1. Construct problem list of 5 patients	Demonstration of formulation of problem list on different cases	<ul style="list-style-type: none">• OSPE•
Treatment planning	At the end of the demo student must be able to: 1. Propose treatment plan of 05 patients 2. Justify retention plan for at least 01 patient presenting with orthodontic problem.	Demonstration of making treatment plan on different cases	<ul style="list-style-type: none">• OSPE• BCQ's



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ORTHODONTICS
CLINICAL ROTATION



1 ST WEEK
<ul style="list-style-type: none">• Introduction to OPD<ul style="list-style-type: none">◦ Discipline, protocols and ground rules◦ Patient allotment• Log book Guidance• History & Clinical Examination (Intraoral, Extraoral)• Introduction of Cephalostat• Identification of Cephalometric landmarks• Cephalometric tracing.• Execution of simple orthodontic procedures
2 ND WEEK
<ul style="list-style-type: none">• Cephalometric planes and analysis.• Cephalometric planes and analysis• Wire bending (Adam's Clasp)• OPG interpretation
3 RD WEEK
<ul style="list-style-type: none">• Cast analysis and interpretation• Bolton's analysis• Demonstration of wire bending<ul style="list-style-type: none">◦ Labial bow)◦ Canine retractor• Demonstration of space analysis
4 TH WEEK
<ul style="list-style-type: none">• Demonstration of mixed dentition analysis<ul style="list-style-type: none">◦ Tanaka and Jhonston analysis◦ Huckaba analysis• Demonstration of wire bending<ul style="list-style-type: none">◦ Z spring• Demonstration of separator placement• Demonstration of molar band placement
5 TH WEEK
<ul style="list-style-type: none">• Identification and indications of Hawley retainer• Demonstration of functional appliances<ul style="list-style-type: none">◦ Identification◦ Indications◦ Components◦ Effects• Demonstration of bonding
6 TH WEEK
<ul style="list-style-type: none">• Demonstration of space maintainers<ul style="list-style-type: none">◦ Identification◦ Indications◦ Contraindications◦ Placement on cast◦ Adjustment on cast◦ Demonstration of space maintainers• Problem list
7 TH WEEK
<ul style="list-style-type: none">• Treatment planning<ul style="list-style-type: none">◦ Growing patients<ul style="list-style-type: none">• Growth modification◦ Non-growing patients<ul style="list-style-type: none">• Camouflage• Orthognathic surgery
8 TH WEEK
<ul style="list-style-type: none">• Revision• End of rotation assessment• Feedback session II
TEST BASED ON CLINICAL SCENARIOS AND OSCEs EVERY THURSDAY



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FEEDBACK FORM



PRACTICAL DEMONSTRATION

BDS Profession: _____ Group: _____ Date: _____

Kindly grade the following from 0-5, 0 being the lowest and 5 being the highest regarding the OPD environment

A) Attitude Of Demonstrators:

1. Dr. SADAF TALHA _____
2. Dr. SIDDIQUE _____
3. Dr. NAZNEEN _____
4. Dr. IQRA _____
5. Dr. TALHA _____
6. Dr. AIMEN _____
7. Dr. MADIHA _____

B) Have you met the objectives regarding?

1. Patient handling: _____
2. Material handling: _____
3. Clinical skills: _____
4. Decision making: _____

C) Did you find the OPD learning sessions\demonstrations helpful?

D) Was it up to your expectation? _____

E) If no, what are the reasons? _____

F) Kindly grade the demonstrators based on:

	Dr. SADAF	Dr. SIDDIQUE	Dr. NAZNEEN	Dr. IQRA	Dr. TALHA	Dr. AIMEN	DR.Madi ha
Attitude							
Knowledge							
Clinical skills							
Teaching skills							

Comments:



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FACILITATOR EVALUATION FORM

DATE: _____

NAME OF FACILITATOR: _____

Tick the appropriate box	Unacceptable	Needs work	Good	Excellent	Outstanding
Topic of lecture:	1	2	3	4	5
Topics were relevant and according to curriculum					
Completion of curriculum					
Enthusiasm of the lecturer					
Interaction with audience					
Spoke clearly and audibly					
Had thorough knowledge of subject					
Used case-based methods: related content to current evidence and research					
Handled questions appropriately and satisfies the audience					
Quality of audiovisual aids					

What are the two good things about the lecturer?

What are the two things you want the lecturer to improve?

OVERALL RATING OF LECTURER (1-5) _____



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Mini-Clinical Evaluation Exercise (Mini-CEX) Rating Form

Trainee Information

Trainee/student's name: _____ Date of Assessment: ____ / ____ / ____

Year of Training/studies: 1 2 3 4 Case Number for that year: 1 2 3 4

Assessor's Name: _____ Assessor's Position: _____

Assessor's email: _____ Hospital/location: _____

Setting: ☐ Inpatient ☐ Outpatient ☐ Emergency ☐ Other (please specify): _____

Patient problem/Dx: _____ Specialty: _____

Patient Age: ____ Patient Gender: ☐ Male ☐ Female Case Complexity: Low Medium High

Strengths

Suggestions for Development

If a trainee or student receives a rating that is unsatisfactory, the assessor must complete this section or the form will not be submitted.

Rate the trainee/student against what you'd expect of a trainee/student in that year of term

	Unsatisfactory			Satisfactory			Superior			Not Observed
1. Medical Interviewing Skills	1	2	3	4	5	6	7	8	9	n/o
2. Physical Examination Skills	1	2	3	4	5	6	7	8	9	n/o
3. Professional Qualities/ communication	1	2	3	4	5	6	7	8	9	n/o
4. Counseling Skills	1	2	3	4	5	6	7	8	9	n/o
5. Clinical Judgment	1	2	3	4	5	6	7	8	9	n/o
6. Organization/efficiency	1	2	3	4	5	6	7	8	9	n/o
Overall Clinical Performance	1	2	3	4	5	6	7	8	9	

Time taken for observation: ____min

Time taken for feedback: ____min

Assessor satisfaction using mini-CEX **LOW** 1 2 3 4 5 6 7 8 9 **HIGH**

Trainee/student satisfaction using mini-CEX **LOW** 1 2 3 4 5 6 7 8 9 **HIGH**



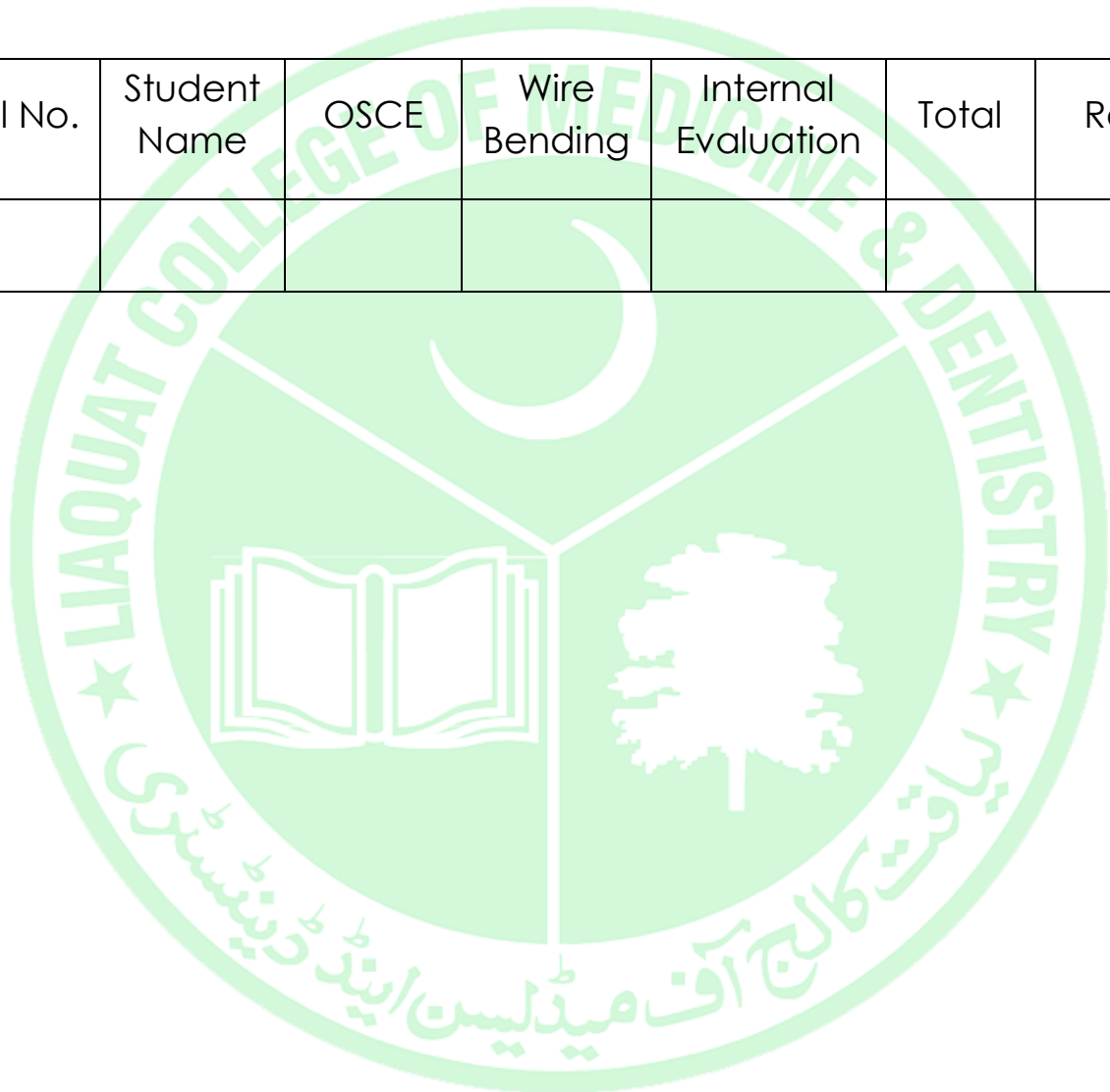
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SCORE CARD

EXAM _____ GROUP _____ DATE: _____

Roll No.	Student Name	OSCE	Wire Bending	Internal Evaluation	Total	Remarks





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OPD GUIDELINES FOR STUDENTS

- All Students must wear white lab coat with ID- Cards
- Dressing should be culturally and socially acceptable
- Hair should be properly set and tied up
- Students are not allowed to roam around in the college in their spare time
- Students are advised not to talk loudly in the corridor/classes/lab/wards/OPD
- Use of mobile phone during classes/lab/wards/test/examination is strictly prohibited

RULES AND SAFETY GUIDELINES FOR ORTHODONTIC LABORATORY

- Never operate machine without training.
 - Never work with loose hair, jewelry etc.
 - Never use machine when impaired.
 - Never work without proper eye protection.
 - Never bring hands close to sharp objects.
 - Never leave your work area in a mess
- Never wear gloves while working on rotating equipment.



PROSTHODONTICS



LEARNING OUTCOMES

PROSTHODONTICS	
By the end of Final Years of BDS Programme, the dental graduate will be able to:	
Knowledge:	<ul style="list-style-type: none">• Define Prosthodontics• Differentiate different branches of Prosthodontics and their application in everyday life.• Comprehend effect of prosthetic replacement on the quality of life of an individual.• Appreciate the implications of not addressing tooth loss at an appropriate time.• Enumerate the difference between sub-specialties of prosthodontics.• Compose proper treatment plan with respect to the needs and affordability of patients.
Skills:	<ul style="list-style-type: none">• Explain and practice clinical procedures to make a complete denture.• Explain and practice lab procedures to make a complete denture.• Explain and practice clinical procedures to make a partial denture.• Explain and practice lab procedures to make a partial denture.• Explain and practice clinical procedures to make a fixed partial denture.• Explain lab procedures to make a fixed partial denture.• Explain and practice clinical procedures for special impression techniques.
Attitude:	<ul style="list-style-type: none">• Observe hygienic dental practice in the prosthetic laboratory and follow proper procedures and regulations for safe use of materials and disposal of waste.• Collaborate with members of a team in a classroom and/or laboratory activities.• Work collaboratively in a group setting.• Display leadership by keeping the team on task, while listening carefully to the ideas of others.• Act swiftly in case of emergency.• Follow the leadership of the supervisor.• Display empathy towards patients.• Accept responsibility of any mistake and take effective measures to correct it.



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COURSE TOPIC: COMPLETE DENTURE

Lecture Topic	Learning Objectives	Mode of Teaching		Assessment Tools
		Lectures	Clinical	
Introduction to Prosthodontics	<ol style="list-style-type: none"> Define Prosthodontics List branches of Prosthodontics Define <ol style="list-style-type: none"> Conventional denture Immediate denture Over-denture Single complete denture Implant supported complete denture Describe reasons for tooth loss Identify surfaces of the complete denture on a given model. 	Lecture		
Anatomy and physiology of complete denture	<ol style="list-style-type: none"> Discuss the clinical importance of extra oral landmarks Identify on picture <ol style="list-style-type: none"> Interpupillary line Ala-tragus line Canthus tragus line Nasio-labial sulcus Vermillion border Philtrum Modiolous Angle of the mouth. Identify intraoral landmarks of prosthetic importance on ideal model of maxilla <ol style="list-style-type: none"> Residual ridge Maxillary tuberosity Palate Midpalatine raphe Incisive papilla Palatine rugae Torus palatines Fovea palatinae Post palatal seal Hamular notch Cuspid eminence Zygomatic process Discuss intraoral landmarks of prosthetic significance for fabrication of mandibular complete denture. <ol style="list-style-type: none"> Residual ridge External oblique ridge 	Lecture Flip classroom		Class Participation Term and final examination



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	<ul style="list-style-type: none"> iii) Buccal shelf area iv) Mental foramen v) Retromolar pad area vi) Mylohyoid ridge vii) Torus mandibularis viii) Internal oblique ridge ix) Genial tubercle 			
Peripheral tissue attachment of denture bearing area/ Biological considerations for impression.	<ol style="list-style-type: none"> Identify the border structures that limit the periphery of the denture in maxilla in the given model <ul style="list-style-type: none"> i) Labial frenum ii) Labial vestibule iii) Buccal frenum iv) Buccal vestibule v) Hamular notch vi) Posterior palatal seal area vii) Fovea palatinae Identify structures border structures that limits the periphery of the denture in mandible <ul style="list-style-type: none"> i) Labial frenum ii) Labial vestibule iii) Buccal frenum iv) Buccal vestibule v) Lingual frenum vi) Alveolo-lingual sulcus vii) Retromolar pad viii) Pterygo-mandibular raphae. 	Lecture	Practical	<p>Class Participation</p> <p>Term and final examination</p>
Physical and Biomechanical Considerations (Retention)	<ol style="list-style-type: none"> Define esthetics, mastication and speech Classify residual alveolar ridge according to Atwood's classification Describe pattern of resorption and masticatory loads in mandible Define retention in complete denture Describe primary factors affecting the degree of <ul style="list-style-type: none"> i. Retention ii. Adhesion iii. Cohesion iv. Interfacial surface tension v. Atmospheric pressure vi. Capillarity vii. Gravity Describe factors affecting the physical forces in primary retention <ul style="list-style-type: none"> i) Quality of saliva 	Lecture		<p>Class Participation</p> <p>Term and final examination</p>



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	<ul style="list-style-type: none"> ii) Quantity of saliva iii) Surface area iv) Intimacy of contact v) Peripheral seal <p>7. Describe factors aiding mechanically in primary retention of the denture</p> <ul style="list-style-type: none"> i. Undercuts ii. Over denture iii. Implants iv. Mucosal inserts v. Rubber suction vi. Magnets <p>8. Explain the secondary factors affecting the degree of retention of complete dentures.</p> <p>9. Describe the function and positional significance regarding complete denture fabrication.</p> <ul style="list-style-type: none"> i. Cheek muscles ii. Lips iii. Tongue iv. Floor of mouth v. Soft palate vi. Masseter vii. Neutral zone <p>10. Discuss the shape/contour of denture borders and flanges in relation to the surrounding musculature and supporting structure for the fabrication of complete dentures.</p> <ul style="list-style-type: none"> i. Over extension denture borders ii. Border molding iii. Coronoid process iv. Occlusal scheme v. Neuromuscular control vi. Physiological factors vii. Proper patient instructions 			
Physical and Biomechanical Considerations (Stability and Support)	<ul style="list-style-type: none"> 1. Define stability in complete denture 2. List factors affecting stability in complete denture 3. Describe the factors influencing the stability and support of the complete denture. <ul style="list-style-type: none"> i) Residual ridge size ii) Quality iii) Palatal vault iv) Neutral zone v) Surrounding vi) musculature 	Lecture		<p>Class Participation</p> <p>Term and final examination</p>



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	<p>4. Describe the factors influencing the stability and support of the complete denture.</p> <ul style="list-style-type: none"> i) Flange shape and contour ii) Occlusal factors iii) Abnormal ridge relationship iv) Direct bone anchorage <p>5. Define support in complete denture</p> <p>6. Describe importance and requirements of support in a complete denture</p> <p>7. Discuss supporting areas of the denture foundation</p> <p>8. Explain support form of the Denture foundation</p> <ul style="list-style-type: none"> i) Describe the factors affecting support ii) Surface area iii) Nature of supporting mucosa iv) Impression procedure v) Accuracy of fit vi) Direct bone anchorage 			
Examination, Diagnosis and Treatment planning	<p>1. Take complete medical and dental history of patients presenting to OPD</p> <p>2. Evaluate Psychological and mental health of patients according to house's classification</p> <p>3. Discuss the drugs which affect the prosthetic treatment of the patient.</p> <p>4. Perform clinical examination of patients</p> <ul style="list-style-type: none"> i) Extra oral examination <ul style="list-style-type: none"> i. Facial examination ii. Skin iii. Lips <ul style="list-style-type: none"> a) Lip length b) Lip Thickness c) Lip Mobility d) Lip support e) Smile Line iv. Neuromuscular evaluation v. Speech evaluation vi. TMJ evaluation ii) Intraoral examination <ul style="list-style-type: none"> i. Cheeks 	Lecture	Tutorial Practical	<p>Class Participation</p> <p>Term and final examination</p> <p>Mini-cex</p>



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	<ul style="list-style-type: none"> ii. Tongue <ul style="list-style-type: none"> a) Tongue size b) Tongue position c) Tongue biting iii. Frenal attachment iv. Floor of the mouth v. Maxillary tuberosity vi. Palate <ul style="list-style-type: none"> a) Hard Palate b) Palatal torus c) Mandibular tori d) Smoker's Palate e) Denture induced stomatitis f) Soft palate classification vii. Residual alveolar ridge classification viii. Bony Prominences ix. Undercuts x. Saliva <ul style="list-style-type: none"> a) Salivary flow b) Viscosity c) Xerostomia d) Oral mucosa examination e) Inter-arch space iii) Radiographic examination <p>5. Describe treatment planning for patients</p> <p>6. Define tissue conditioning</p> <p>7. Define nutritional counseling</p>			
Mouth Preparation Including Pre-prosthetic Surgery	<p>Discuss non-surgical methods of mouth preparation:</p> <ul style="list-style-type: none"> i. Rest for denture bearing area ii. Occlusal correction iii. Good nutrition iv. Conditioning of patient's musculature <p>Discuss surgical methods of mouth preparation:</p> <ul style="list-style-type: none"> i. Removal of retained dentition ii. Elimination of infections iii. Removal of hyperplastic ridge tissue iv. Correction of hypertrophic maxillary labial frenum v. Correction of hypertrophic lingual frenum vi. Correction of papillary hyperplasia vii. Correction of ridge undercuts 	Lecture		<p>Class Participation</p> <p>Term and final examination</p>



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	<ul style="list-style-type: none"> viii. Correction of hyperplastic epulis fissuratum ix. Management of prominent mylohyoid and internal oblique ridges x. Reduction of pandulus maxillary tuberosity xi. Excision of tori xii. Vestibuloplasty. 			
Posterior palatal seal	<ul style="list-style-type: none"> 1. Define posterior palatal seal 2. Describe the functions of posterior palatal seal 3. List the components and boundaries of posterior palatal seal <p>Describe the techniques for recording the posterior palatal seal</p>	Lecture Flip classroom	Practical	Class Participation Term and final examination
Occlusion / osmotic balance	<ul style="list-style-type: none"> 1. Define occlusion 2. Classify the types of occlusion in relation to complete dentures 3. Describe the concept of Balanced occlusion 4. Explain the characteristics of balanced occlusion 5. Discuss the importance and general considerations related to balanced occlusion 6. List the types of balanced occlusion 7. Explain the factors influencing balanced occlusion 	Lecture	Practical	Class Participation Term and final examination
Maxillo-mandibular Relations	<ul style="list-style-type: none"> 1. Vertical relations 2. Horizontal relations 	Lecture Videos	Tutorial Practical	Class Participation Term and final examination
Facebow	<ul style="list-style-type: none"> 1. Define facebow 2. Discuss the purpose and advantages of using facebow 3. List the parts of facebow 4. List the types of facebow 5. Describe the uses of facebow 6. Discuss the procedures for facebow transfer 	Lecture Videos		Class Participation Term and final examination
Mandibular movements	<ul style="list-style-type: none"> 1. Discuss the anatomy of temporomandibular joint 2. Discuss the clinical significance of mandibular movements in relation to prosthesis 3. Discuss the border movements of the mandible 4. Describe the significance of gnathology in dental prosthetics. 	Lecture Videos		Class Participation Term and final examination



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Articulators	<ol style="list-style-type: none"> 1. Define articulators 2. Explain the functions of articulator 3. List down the types of articulators 4. Explain the advantages and limitations of articulators 5. Describe the purpose of an articulator 6. Discuss the minimum and additional requirements of articulator 7. Discuss the prosthetic use of <ol style="list-style-type: none"> i) Simple hinge articulator ii) The mean value articulator iii) Semi-adjustable articulator iv) Fully adjustable articulator 8. Describe the prosthetic importance of <ol style="list-style-type: none"> i) Protrusive records ii) Lateral records iii) Hanau formula 	Lecture Videos	Practical	Class Participation Term and final examination
Selection of artificial teeth and arrangement of artificial teeth	<ol style="list-style-type: none"> 1. Describe the objectives of teeth selection 2. Explain the general considerations in teeth selection 3. Describe the size of teeth 4. Discuss the methods used to select size of teeth <ol style="list-style-type: none"> i) Methods using pre-extraction records ii) Methods using anthropological measurements of the patient iii) Methods using anatomical landmarks iv) Methods using theoretical concepts 5. Describe the factors in selection of artificial teeth <ol style="list-style-type: none"> i) Size of face ii) Inter-arch spacing iii) Distance between the distal ends of the maxillary cuspids iv) Length of lips v) Size and relation of arches vi) Size of posterior teeth 6. Discuss the factors affecting the shade selection of artificial teeth 	Lecture Videos	Tutorial Practical	Class Participation Term and final examination DOPS



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	<ul style="list-style-type: none"> i) Hue ii) Saturation iii) Translucency iv) Age v) Habit vi) Complexion vii) Color of eyes viii) Color of patient hair <p>7. Describe positioning and relationship of teeth</p> <p>8. Discuss advantages and disadvantages of</p> <ul style="list-style-type: none"> i) Anatomic teeth ii) Non-anatomic teeth <p>9. Explain the prosthetic importance of cusplless teeth</p> <p>10. Describe features in</p> <ul style="list-style-type: none"> i) Class-I relationship ii) Class-II relationship iii) Class-III relationship 			
The trial denture	<p>1. Define trial denture</p> <p>2. Describe significance of trial denture</p> <p>3. Discuss verification</p> <ul style="list-style-type: none"> i) centric relation ii) centric occlusion iii) vertical relation <p>4. Illustrate the evaluation of</p> <ul style="list-style-type: none"> i) Lip and cheek support ii) Occlusal plane iii) Posterior palatal seal iv) Esthetic v) Phonetics 	Lecture	Practical	<p>Class Participation</p> <p>Term and final examination</p>
Denture processing	<p>1. List denture base material</p> <p>2. Discuss the laboratory steps of fabrication of complete denures and perform them in practicals.</p> <ul style="list-style-type: none"> i) Flasking/investing ii) Dewaxing iii) Trial packing of acrylic resin iv) Final closure and bench curing v) Deflasking vi) Remounting vii) Laboratory remounting viii) Finishing and polishing <p>3. Discuss denture defects</p> <ul style="list-style-type: none"> i) Porosity ii) Crazeing iii) Warpage iv) Fracture 	<p>Lecture Videos</p> <p>Flipped class</p>	Practical	<p>Class Participation</p> <p>Term and final examination</p>



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	v) soaking 4. Define remount record index			
Denture placement and patient education	<ol style="list-style-type: none"> 1. Discuss causes of denture errors 2. Describe denture insertion and evaluation procedure 3. Explain evaluation of the processing 4. Describe evaluation of fit and comfort 5. Discuss evaluation of retention stability and support 6. Discuss <ol style="list-style-type: none"> i) Evaluation of occlusion ii) Evaluation of esthetic iii) Evaluation of jaw relation iv) Evaluation of speech 7. Discuss instruction and education of a new denture wear 	Lecture	Practical	Class Participation Term and final examination
Post placement phase	<ol style="list-style-type: none"> 1. Describe causes of denture failure 2. Discuss possible complains of a newly delivered denture 3. Discuss instruction regarding insertion and removal of prosthesis 4. Discuss maintenance of the prosthesis 5. Describe periodic recall of patient after delivery of complete dentures. 	Lecture Videos		Class Participation Term and final examination
Post Insertion Complain/ Sequelae of complete denture insertion	Discuss post insertion complains: <ol style="list-style-type: none"> i. Related to fitting surface ii. Related to esthetics iii. Related to occlusal surface iv. Pain v. Discomfort vi. Mastication problem vii. Ulcers 	Lecture	Tutorial CBL	Class Participation Term and final examination
Immediate Dentures And Replacement Dentures	<ul style="list-style-type: none"> • Define immediate dentures and replacement dentures • Discuss classification and types of immediate dentures • Discuss Indications and contraindications • List clinical and laboratory procedures • Discuss multidisciplinary approach including care during surgery • Discuss Insertion and follow up & maintenance 	Lecture	Practical	Class Participation Term and final examination



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Single Complete Denture	<ul style="list-style-type: none"> • Define single complete denture • List problems with single complete denture • Discuss common occlusal disharmonies and ways to adjust them. • Discuss single complete denture opposing natural teeth • Discuss single complete denture opposing RPD & FPD • Discuss implant supported prosthesis • Discuss methods to achieve balanced occlusion • List clinical procedure of making single complete denture • List occlusal materials for single complete dentures. 	Lecture		<p>Class Participation</p> <p>Term and final examination</p>
Combination Syndrome	<ul style="list-style-type: none"> • Define combination syndrome • Discuss diagnosis, etiology and treatment strategies related to combination syndrome 	Lecture		<p>Class Participation</p> <p>Term and final examination</p>
Speech	<ul style="list-style-type: none"> • Discuss Bilabial sounds • Discuss Labiodental sounds • Discuss Velar sounds 	Lecture		<p>Class Participation</p> <p>Term and final examination</p>
Copy Denture, And Occlusal Pivot/ Techniques to overcome the problems in removable prosthodontics	<ol style="list-style-type: none"> 1. Define copy denture 2. Discuss indications, contraindications, advantages and disadvantages 1. Discuss laboratory techniques. 	<p>Lecture</p> <p>Videos</p>		<p>Class Participation</p> <p>Term and final examination</p>
Relining, Rebasing And Repair	<ol style="list-style-type: none"> 2. Define relining, rebasing and repair 3. Discuss indication, contraindication, material and techniques for relining the denture 4. Describe indications and laboratory techniques for rebasing 5. Discuss the types, causes and problems with repairing fractures of denture 6. Discuss contraindication and repair material for dentures 	<p>Lecture</p> <p>Videos</p>	Practical	<p>Class Participation</p> <p>Term and final examination</p>
Over-dentures	<ul style="list-style-type: none"> • Define over-dentures • Discuss classification and types of over-dentures • Discuss Indications and contraindications • List clinical and laboratory procedures • Discuss Insertion and follow up & maintenance 	Lecture		<p>Class Participation</p> <p>Term and final examination</p>





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	<ul style="list-style-type: none">✓ Deflasking✓ Finishing✓ Polishing <p>➤ 1 occlusal splint fabrication:</p> <ul style="list-style-type: none">✓ Oral examination✓ Impression record and model pouring with base formation✓ Bite registration✓ Articulation✓ Wax-up and finishing of occlusal splint✓ flasking✓ Dewaxing✓ Separating media application✓ Packing✓ Curing✓ Deflasking✓ Finishing✓ Polishing <p><u>OTHERS</u></p> <p>➤ PRESENTATIONS</p> <p>➤ EXTRA ACADEMIC ACTIVITIES</p> <ul style="list-style-type: none">✓ Posters✓ Activities✓ Clinical case presentations <p>➤ Poster making</p> <p><u>ON PATIENT:</u></p> <ul style="list-style-type: none">➤ History taking➤ Examination➤ 5 sets of Alginate Impressions➤ Models of impressions with bases➤ 1-2 case of complete denture➤ 2-3 partial dentures➤ Clasp formation on patient's model			
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COURSE TOPIC:IMPRESSIONS				
Lecture Topic	Learning Objectives	Mode of Teaching		Assessment Tools
		Lectures	Clinical	
Objectives, theories and techniques of impression	<ol style="list-style-type: none">1. Define<ol style="list-style-type: none">i) Retentionii) Supportiii) Stabilityiv) Estheticsv) Preservation of remaining structures2. Describe indications, advantages, disadvantages, and material used in impression making with the following techniques:<ol style="list-style-type: none">i) Minimal pressure impression techniqueii) Selective pressure impression techniqueiii) Definite pressure impression techniqueiv) Functional impression technique3. Discuss the impression techniques:<ol style="list-style-type: none">i) Based on mouth openingii) Based on types of trays usediii) Based on theories of impressioniv) Based on purpose of impressionv) Based on material used	Lecture Videos	Tutorial Practical	Class Participation Term and final examination DOPS



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COURSE TOPIC: OCCLUSION/TMD

Lecture Topic	Learning Objectives	Mode of Teaching		Assessment Tools
		Lectures	Clinical	
Theories and Principles of Occlusion in all types of prosthesis (Fixed and removable)	<ol style="list-style-type: none"> Describe optimum functional occlusion Discuss the following occlusal scheme <ol style="list-style-type: none"> Canine guided Group function Mutually protected Describe determinants of occlusal morphology <ol style="list-style-type: none"> Posterior controlling factors (Condylar guidance) Anterior controlling factors (Anterior guidance) Vertical determinants Horizontal determinants 	Lecture		<p>Class Participation</p> <p>Term and final examination</p>
Concept, etiology, Treatment planning And treatment Option for occlusion	<ol style="list-style-type: none"> Discuss the etiology of temporo-mandibular joint disorder syndrome. Describe treatment options <ol style="list-style-type: none"> Supportive therapy <ol style="list-style-type: none"> Pharmacological therapy Physical therapy Definitive therapy <ol style="list-style-type: none"> Reversible irreversible 	Lecture Videos		<p>Class Participation</p> <p>Term and final examination</p>



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COURSE TOPIC: GERODONTOLOGY				
Lecture Topic	Learning Objectives	Mode of Teaching		Assessment Tools
		Lectures	Clinical	
Effects of medication on oral health	1. Discuss i) Xerostomia ii) Sialorrhoea iii) Lichen planus iv) Aphthous like ulcers v) Pigmentation vi) Gingival enlargement vii) Burning mouth syndrome viii) Loss of taste ix) Pseudo-membranous candidiasis x) Angular cheilitis xi) Osteonecrosis of jaw	Lecture		Class Participation Term and final examination
Medical conditions having oral manifestation	1. Describe the following medical conditions having oral manifestations i) Pulmonary conditions ii) Skin diseases iii) Connective tissue disorders iv) Liver disease v) Hematological disorders vi) Autoimmune disease	Lecture		Class Participation Term and final examination
Xerostomia	1. Define xerostomia 2. Discuss the causes of xerostomia 3. Describe clinical features of xerostomia 4. Discuss the effect of xerostomia on prosthesis 5. Discuss the diagnosis and management of xerostomia	Lecture		Class Participation Term and final examination
Root Caries	1. Discuss the clinical features of root surface caries 2. Describe the microbiology of root surface caries 3. Discuss the diagnosis and factors predisposing to root caries	Lecture		Class Participation Term and final examination
Geriatric Nutrition	1. Discuss nutritional balance based on: i) Complex carbohydrate ii) Protein enriched diet iii) Calcium rich food iv) Excessive water 2. Discuss the disadvantage to Limit intake of i) Simple sugar ii) Fat iii) Sodium	Lecture		Class Participation Term and final examination



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COURSE TOPIC: REMOVABLE PARTIAL DENTURE

Contents	Learning Objectives	Mode of Teaching		Assessment Tools
		Lecture	Practical	
Physiology, terminology and types of removable partial denture(RPD)	<ul style="list-style-type: none"> Define: <ol style="list-style-type: none"> 1. Abutment 2. Retainer 3. Tooth supported RPD 4. Tooth tissue supported RPD 5. Temporary RPD 6. Interim denture 7. Transitional denture 8. Treatment denture 9. Stability 10. Support 11. Retention 12. Reciprocation 13. Bracing 14. Appliance 15. Saddle 16. Prosthesis Classify the types of removable partial denture Describe indication, Contraindications, advantages and disadvantages of removable partial denture 	Lecture(1)	tutorial	Class Participation
Partially Edentulous Epidemiology, Physiology And Terminology	<ul style="list-style-type: none"> Define <ol style="list-style-type: none"> 1. Abutment 2. Retainer 3. Extra coronal partial denture 4. Tooth supported RPD 5. Tissue supported RPD 6. Tooth-tissue supported RPD 7. Temporary RPD 8. Interim denture 9. Transitional denture 10. Treatment denture 11. Centric relation 12. Centric occlusion 13. Eccentric relation 14. Support 15. Retention 16. Reciprocation 17. Bracing 18. Appliance 19. Saddle area 20. Stability 	Lecture(1)		Class participation
Applied Anatomy And Physiology	<ul style="list-style-type: none"> Discuss clinical application of anatomy of oral cavity Brief physiology of jaw movements. 	Lecture(1)		Class test Class Test Class participation Final examination
Oral Manifestations Of Systemic Diseases	<ul style="list-style-type: none"> Discuss problem related to xerostomia Discuss Problem related to poor healing Discuss Problem related to osteoporosis Discuss Problem related to osteopenia Discuss Problem related to autoimmune diseases. 	Lecture(1)		Class test Class participation Final examination
Diagnosis And Treatment Planning	<p>CLINICAL EXAMINATION</p> <p>A. HISTORY</p> <ul style="list-style-type: none"> Demographic data Chief complaint History of presenting complaint 	Lecture(1)		MINI C-EX



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Patient Evaluation, History, General Examination And Problem Oriented Treatment Planning	<ul style="list-style-type: none">Dental historyMedical historySocial history <p>B. EXAMINATION</p> <p>a. General Examination</p> <ul style="list-style-type: none">Gait.Complexion and personalityCosmetic indexMental attitude of patient <p>b. Extra Oral examination</p> <ul style="list-style-type: none">Facial featuresFacial formFacial profileLower facial heightMuscle toneComplexionLip competencyTMJ examination<ul style="list-style-type: none">Examination of muscles of masticationDeviationDeflectionLimited mouth openingClicking sounds/crepitatingNeuromuscular examination <p>c. Intra Oral Examination</p> <p>1) Existing teeth</p> <ul style="list-style-type: none">Number of teethTiltingDriftingSupra eruptionRotation <p>2) Mucosa</p> <ul style="list-style-type: none">Color of mucosaCondition of mucosaThickness of mucosa <p>3) Saliva</p> <ul style="list-style-type: none">NormalThick and ropyXerostomia <p>4) Occlusion</p> <ul style="list-style-type: none">Canine guidedGroup functionMutually protected <p>5) Others: Midline, mouth opening, occlusal stops, periodontal condition, residual roots, tooth surface loss</p> <p>C) Radiographic examination</p> <ul style="list-style-type: none">Crown to root ratioPeriapical pathologyRetained residual rootsThickness of mucosaBone support and qualityRoot configuration of abutment teeth <p>D) Diagnostic casts</p> <ul style="list-style-type: none">Purpose of diagnostic castMounting diagnostic castSequence of mounting maxillary cast to axis orbital planeJaw relation for diagnostic castMaterial and methods for centric relation <p>E) Diagnostic findings</p> <p>F) Interpretation of examination data</p> <ul style="list-style-type: none">Radiographic interpretationsPeriodontal considerationCaries activityEvaluation of prosthesis foundation teeth and residual ridge.Surgical preparationAnalysis of occlusal factorsFixed restorationsOrthodontic treatment			
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	G) Differential diagnosis; fixed or removable partial denture <ul style="list-style-type: none"> • Indications of FPD • Indications of RPD E) Choice between complete denture and removable partial denture I) Clinical factors related to metal alloys used for metal framework.			
Biomechanics Of Removable Partial Denture	<ul style="list-style-type: none"> • Discuss the biomechanical considerations. • Discuss the concept of <ul style="list-style-type: none"> • Lever 1 • Lever 2 • Lever 3 • Discuss Stress consideration in partial denture <ul style="list-style-type: none"> • Vertical <ul style="list-style-type: none"> i. Displacing stresses ii. Dislodging stresses • Horizontal • Torsional • Discuss Factors influencing magnitude of stress • Describe Differential support • Discuss Role of periodontal ligaments in removable partial denture 	Lecture(1)	Tutorial	
Components of RPD (major connector and minor connector)	<ul style="list-style-type: none"> • Define major connectors • List types of major connectors • Discuss the location, indication contraindication of major connectors • Describe ideal requirements and design consideration of major connector • Describe functions of minor connectors • Explain form and location of minor Connectors • Discuss tissues tops and finishing Line of removable partial dentures. 	Lecture(4)	Skills designing	Class Participation Class Test
Rest and rest seats	<ul style="list-style-type: none"> • Define rest • Classify rest and rest seats on the basis of location • Describe form, support & design of occlusal rest and rest seat • Relate the role of rest in control of prosthesis movement 	Lecture(2)	Small Group Discussion Tutorial Practical	Class Participation Class Test Final examination DOPS
Direct retainers	<ul style="list-style-type: none"> • Define direct retainers • State the role of direct retainer in prosthesis movement control • Classify direct retainers on the basis of extra coronal and intra coronal prosthesis • Discuss the contours of tooth for the fabrication of retentive clasps • Describe functional requirement of clasp • Discuss criteria for selecting given clasp design • List basic parts of clasp assembly • Describe basic principles of clasp design • List types of clasp assembly 	Lecture(4)	Small Group Discussion Tutorial Practical	Class Participation Class Test Final examination DOPS
Indirect retainers	<ul style="list-style-type: none"> • Define indirect retainers • Explain factors influencing effectiveness of indirect retainers • Discuss the forces acting on the denture • Define fulcrum line • Describe auxiliary functions of indirect retainers • List types of indirect retainers 	Lecture(2)		Class Participation
Denture base consideration	<ul style="list-style-type: none"> • Discuss ideal denture base material used in the fabrication of removable partial dentures. • Describe advantages and disadvantages of 	Lecture(1)		



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	<ul style="list-style-type: none"> metal and acrylic denture bases Explain methods of attaching artificial teeth to the denture base Discuss the need for relining the denture base. Define stress breakers for denture base 			
Principles of RPD design	<ul style="list-style-type: none"> Describe the difference in prosthesis support and the influence on design Differentiate between types of removal partial denture Describe the components partial dentures which are part of partial Denture design 	Lecture(2)	Group Discussion Tutorial Practical skills	DOPS
Surveying	<ul style="list-style-type: none"> Define surveying List the types of the dental surveyor Identify the parts of the dental surveyor List the types of survey lines Explain the purpose of surveyor Discuss the factors that determine the path of placements and removal List the steps of the procedure in surveying a diagnostic cast Explain final path of placement and relation to cast to surveyor Discuss surveying the master cast (not repetition diagnostic and master cast are different) Describe measuring retention and retentive undercut Explain blocking out the master cast and relieving the master cast 	Lecture(2)	Tutorial Practical Skills	DOPS
Mouth preparation for removal partial denture	<ul style="list-style-type: none"> Describe oral surgical procedures Explain conditioning of abused and irritated patient Describe periodontal preparations Explain the diagnosis of occlusal disharmony Discuss endodontic treatment necessary before fabrication of removable partial dentures 	Lecture(1)		
Preparation of abutment teeth	<ul style="list-style-type: none"> Classify the abutment teeth according to tooth preparation Explain the sequence of the abutment teeth preparation on sound teeth and existing restoration Discuss the preparation of the guide planes and rest seats Discuss the techniques used to create undercuts for retentive clasps Explain abutment preparation using crowns and conservative restorations Explain the use of isolated teeth as abutment 	Lecture(1)		
Impression techniques and modifications	<ul style="list-style-type: none"> List the types of impression materials use for RPD Describe the anatomic and functional form of impression Discuss indication of functional impression Describe impression techniques: <ol style="list-style-type: none"> McLean's physiologic Impression technique Hindell's modification Functional relining method Selective pressure impression technique Fluid wax technique Altered cast technique Modifications of altered cast technique 	Lecture(2)	Practical skill	DOPS



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Trail of metal frame work	<ul style="list-style-type: none"> • Define examination of metal framework • Discuss the procedure of fitting frame work to teeth and supporting structures • Explain the correcting discrepancies • Explain the fitting frame work to opposite occlusion • Describe the finishing of the framework 	Lecture(1) + videos		
Maxillomandibular relations	<ul style="list-style-type: none"> • Describe desirable occlusal contact relationship for removable partial denture • Describe the methods for establishing occlusal relationship • Explain the use of articulators • Describe the articulation techniques <ol style="list-style-type: none"> 1. Split cast technique • Discuss the jaw relation for mandibular removable partial denture opposing a maxillary complete denture 	Lecture(1)		
Selection & arrangement of teeth	<ul style="list-style-type: none"> • List anterior and posterior teeth selection on the basis of <ol style="list-style-type: none"> 1. Size of teeth 2. Form of teeth 3. Color of teeth 	Lecture(1) + videos	Practical	
Lab procedure	<ul style="list-style-type: none"> • Describe duplicating a cast stone • Describe the waxing framework of removable partial denture • Define <ol style="list-style-type: none"> 1. Spruing 2. Investing 3. Burn out 4. Casting 5. Removing the cast from investment 6. Finishing <p>Discuss the making of record bases Explain the making of a stone occlusal template from a functional occlusal record Demonstrate the arrangement of anterior and posterior teeth Discuss the waxing and flasking of removable partial denture before processing acrylics in base Describe the processing and polishing of the denture</p>	Lecture(3) + videos	Practical Laboratory demonstration	



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COURSE TOPIC: CROWN AND BRIDGES

Lecture Topic	Learning Objectives	Mode of Teaching		Assessment Tools
		Lectures	Clinical	
An introduction to Fixed Prosthodontics	<ol style="list-style-type: none"> Define the following terms: <ol style="list-style-type: none"> Fixed prosthodontics Crown Bridge Inlay Veneers Retainers Pontics Abutment Saddle area Discuss the applied anatomy and physiology of face <ol style="list-style-type: none"> Tmj Muscles of mastication Jaw movements Discuss indications and contraindications of fixed prosthodontics 	Lecture		<p>Class Participation</p> <p>Term and final examination</p>
History and examination	<ol style="list-style-type: none"> Discuss <ol style="list-style-type: none"> Demographic data Chief complaint History of presenting complaint Medical history Dental history Define extra oral examination Demonstrate it on a patient. <ol style="list-style-type: none"> Facial features ii) Facial form iii) Facial profile iv) Tmj v) Muscles of mastication Define Intra oral examination Demonstrate it on a patient. <ol style="list-style-type: none"> Periodontal needs Restorative needs Endodontic needs Prosthodontic needs Orthodontic needs 	Lecture		<p>Class Participation</p> <p>Term and final examination</p> <p>Mini-CEX</p>
Diagnostic Cast and related procedure	<ol style="list-style-type: none"> Discuss the art of impression making Discuss the mounting on articulator Discuss types of articulator Identify parts of Facebow in 	Lecture		<p>Class Participation</p> <p>Term and final examination</p>



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	<p>picture</p> <p>5. Record the centric relation on patients</p>			
Treatment Planning	<p>1. Analyze patients needs</p> <p>2. Discuss available material for the fabrication of the required prosthesis</p> <p>3. Assess abutment teeth</p> <p>4. Plan replacement of single and multiple missing teeth</p>	Lecture	CBL	<p>Class Participation</p> <p>Term and final examination Mini-Cex</p>
Principals Of Occlusion	<p>1. Explain</p> <p>i) Anatomy of tmj</p> <p>ii) Ligaments</p> <p>iii) Centric relation</p> <p>iv) Mandibular, border and functional movements</p> <p>v) Unilateral and bilateral balanced occlusion</p>	Lecture		<p>Class Participation</p> <p>Term and final examination</p>
Mouth Preparation	<p>1. Discuss the importance of mouth preparation:</p> <p>i) Periodontally</p> <p>ii) Restoratively</p> <p>iii) Orthodontically</p> <p>iv) Surgically</p> <p>v) Diagnostic adjustments</p> <p>vi) Clinical occlusal adjustments</p>	Lecture	Practical	<p>Class Participation</p> <p>Term and final examination</p>
Components Of Fixed Partial Denture	<p>Discuss the components of fixed partial denture</p> <ul style="list-style-type: none"> • Connector • Pontic • Retainer • Abutment 	Lecture	Tutorial	<p>Class Participation</p> <p>Term and final examination</p>
Classification Of Fixed Partial Denture	<p>List classification of fixed partial denture</p> <ul style="list-style-type: none"> • Class I • Class II • Class III 	Lecture		<p>Class Participation</p> <p>Term and final examination</p>
Fixed Partial Denture Types	<p>1. Describe indications, contraindication, advantages, disadvantages</p> <p>i) Conventional bridge</p> <p>ii) Minimal preparation bridge</p> <p>iii) Fixed-fixed bridge</p> <p>iv) Cantilever bridge</p>	Lecture		<p>Class Participation</p> <p>Term and final examination</p>
Crown and types of crowns	<p>1. List various partial and</p>	Lecture		<p>Class Participation</p>



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(Introduction)	<p>full coverage restorations</p> <ol style="list-style-type: none"> Describe the principles of tooth preparation Describe the indications and contraindications for provision of inlay and onlay Describe clinical assessment required and steps of preparation for inlay and onlay Discuss fluid management and soft tissue management Discuss the procedure of Impression making for inlays and onlays. List material used for cementation Describe clinical procedure for cementation Discuss the latest innovations including CAD-CAM technology 			Term and final examination
Veneers	<ol style="list-style-type: none"> Discuss indications and contraindications for veneers Describe the diagnostic procedure involved in treatment planning Explain the importance of quantity and quality of enamel for bonding Describe tooth preparation and impression material used for veneers Describe step by step procedure for veneer placement 	Lecture		<p>Class Participation</p> <p>Term and final examination</p>
Crowns	<ol style="list-style-type: none"> Describe indications and contraindications of <ol style="list-style-type: none"> Porcelain fused to metal crown All metal crown All ceramic crown Discuss factors for shade selection Describe guidelines for shade matching Describe clinical assessment and steps for tooth preparation for porcelain fused to metal crown, all metal and all ceramic crown List material available for these restorations Discuss soft tissue 	Lecture	Practical	<p>Class Participation</p> <p>Term and final examination</p> <p>DOPS</p>



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	<p>management and impression making for crowns</p> <ol style="list-style-type: none"> Discuss indications and contraindications for the use of electrosurgery List materials used for cementation Describe the clinical procedure for cementation <p>IMPLANTSUPPORTEDRESTORATIONS:</p> <ol style="list-style-type: none"> Discuss indications and contraindications Describe various implant supported restorations that can be used for missing teeth 			
Fixed partial denture design	<ol style="list-style-type: none"> Discuss design considerations for individual conditions Describe material selection Explain biomechanical considerations Discuss abutment selection Discuss special cases Explain condition of residual ridge And occlusion with opposing teeth 	Lecture		<p>Class Participation</p> <p>Term and final examination</p>
Abutment and retainer selection	<ol style="list-style-type: none"> Explain types of retainers based on tooth coverage <ol style="list-style-type: none"> Full veneer crowns Partial veneer crowns Minimal preparation retainers Discuss material being used <ol style="list-style-type: none"> All metal Metal ceramics All ceramic All acrylic Discuss criteria for selection of retainers <ol style="list-style-type: none"> Alignment, appearance, condition Cost Preservation of tooth structure Discuss abutment selection <ol style="list-style-type: none"> Location, condition, position of abutment Crown root ratio, root support Pulpal health Explain types of abutments <ol style="list-style-type: none"> Healthy 	Lecture		<p>Class Participation</p> <p>Term and final examination</p>



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	<ul style="list-style-type: none"> ii) Cantilever iii) Tilted iv) Damaged Implant iv. abutments 			
Margin placement and pontic design	<ol style="list-style-type: none"> 1. List types of margins: <ul style="list-style-type: none"> i) Shoulder ii) Chamfer iii) Sloped shoulder iv) Shoulder with bevel v) Feathered edge vi) Chisel edge vii) Bevel 2. Describe Pontic design 3. List the factors affecting pontic design 4. Discuss available space 5. Describe contour of ridge 6. Discuss the amount of occlusal load placed on the abutment teeth during mastication. 7. Discuss general design considerations 	Lecture	Practical	<p>Class Participation</p> <p>Term and final examination</p> <p>DOPS</p>
Material consideration and cementation	<ol style="list-style-type: none"> 1. List types of materials used in cementation of fixed prosthesis. 2. Discuss the composition, properties, merits and short coming of material 	Lecture	Practical	<p>Class Participation</p> <p>Term and final examination</p>
Steps of procedures	<ol style="list-style-type: none"> 1. Discuss biological, mechanical and esthetic principles of tooth preparation 2. Discuss digital and physical techniques for impression making 3. Discuss digital and physical procedures of laboratory for the fabrication of cast. 4. Discuss cementation and post-cementation followup, Management and complications 	Lecture	Practical	<p>Class Participation</p> <p>Term and final examination</p>
Resin bonded bridges	<ol style="list-style-type: none"> 1. Discuss: <ul style="list-style-type: none"> i) Indications and contraindications ii) Advantages and disadvantages iii) Types of resin bonded Bridges iv) Rochette bridge v) Maryland bridge vi) Cast mesh fixed partial dentures vii) Virginia 	Lecture		<p>Class Participation</p> <p>Term and final examination</p>



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	viii) bridge			
Temporization	<ol style="list-style-type: none">1. Describe advantages and disadvantages2. Discuss different techniques of fabrication3. Describe properties of materials available4. Discuss cements available for temporization of teeth.	Lecture	Practical	Class Participation Term and final examination
Follow up and post cementation complains	<ul style="list-style-type: none">• Describe causes of prosthesis failure• Discuss possible complains of a newly cemented prosthesis• Discuss post-op instructions• Discuss maintenance of the prosthesis• Describe periodic recall of patient after delivery of complete dentures. <p>Discuss post insertion complains:</p> <ol style="list-style-type: none">A. Related to estheticsB. Related to occlusal surfaceC. PainD. DiscomfortE. Mastication problem	Lecture	Practical	



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COURSE TOPIC: IMPLANT

Lecture Topic	Learning Objectives	Mode of Teaching		Assessment Tools
		Lectures	Clinical	
Types of implants	<ol style="list-style-type: none"> Define endosteal implant <ol style="list-style-type: none"> Root form Blade form Define subperiosteal and transosteal implants List down the components of implants Explain advantages, disadvantages, indications and contraindications of implants Describe impression techniques for implants 	Lecture		Class Participation Term and final examination
Osseo-integration and biocompatibility	<ol style="list-style-type: none"> Describe integration and bio-integration Discuss mechanism of osseo-integration Discuss stages of osteointegration Explain theories of bone to implant interface Discuss the factors influencing osteointegration 	Lecture		Class Participation Term and final examination
Prosthetic options	<p>Discuss the prosthetic options of implant dentistry</p> <ul style="list-style-type: none"> FP 1 FP 2 FP 3 <ul style="list-style-type: none"> Fixed prosthesis Hybrid prosthesis RP 4 RP 5 <p>Discuss Advantages and disadvantages of screw retained and cement retained prosthesis</p>	Lecture		Class Participation Term and final examination
Limitation of implants	<p>List limitations of dental implants</p> <ul style="list-style-type: none"> Age Patient desire Patient fear Time of treatment Consequence of failure 	Lecture		Class Participation Term and final examination



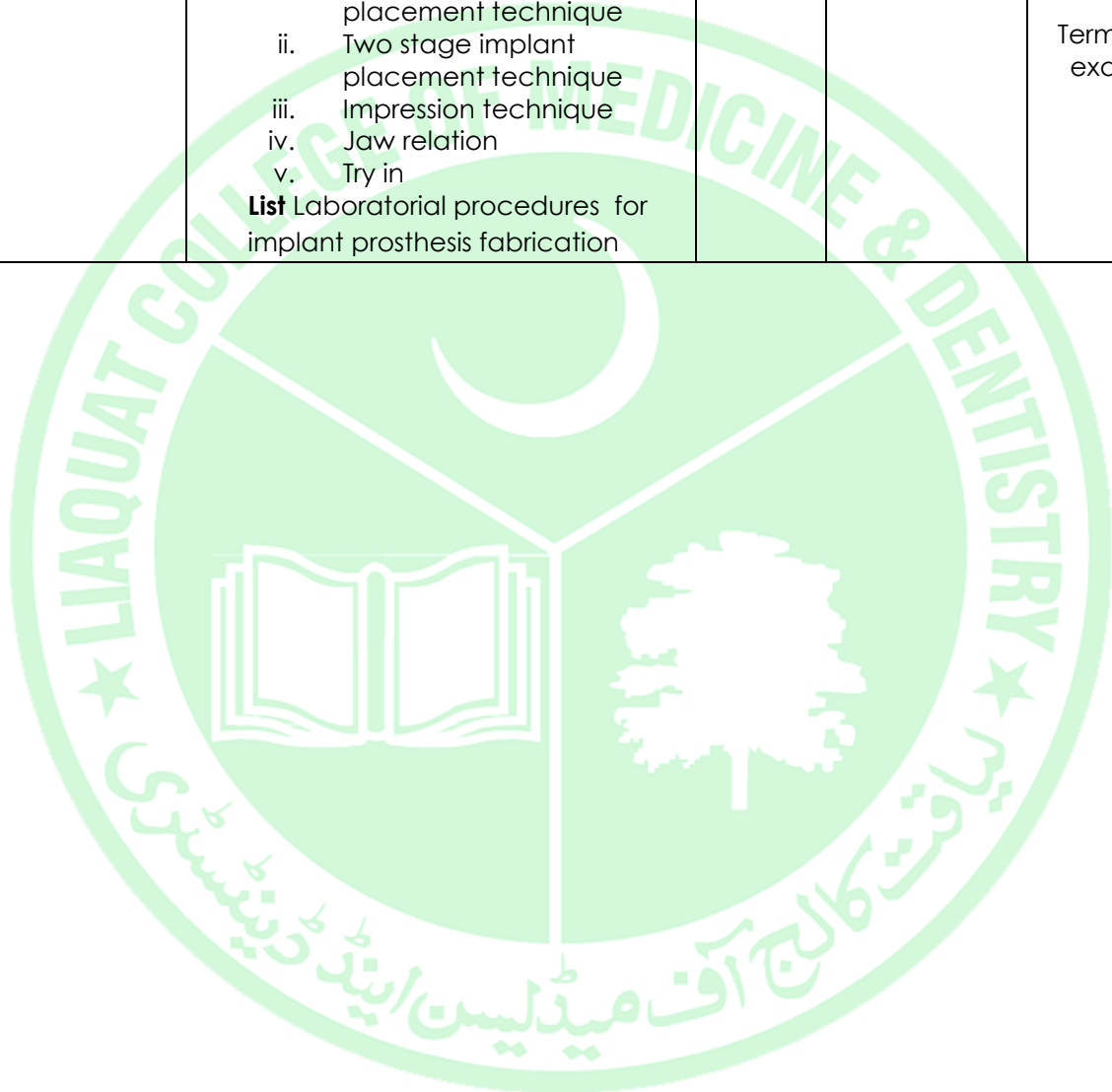
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	<ul style="list-style-type: none"> • Cost to patient • Adjacent tooth mobility • Bone height • Bone length • Bone width • Soft tissue drape • Challenging esthetics • Systemic diseases • Crown height space 			
Clinical and laboratory procedures	<p>List Clinical procedures for implant placement</p> <ol style="list-style-type: none"> One stage implant placement technique Two stage implant placement technique Impression technique Jaw relation Try in <p>List Laboratorial procedures for implant prosthesis fabrication</p>	Lecture		<p>Class Participation</p> <p>Term and final examination</p>





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COURSE TOPIC: MAXILLO-FACIAL PROSTHESIS

Lecture Topic	Learning Objectives	Mode of Teaching		Assessment Tools
		Lectures	Clinical	
Classification of congenital and acquired defects	<ol style="list-style-type: none"> 1. List maxillary defects and mandibular defects 2. Define velo-pharyngeal defects 	Lecture Flipped class		Class Participation Term and final examination
Principles governing treatment and management of defects	<ol style="list-style-type: none"> 1. Discuss treatment of soft and hard palate defects <ol style="list-style-type: none"> i) Obturator ii) Speech-aid 	Lecture		Class Participation Term and final examination
Types of obturators	<ol style="list-style-type: none"> 1. Explain the fabrication, indication, contraindications, advantages and disadvantages of <ol style="list-style-type: none"> i) Surgical obturator prosthesis ii) Interim obturator prosthesis iii) Definitive obturator prosthesis 	Lecture	Practical	Class Participation Term and final examination
Cleft palate and speech aid prosthesis	<ol style="list-style-type: none"> 1. Discuss pre surgical naso-alveolar molding appliance 2. Classify soft palate defects according to Veau's classification. 3. Classify physiological and anatomical defects 4. List types of speech-aid 5. Describe advantages, disadvantages, indication and contraindications of speech-aid prosthesis 6. Discuss: <ol style="list-style-type: none"> i) Design features of speech-aid ii) Impression procedure of speech-aid. iii) Technical consideration of speech-aid 	Lecture		Class Participation Term and final examination
Facial prosthesis	<ol style="list-style-type: none"> 1. Discuss <ol style="list-style-type: none"> i) Auricular defects ii) Nasal defects iii) Ocular defects iv) Lips and cheek defects 	Lecture		Class Participation Term and final examination
Splints , bite raising appliances and stents	<ol style="list-style-type: none"> 1. List down the types of splints 2. Discuss the prosthetic importance of bite-plane appliances 3. Describe its complication 4. Explain indication, fabrication and impression technique for stents 	Lecture	Practical	Class Participation Term and final examination



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CLINICAL QUOTA



ON PATIENT:	
<ul style="list-style-type: none"> History taking Examination 5 sets of Alginate Impressions 5 Models of impressions with bases 1 case of complete denture 1 Complete denture history examination and diagnosis 2-3 partial dentures 2-3 partial denture history examination and diagnosis 5 Clasp formation Observation of clinical steps of distal extension partial dentures Observation of tooth preparation. 	
ON MODEL/PHANTOM TEETH:	
Fixed Prosthodontics <ul style="list-style-type: none"> 2 PFM crown preparations on anterior and posterior teeth Temporary crown fabrication 	
Removable Prosthodontics	
Complete Denture <ul style="list-style-type: none"> Self cure denture base: <ul style="list-style-type: none"> Ideal die model pouring for maxilla and mandible Separating media application Mixing of material Fabrication of tray Finishing Polishing Wax rim formation Articulation Class 1 teeth setup Flasking Dewaxing Separating media application Packing Curing Deflasking Finishing Polishing - Handling of impression material (impression compound and green stick) on ideal model - Observation of obturator fabrication on ideal model. 	For Removable Partial Denture <ul style="list-style-type: none"> 5 clasps formation <ul style="list-style-type: none"> Ideal die model pouring for maxilla and mandible Designing of clasp Clasp formation Kennedys class 1 <ul style="list-style-type: none"> Ideal die model pouring for maxilla and mandible Base formation Undercut blocking Designing Articulation Wire work Wax up Teeth setup 1 occlusal splint fabrication <ul style="list-style-type: none"> Oral examination Impression record and model pouring with base formation Bite registration Articulation Wax-up and finishing of occlusal splint flasking Dewaxing Separating media application Packing Curing Deflasking Finishing Polishing
OTHERS	
<ul style="list-style-type: none"> Presentations 	



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LIST OF INSTRUMENTS AND MATERIALS

FOR PATIENTS:

- Face mask
- Surgical gloves
- Examination instruments sets with tray
 - ✓ Mouth mirror
 - ✓ Explorer
 - ✓ Cotton forceps
- Set of partial denture trays
- Set of complete denture trays

MATERIAL

- Alginate impression material

FOR PRACTICAL WORK:

- | | |
|--|-------------------------|
| ➤ Pliers <ul style="list-style-type: none">✓ Round✓ Flat✓ Adam's | ➤ Plaster knife |
| ➤ Wire cutter | ➤ Wax knife |
| ➤ Stainless steel wire | ➤ Wax carver |
| ➤ Rubber bowls <ul style="list-style-type: none">✓ Alginate✓ Plaster | ➤ Glass slab |
| ➤ Spatulas <ul style="list-style-type: none">✓ Curved✓ Straight | ➤ Articulator |
| ➤ Burs <ul style="list-style-type: none">✓ Straight fissure bur✓ Tapered fissure bur✓ Topedo ended bur✓ Wheel bur | ➤ Dental flasks |
| | ➤ Spirit lamps |
| | ➤ Plaster scissors |
| | ➤ High speed hand piece |

Phantom teeth (2 premolars lower, 2 premolars upper, 2 molars lower, 2 molars upper, 4 maxillary central incisors)



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Assessment Form



PRESENTATIONS

KEY:

Excellent	Good	Fair	Satisfactory	Needs Improvement
9-10	8-7	6-5	4-3	2-1

S.NO	TOPIC	SUPERVISOR	GRADE	DATE	SIGN
1.	KENNEDY'S CLASSIFICATION AND APPLIGATE'S RULE				
2.	DENTAL WAXES				
3.	ALGINATE				
4.	IDEAL TEETH ARRANGEMENT IN COMPLETE DENTURE				
5.	MAXILLARY MAJOR CONNECTORS				
6.	MANDIBULAR MAJOR CONNECTORS				
7.	MINOR CONNECTORS				
8.	DIRECT RETAINERS (OCCLUSALLY APPROACHING)				
9.	DIRECT RETAINERS (GINGIVALLY APPROACHING)				
10.	INDIRECT RETAINERS				
11.	REST AND REST SEATS				
12.	SURVEYOR AND SURVEYING				
13.	DESIGNING OF KENNEDY'S CLASS I AND CLASS II				
14.	DESIGNING OF KENNEDY'S CLASS III AND CLASS IV				
15.	IMPRESSION OF KENNEDY'S CLASS I AND II				
16.	ALTERED CAST TECHNIQUE				
17.	PONTICS				
18.	TYPES OF BRIDGES				
19.	TYPES OF ABUTMENTS				
20.	PRINCIPLES OF CROWN PREPARATION				

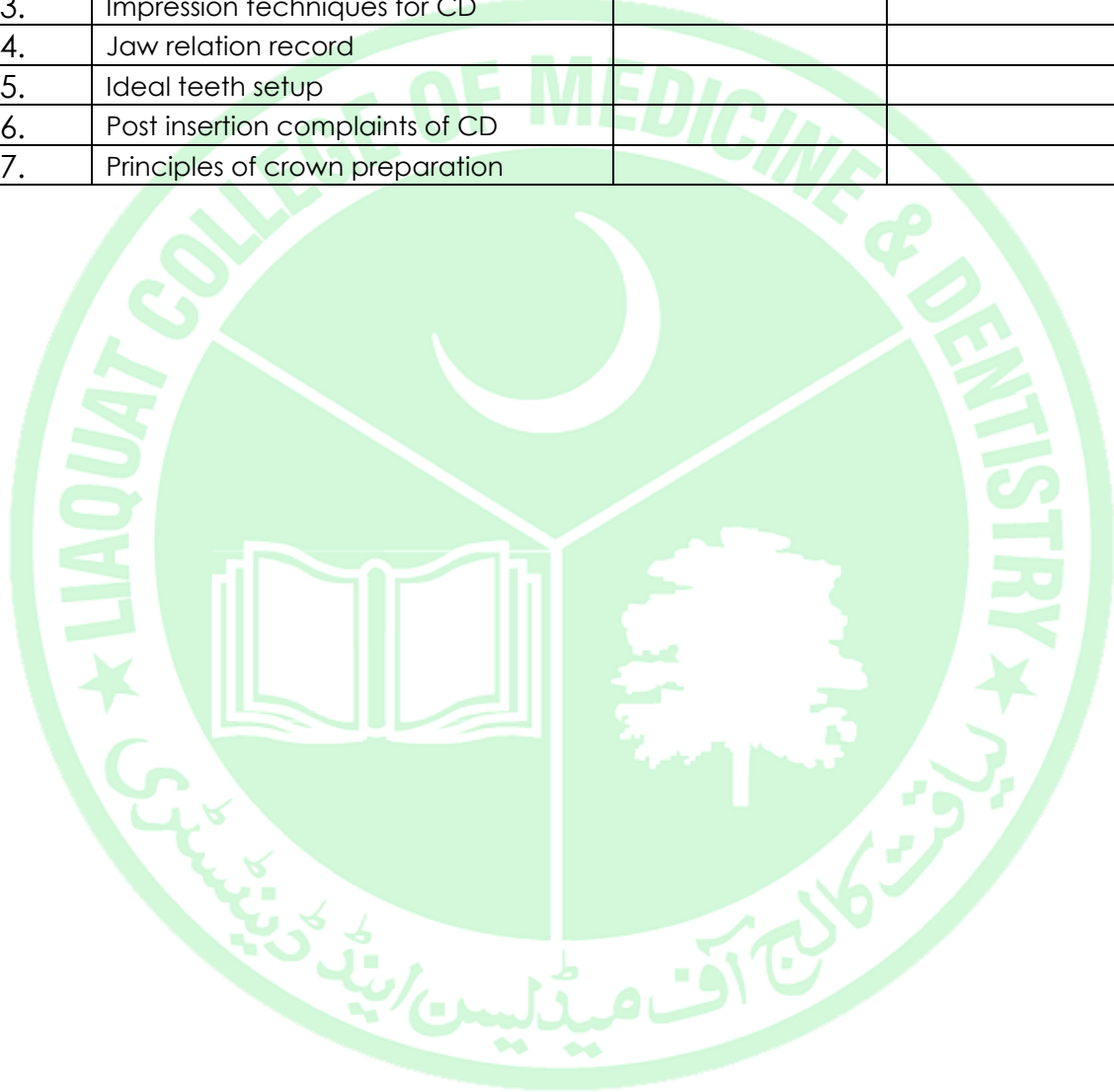


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Assessment Form



TUTORIALS

S.NO	TOPIC	SUPERVISOR	STUDENT SIGN
1.	Steps of complete denture fabrication		
2.	History and examination for complete denture		
3.	Impression techniques for CD		
4.	Jaw relation record		
5.	Ideal teeth setup		
6.	Post insertion complaints of CD		
7.	Principles of crown preparation		





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CLINICAL WORK DEMONSTRATION



S.NO	TASK	DATE	SUPERVISOR NAME	STUDENT SIGN
1.	Alginate impression for RPD			
2.	Bite registration for RPD			
3.	Trial for RPD			
4.	Insertion for RPD			
5.	Primary impression for CD			
6.	Border moulding for CD			
7.	Secondary impression for CD			
8.	Jaw relation record for CD			
9.	Trail for CD			
10.	Insertion for CD			
11.	Complains for CD/RPD			
12.	Special impression techniques			



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PRACTICAL WORK DEMONSTRATION



S.NO	TASK	DATE	SUPERVISOR NAME	STUDENT SIGN
<u>COMPLETE DENTURE</u>				
Fabrication of self-cure denture base				
a)	Undercut seal and separating media application			
b)	Finishing and polishing			
c)	Wax rim formation			
d)	Articulation			
e)	Class - I ideal complete denture teeth setup			
f)	Flasking			
g)	Dewaxing			
h)	Separating media application			
i)	Packing			
j)	Deflasking			
k)	Finishing			
l)	Polishing			
<u>CLASPS</u>				
a)	Anterior clasp			
b)	Posterior clasp			



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PARTIAL DENTURE

a)	Kennedy's class - I teeth setup			
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IMPRESSION WITH MODEL POURING

a)	Maxillary and Mandibular impression with model pouring			
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OCCLUSAL SPLINT

a)	Oral examination			
b)	Impression record and model pouring with base formation			
c)	Bite registration			
d)	Articulation			
e)	Wax-up and finishing of occlusal splint			
f)	flasking			
g)	Dewaxing			
h)	Separating media application			
i)	Packing			
j)	Curing			
k)	Deflasking			
l)	Finishing			
m)	Polishing			

FIXED PROSTHODONTICS

a)	All ceramic anterior crown preparation			
b)	PFM posterior crown preparation			
c)	Temporary crown fabrication			



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PRACTICAL WORK PERFORMANCE



S.NO	TASK	DATE	GRADE	SUPERVISOR SIGN
<u>COMPLETE DENTURE</u>				
Fabrication of self-cure denture base				
a)	Undercut seal and separating media application			
b)	Finishing and polishing			
c)	Wax rim formation			
d)	Articulation			
e)	Class I teeth setup			
g)	Flasking			
h)	Dewaxing			
i)	Separating media application			
j)	Packing			
k)	Deflasking			
l)	Finishing			
m)	Polishing			
<u>CLASPS</u>				
c)	Anterior clasp			
d)	Anterior clasp			
e)	Posterior clasp			
f)	Posterior clasp			
g)	Posterior clasp			
<u>IMPRESSION WITH MODEL POURING</u>				
b)	1 st maxillary and mandibular impression with model pouring			
c)	2 nd maxillary and mandibular impression with model pouring			
d)	3 rd maxillary and mandibular impression with model pouring			
e)	4 th maxillary and mandibular impression with model pouring			
f)	5 th maxillary and mandibular impression with model pouring			
<u>OCCLUSAL SPLINT</u>				
d)	Oral examination			



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e)	Impression record and model pouring with base formation			
f)	Bite registration			
g)	Articulation			
h)	Wax-up and finishing of occlusal splint			
i)	flasking			
j)	Dewaxing			
k)	Separating media application			
l)	Packing			
m)	Curing			
n)	Deflasking			
o)	Finishing			
p)	Polishing			

FIXED PROSTHODONTICS

a)	1 st All ceramic anterior crown preparation			
b)	2 nd All ceramic anterior crown preparation			
c)	1 st PFM posterior crown preparation			
d)	2 nd PFM posterior crown preparation			
e)	Temporary crown fabrication			



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ASSESSMENT FORM FOR IMPRESSION

KEY:

EXCELLENT	GOOD	FAIR	SATISFACTORY	NEEDS IMPROVEMENT
5	4	3	2	1

Alginate Impression Record:

S. NO	UNIT PROTOCOLS	MARKS	REMARKS	SIGN
1.	Covering of unit			
2.	Chair positioning			
3.	Consent			
4.	Gloves			
5.	Mask			
6.	Head cap			
7.	Material			
	IMPRESSION TAKING			
1.	Mixing of impression material			
2.	Selection of instruments			
	a. Bowl			
	b. Spatula			
	c. Tray			
3.	Chair positioning			
4.	Operator positioning			
5.	Method of impression taking			
6.	Water powder ratio			
7.	Final Impression			



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ASSESSMENT FORM FOR TEETH SETUP



KEY:

EXCELLENT	GOOD	FAIR	SATISFACTORY	NEEDS IMPROVEMENT
5	4	3	2	1

Alginate Impression Record:

S. NO	STEPS	MARKS	REMARKS	SIGN
1.	RECORD BLOCK			
	a) DENTURE BASE			
	b) WAX RIM			
2.	ARTICULATION			
3.	MIDLINE			
4.	TEETH SETUP			
	a) OVERJET			
	b) OVERBITE			
	c) INCLINATION OF ANTERIOR TEETH			
	d) CUSPID-CUSPID LINE			
	e) CUSPID-MOLAR LINE			
	f) CUSPID RETROMOLAR LINE			
	g) MOLAR RELATIONSHIP			
	h) POSTERIOR TEETH INCLINATION			
5.	FINISHING AND FISTUNING			



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ASSESSMENT FORM FOR CLASP



KEY:

EXCELLENT	GOOD	FAIR	SATISFACTORY	NEEDS IMPROVMENT
5	4	3	2	1

TEETH SETUP FOR PARTIAL DENTURE:

S. NO	STEPS	MARKS	REMARKS	SIGN
1.	DESIGNING ON MODEL			
2.	WROUGHT WIRE CLASP FORMATION ON MOLAR			
3.	WROUGHT WIRE CLASP FORMATION ON PREMOLAR			
4.	WAXUP			
5.	TEETH SETUP			



PEDIATRIC DENTISTRY



LEARNING OUTCOMES

PEDIATRIC DENTISTRY	
By the end of Final Years of BDS Program, the dental graduate will be able to:	
Knowledge:	<ul style="list-style-type: none">• Correlate the concepts of basic and clinical dental sciences to practice paediatric dentistry.• Assess children presenting with common dental complaints, while carrying out examinations and relevant investigations to diagnose the problem.• Develop critical thinking and reasoning to manage dental problems in children including caries, trauma, periodontal and orthodontic problems.
Skills:	<ul style="list-style-type: none">• Take history and conduct clinical examinations and investigations that allow collection of information required to evaluate the cause of a problem in a child.• Determine the differential and definitive diagnosis by interpreting and correlating findings from history, clinical and radiographic examination together with other diagnostic tests.• Formulate treatment plan relevant to specific needs of a child.• Remove or otherwise treat carious tooth structure under rubber dam isolation, demonstrating appropriate instrument selection and manipulation of restorative material to restore tooth form, function and aesthetics.• Treat teeth with pulpal diseases under rubber dam isolation using techniques such as indirect/direct pulp capping, pulpotomy to relieve pain and maintain pulp vitality or otherwise with root canal treatment where pulp is necrotic.• Perform extractions, serial extractions or align teeth orthodontically where indicated.• Demonstrate oral hygiene instructions, topical fluoride therapy and fissure sealing.• Counsel the children regarding diet relevant to oral health
Attitude:	<ul style="list-style-type: none">• Demonstrate caring and ethical behavior and professional attitude to children.• Establish a child patient- dentist relationship that allows effective delivery of dental treatment including communication to child's parents or guardians, the knowledge and understanding of treatment proposed or advice given.• Acknowledge that the child is the centre of care and that all the interactions including diagnosis, treatment planning and treatment have the child's best interests as the focus of that care.• Demonstrate giving constructive feedback to the child and the parents/guardians while monitoring the accomplishment of oral health care, instructions and advice



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COURSE TOPIC: INTRODUCTION TO PEDIATRIC DENTISTRY

Lecture Topic	Learning Objectives	Mode of Teaching		Assessment Tools
		Lectures	Clinical	
Introduction To Pediatric Dentistry	<ul style="list-style-type: none">➤ Discuss development of dentition.➤ Differentiate between primary and permanent teeth on the basis on structure composition and size➤ Explain the chronology of development of primary and permanent dentition➤ State exfoliation & eruption timing, sequence of primary teeth, sequence of eruption permanent teeth eruption.	Lecture (1)		Final Examination

COURSE TOPIC: PAIN AND ANXIETY MANAGEMENT OF PEDIATRIC PATIENT

Lecture Topic	Learning Objectives	Mode of Teaching		Assessment Tools
		Lectures	Clinical	
Pain And Anxiety Management Of Pediatric Patient	<ul style="list-style-type: none">➤ List various pharmacological and non-pharmacological methods of pain and anxiety control.➤ Describe different behavioral management strategies for pediatric patients.➤ State different sedation techniques for pediatric patients.➤ Explain the dental management of children with special needs. <p>By the end of paedodontic OPD rotation the final student will be able to:</p> <ul style="list-style-type: none">➤ Demonstrate various behavioral management strategies on simulated pediatric patients.➤ Write down a prescription for pain and infection control in pediatric patients presenting with endodontic pain.	Lecture (2)	Tutorial/ Small Group Discussion On simulated patient	Class Participation Final Examination Google assignment



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COURSE TOPIC: PREVENTION OF DENTAL CARIES FOR PEDIATRIC PATIENT

Lecture Topic	Learning Objectives	Mode of Teaching		Assessment Tools
		Lectures	Clinical	
Prevention Of Dental Caries for pediatric patient	<ul style="list-style-type: none"> ➤ Describe various medical conditions that may affect the management of pediatric patients. ➤ Discuss effects of diet on dental tissues. ➤ State various sources of sugars. ➤ Describe the effect of fluoride on the dental caries process. ➤ Discuss mechanism of action of fluoride ➤ Discuss management of accidental fluoride toxicity ➤ Explain the rationale of fluoride supplementation. ➤ Describe different vehicles of fluoride delivery. ➤ Explain the importance of parental counseling. ➤ Describe the importance of dietary management and home care in caries prevention. ➤ State the importance of regular dental follow-ups. ➤ Discuss the importance of fissure sealing and acid etch technique as a preventive measure. ➤ Describe the placement of pit and fissure sealants and preventive resin restorations in primary teeth. <p>By the end of the paedodontics OPD rotation the student will be able to:</p> <ul style="list-style-type: none"> ➤ Take a medical and dental history of a pediatric patient. ➤ Counsel parent/ guardian of a pediatric patient regarding measures to prevent dental disease. ➤ Demonstrate correct tooth brushing technique. ➤ Perform placement of pit and fissure sealants ➤ Perform preventive resin restorations on patients . 	Lecture (3)	<p>CBL on fluoride toxicity</p> <p>Tutorial/ Small Group Discussion On patient</p>	Class Participation Group Assignment Final Examination Mini CEX OSATS Google assignment



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COURSE TOPIC: LOCAL ANESTHESIA TECHNIQUE FOR PEDIATRIC PATIENT

Lecture Topic	Learning Objectives	Mode of Teaching		Assessment Tools
		Lectures	Clinical	
Local Anesthesia Technique For Pediatric Patient	<ul style="list-style-type: none"> ➤ Summarize new techniques for achieving topical anesthesia. ➤ List non pharmacological pain control methods ➤ Describe available topical anesthetic solutions. ➤ Describe new techniques for achieving topical anesthesia. ➤ List various techniques of local anesthesia administration. ➤ Describe supplemental anesthesia techniques ➤ Enlist contraindications of local anesthesia ➤ Describe pain free anesthesia technique. ➤ Interpret Possible complications of local anesthesia. <p>By the end of paedodontic OPD rotation the final student will be able to:</p> <ul style="list-style-type: none"> ➤ Perform painless anesthesia technique on pediatric patients undergoing restorative treatment. 	Lecture (2)	Tutorial/ Small Group Discussion On patient	Final Examination OSATS

COURSE TOPIC: RESTORATIVE DENTISTRY FOR PEDIATRIC DENTITION

Lecture Topic	Learning Objectives	Mode of Teaching		Assessment Tools
		Lectures	Clinical	
Restorative Dentistry For Pediatric Dentition	<ul style="list-style-type: none"> ➤ Discuss methods to detect and diagnose dental caries in primary teeth. ➤ Describe the pattern of early childhood caries and its management. ➤ Discuss the radiographic views that are of value in diagnosing dental caries. ➤ Explain the importance of isolation when restoring teeth. ➤ Explain the importance of matricing in proximal decay. ➤ Describe restorative materials that can be used to restore a carious lesion. ➤ Describe restoration of occlusal and proximal caries. ➤ List the indications and techniques for stainless steel crowns and strip crowns. ➤ Discuss alternative to conventional cavity preparation <p>By the end of the paedodontics OPD rotation the student will be able to:</p> <ul style="list-style-type: none"> ➤ Demonstrate history taking, examination and diagnosis in a pediatric patient presenting in OPD. ➤ Diagnose dental caries in primary teeth based on clinical and radiographic examination. ➤ Prepare cavities and fill with suitable material in children presenting in OPD. ➤ Demonstrate technique for stainless steel crown. 	Lecture (1)	Tutorial/ Small Group Discussion On Patient	Class Test Class Participation Final Examination Mini CEX OSATS Google assignment



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COURSE TOPIC: PULP THERAPY FOR PRIMARY AND YOUNG PERMANENT TEETH

Lecture Topic	Learning Objectives	Mode of Teaching		Assessment Tools
		Lectures	Clinical	
Pulp Therapy For Primary And Young Permanent Teeth	<ul style="list-style-type: none"> ➤ Describe the development of a tooth from its eruption to root maturation. ➤ Explain the need to save primary teeth. ➤ Describe the importance of case assessment. ➤ Describe the stabilization of mouth in case of rampant caries. ➤ Describe the indications, contraindications and procedures in primary dentition for: <ul style="list-style-type: none"> i) Pulp cap, ii) Pulpotomy, iii) Pulpectomy ➤ Describe indications, contraindications in young permanent dentition for: <ul style="list-style-type: none"> i) Indirect pulp cap, ii) Direct pulp cap, iii) CvekPulpotomy, iv) Apexogenesis, v) Apexification ➤ Describe the role of regenerative endodontics in the management of non-vital immature teeth. <p>By the end of the paedodontics OPD rotation the student will be able to:</p> <ul style="list-style-type: none"> ➤ Perform indirect pulp cap procedure on primary and young permanent teeth. ➤ Formulate a treatment plan for the patient presenting with premature roots according to their pulp status in OPD. 	Lecture/ Flip classroom (2)	CBL on Apexification Tutorial/ Small Group Discussion	Class Test Class Participation Final Examination Google assignment



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COURSE TOPIC: INHERITED ANOMALIES OF ENAMEL AND DENTIN

Lecture Topic	Learning Objectives	Mode of Teaching		Assessment Tools
		Lectures	Clinical	
Inherited Anomalies Of Enamel And Dentin	<ul style="list-style-type: none">➤ List various inherited enamel and dentin defects.➤ Discuss the clinical problems associated and treatment objectives when managing inherited enamel and dentin defects.➤ Discuss the etiology, prevention, clinical features and management of:<ul style="list-style-type: none">i) Amelogenesis Imperfectaii) Dentinogenesis Imperfectaiii) Molar Incisor hypomineralization.iv) Dentin dysplasia <p>By the end of paedodontics OPD rotation final year student will be able to:</p> <ul style="list-style-type: none">➤ Diagnose (paper based cases only/ not on patients) on history, clinical and radiographic findings:<ul style="list-style-type: none">i) Amelogenesis Imperfectaii) Dentinogenesis Imperfectaiii) Molar Incisor hypomineralization	Lecture (5)	CBL on inherited enamel and dentin defects. Tutorial/ Small Group Discussion	Class Test Class Participation Final Examination Google assignment

COURSE TOPIC: PERIODONTAL DISEASES IN PEDIATRIC PATIENT

Lecture Topic	Learning Objectives	Mode of Teaching		Assessment Tools
		Lectures	Clinical	
Periodontal Diseases In Pediatric Patient	<ul style="list-style-type: none"> ➤ Classify periodontal diseases in Children. ➤ Discuss the etiology, clinical features and management of acute gingival conditions: <ul style="list-style-type: none"> I.Primary herpetic gingivostomatitis II.Necrotizing ulcerative gingivitis. ➤ Discuss the etiology, clinical features and management of chronic gingivitis and periodontitis. ➤ Discuss etiology, clinical features and management of drug induced gingival enlargement. ➤ Discuss periodontal disease as a manifestation of various syndromes and systemic diseases in children. 	Lecture (3)	CBL on drug induced gingival enlargement. Tutorial/ Small Group Discussion	Class Test Class Participation Final Examination

COURSE TOPIC: ANOMALIES OF TOOTH FORMATION AND ERUPTION

Lecture Topic	Learning Objectives	Mode of Teaching		Assessment Tools
		Lectures	Clinical	
Anomalies Of Tooth Formation And Eruption	<ul style="list-style-type: none"> ➤ Discuss the prevalence, etiology and management of variation in the number of teeth. ➤ Discuss various anomalies in tooth size and their management. ➤ Describe various anomalies of tooth form and their management. ➤ Describe disturbances in eruption and exfoliation and its clinical significance. <p>By the end of paedodontics OPD rotation final year student will be able to:</p> <ul style="list-style-type: none"> ➤ Diagnose anomalies of tooth size and form based on clinical and radiographic findings. ➤ Diagnose disturbances in eruption and exfoliation based on history, clinical and radiographic findings 	Lecture/ Flip classroom m (5)	Tutorial/ Small Group Discussion Tutorial/ Small Group Discussion	Class Test Class Participation Final Examination



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COURSE TOPIC: THE PEDODONTIC-ORTHODONTIC INTERFACE

Lecture Topic	Learning Objectives	Mode of Teaching		Assessment Tools
		Lectures	Clinical	
The Pedodontic-Orthodontic Interface	<ul style="list-style-type: none">➤ Explain the importance of screening patients for orthodontic referral at the correct time.➤ Define interceptive orthodontics.➤ Describe the rationale and sequence of serial extractions.➤ Summarize various space maintainers used in mixed dentition.➤ List various habit breaking appliances in pediatric patients. <p>By the end of paedodontics OPD rotation final year student will be able to:</p> <ul style="list-style-type: none">➤ Formulate a referral letter to an orthodontist when required.	Lecture (1)	Tutorial/ Small Group Discussion	Class Test Class Participation Final Examination

COURSE TOPIC: ORAL SURGERY AND PATHOLOGY IN PEDIATRIC PATIENTS

Lecture Topic	Learning Objectives	Mode of Teaching		Assessment Tools
		Lectures	Clinical	
Oral Surgery And Pathology In Pediatric Patients	<ul style="list-style-type: none">➤ Describe lesions affecting the oral soft tissues in children:<ul style="list-style-type: none">i) Infections,ii) Ulcers,iii) Vesiculobullous,iv) White lesions,v) Cysts,vi) Tumors.➤ Describe lesions affecting the jaws in children:<ul style="list-style-type: none">i) Cysts,ii) Developmental,iii) Osteodystrophies,iv) Tumors.	Lecture (2)		Class Test Class Participation Final Examination



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COURSE TOPIC: DENTAL TRAUMA

Lecture Topic	Learning Objectives	Mode of Teaching		Assessment Tools
		Lectures	Clinical	
History And Examination	<ul style="list-style-type: none"> ➤ Classify dento-alveolar injuries. ➤ Outline the importance of a detailed history of trauma including past medical and dental history. ➤ List the questions to be inquired from a patient presenting with history of dental trauma. ➤ Discuss the appropriate radiographs needed for an accurate diagnosis. ➤ List and discuss appropriate investigations for patients with dental trauma. <p>By the end of paedodontics OPD rotation final year student will be able to:</p> <ul style="list-style-type: none"> ➤ Take comprehensive medical & dental history of the patient present with traumatic injuries in the OPD. ➤ Perform extra and intraoral examination on a patient presenting with traumatic injuries in the OPD. 	Lecture (1)	Tutorial/ Small Group Discussion (CBL) On patient/ Simulated patient	Class Test Class Participation Group Assignment Final Examination Mini CEX
Healing After Trauma	<ul style="list-style-type: none"> ➤ List the different types of healings following dental trauma. ➤ Describe the healing of pulp and factors affecting its healing. ➤ Describe the healing of periodontium and factors affecting its healing. ➤ Differentiate between various types of root resorptions: <ol style="list-style-type: none"> External resorption, Cervical resorption, Internal resorption, Replacement resorption. 	Lecture (2)	Tutorial/ Small Group Discussion	Class Test Class Participation Final Examination
Injuries To Primary Dentition	<ul style="list-style-type: none"> ➤ Discuss management of hard tissue injury in the following categories: <ol style="list-style-type: none"> Uncomplicated crown fracture, Complicated crown fracture, Crown-root fracture, Root fracture. ➤ Describe management of soft tissue injury in following categories: <ol style="list-style-type: none"> Concussion, Subluxation, Extrusive luxation, Lateral luxation, Intrusion, Avulsion. ➤ Describe the sequelae of injuries to the primary dentition. <p>By the end of paedodontics OPD rotation final year student will be able to:</p> <ul style="list-style-type: none"> ➤ Formulate a treatment plan for the patient presenting with traumatic injuries in the OPD. 	Lecture (1)	(CBL) Tutorial/ Small Group Discussion	Class Test Class Participation Final Examination
Injury To Permanent Dentition-Hard Tissue	<ul style="list-style-type: none"> ➤ Explain management of hard tissue injury in the following categories: <ol style="list-style-type: none"> Enamel infraction, Enamel fracture, Enamel-dentin fracture, Complicated crown fracture, Uncomplicated crown-root fracture, Complicated crown-root fracture, 	Lecture (2)		Class Test Class Participation Final Examination



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	vii) Root fracture. > Discuss the types and uses of splints. > Explain the duration of splint therapy in each injury. > Describe the procedure for placement of composite and wire splint. By the end of paedodontics OPD rotation final year student will be able to: > Diagnose and formulate a treatment plan for the patient presenting with traumatic injuries in the OPD.		(CBL) Tutorial/ Small Group Discussion	
Injury To Permanent Dentition-Luxation And Avulsion	> Describe management of soft tissue injury in following categories: i) Concussion, ii) Subluxation, iii) Extrusive luxation, iv) Lateral luxation, v) Intrusion, vi) Avulsion. > Describe duration of splint therapy in each injury. > Describe the rationale of delayed re-implantation of an avulsed tooth. By the end of paedodontics OPD rotation final year student will be able to: > Formulate a treatment plan for the patient presenting with traumatic injuries in the OPD.	Lecture (3)	(CBL) Tutorial/ Small Group Discussion	Class Test Class Participation Final Examination

COURSE TOPIC: ADVANCED RESTORATIVE DENTISTRY

Lecture Topic	Learning Objectives	Mode of Teaching		Assessment Tools
		Lectures	Clinical	
Advanced Restorative Dentistry	> List the advanced restorative techniques. > Define bleaching i) Non vital bleaching ii) Vital bleaching chair iii) Vital bleaching night guard > List causes of tooth discoloration. > Enumerate types of bleaching. > State indication and contraindications of i) Non vital bleaching ii) Vital bleaching chair	Lecture (4)		Class Test Class Participation Final Examination



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GUIDE TO CLINICAL SKILL LAB (COD)

Introduction	<p>Clinicians are defined by their skill sets. From listening to procedures the continuum of skills that are garnered by learners and dental students are myriad. We believe learning is a life-long process. The emphasis on skill acquisition is one of the key features of the competency based curriculum and in many ways is its soul. The competency based undergraduate curriculum provides a framework for learning and assessing skills. The Clinical skill laboratory provides a supportive environment in which learners can acquire and practice skills and be observed and assessed.</p> <p>As well as promoting personal professional development, PDC aims to maintain and develop competencies (knowledge, skills and attitudes) of the individual student and health care worker, essential for meeting the changing needs of patients and the health care delivery system, responding to the new challenges from the scientific development in medicine and dentistry, and meeting the evolving requirements of society.</p>
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Knowledge

Skills

Attitude

Responsiveness

Communication

Vision	The Clinical Skill Laboratory will be a local center of excellence and innovation for health care simulation, education, acquisition of skills, research, and health system integration to ensure patient safety
Mission	The Clinical Skill laboratory mission is in accord with the mission of College of dentistry (LCMD). The Clinical Skill laboratory will provide a replica of the patient care environment where students can apply cognitive, psychomotor, and affective skills and instructors can facilitate learning and objectively measure student performance and competency
Goals	<ul style="list-style-type: none">• The goal of skill lab is to create an artificial replication of the real world situation in which students can gain knowledge and psychomotor skills and be able to critically think through complex scenarios in a safe and non-threatening environment.• Develop new technical skills and refresh current competencies• Playing a critical role in shaping patient safety initiatives by national and institutional assessment of needs for simulation-based education• Keep up-to-date on best practices• Learn how to incorporate the latest technologies, new learning methods and educational strategies into teaching.• Explore inter-professional education• Establishing local, regional and national partnerships• Advancing the field of health care simulation through research and dissemination of our work in relevant local, regional and national forums• Targeting multi-disciplinary health care teams, helping all members understand their roles and communicate effectively
Skills Lab Protocols For Students	<ul style="list-style-type: none">• Information shall be forwarded to all students regarding respective skill session a week prior through timetable.



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	<ul style="list-style-type: none"> • Punctuality and regularity is mandatory for all the students. • Students are bound to follow safety guidelines of skill lab • Student should follow the infection control protocols. All students should wear face masks in Skill lab premises and maintain social distancing. • Logbook should be filled by students at the end of each session and should be signed by their respective supervisor/instructor • At the end of session final assessment of the student should be done through questionnaire/test and attendance will be marked after clearing it. • The attendance of the sessions will be counted in internal evaluations • At the end of the session, students should be provided with the feedback forms in which they give feedback 	
Skills Lab Safety Guidelines	<ul style="list-style-type: none"> • The following guidelines for the smooth running of Skills and Simulation lab are presented and the students are expected to follow these. • All students are encouraged to follow infection control protocols • All students are directed to keep all their belongings in a separate area dedicated for this purpose. • No student is allowed to use mobile phones into the learning area of skills lab. • They are strictly prohibited to write anything on the manikins, tables, walls and blends etc. • Needles and blades used in skills lab should not be reused and should be disposed of in the nearest sharps container. • Soiled linen should be immediately sent to laundry. • All tubes, catheters, dressings, tape, etc. must be removed and the area cleaned appropriately upon completion of simulated exercises. • Manikins are to be left on the tables and not moved unless directed by the instructor. • All drainage bags must be emptied, disposed of or cleaned appropriately for later use. • Students who use the skills lab will keep the confidentiality and privacy of manikins. This rule will apply to all students who want to enter and use the skill lab manikins and any violation will result in disciplinary action against that student. • Students are not to be left unattended by faculty or staff at any time. • The doors to skills lab should be locked at all times when not in use. • A first aid kit will be available all the time in the skill lab to be used in case of any injury to the student or faculty. • No food and drinks will be allowed in skills lab. • Students, staff and faculty must be aware that some of the equipment and supplies in the skill lab contains latex. Those with a known sensitivity / allergy to latex should contact the Director or coordinator. All users who suffer from a latex sensitivity / allergy should familiarize themselves with the policy and take precautions while using or handling latex parts by wearing non-latex gloves. • Unauthorized persons are not allowed in the labs at any time. • In case of any needle stick injury, they will report immediately to instructor/coordinator/staff and follow the guide lines 	
Nominated Faculty	Coordinator PDC (Skill Lab) COD	Dr. Amna Rehman (Assistant Professor Oral and Maxillofacial Surgery)
	Members	Dr. Samer (Instructor skill lab)



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PROFESSIONAL DEVELOPMENT CELL (SKILL LAB)				
Competencies	Learning Objectives	Teaching & learning Activities	Assessment tools	Outcomes
Basic life support (BLS)	<p>At the end of the session student of Final year BDS, should be able to:</p> <ul style="list-style-type: none"> Analyze the conditions which needs BLS provision. Describe the method of Cardiopulmonary resuscitation in sequence. Describe the management of choking in infants and adults Translate the steps of BLS provision. Perform the BLS following AHA guidelines 	Video, Practical demonstration followed by self on practice on manikin	Mini CEX, OSATS DOPS OSCE	By the end of the training program, students of Final year BDS should be able to : 1) Practice basic life support following the American heart association manual guidelines
Biopsy Taking	<p>At the end of the session student of Final year BDS, should be able to:</p> <ul style="list-style-type: none"> Identify patient selection and preparation for biopsy Describe optimal biopsy techniques List potential complications Describe all steps of the procedure correlating the antisepsis rules. Recognize the advantages and disadvantages of choosing specific type of biopsy Practice the Incisional, excisional, aspiration biopsies on models 	Video, Practical demonstration		Perform Incisional, excisional and aspiration biopsies
Primary Airway Management	<p>At the end of the session student of Final year BDS, should be able to:</p> <ul style="list-style-type: none"> Name and label the major structures of the respiratory system on a diagram 	Video, Role-play on manikin followed by self practice		Apply the primary airway management



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	<ul style="list-style-type: none">• List the signs of adequate breathing• List the signs of inadequate breathing.• Describe the steps in performing the head tilt–chin lift and jaw thrust• Relate mechanism of injury to opening the airway• Execute how to ventilate a patient artificially with a pocket mask• Demonstrate the steps in performing the skill of artificially ventilating a patient with a bag–valve–mask• Role-play how to measure and insert an oropharyngeal (oral) airway• Role-play how to measure and insert a nasopharyngeal (nasal) airway.			
Orofacial Radiology	<p>At the end of the session student of Final year BDS, should be able to:</p> <ul style="list-style-type: none">• Translate relevant anatomy, pathophysiology, technology and performance of examinations as it relates to the daily practice of orofacial radiology.• Interpret the basic plain film orofacial Radiograph• Differentiate between normal and abnormal findings on these radiographs.• Identify the needs of advising these Radiography• Analyze the harmful radiation doses and their effects	Presentation, CBL, small group discussion		Categorize the different orofacial plain radiographs



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CODE OF CONDUCT



STUDENT'S CODE OF CONDUCT

PURPOSE:

The purpose is to determine and set out general standards of conduct expected of student, provide examples of conduct that may be subject to disciplinary action by the institute and set out the process and procedures that it will follow when an allegation of non-academic misconduct is made. Students are expected to be aware of, and to conduct themselves in accordance with this Code.

Failure to fulfill these responsibilities may result in the withdrawal of privileges or the imposition of sanctions.

APPLICATION:

This Code applies to conduct that:

- a) Occurs on or near the premises of the Institute and Hostel.
- b) Occurs elsewhere in the course of activities sponsored by the institute, or where the conduct is alleged to adversely affect, disrupt, or interfere with another person's reasonable participation in Institute's programs or activities; or
- c) Occurs in the context of a relationship between the student and a third party that involves the student's standing, status, or academic record at the Institute

STUDENTS' GENERAL CONDUCT AND BEHAVIOUR:

GENERAL CONDUCT:

1. Identity Card:

Students shall always carry the identity card issued by LCMD and must be displayed within college premises. Students without ID card may not be allowed to enter the college premises.

Faculty members, student affair, administration staff and security staff are authorized to check ID cards at any time.

2. Respect and Discipline:

- a) Students shall abide by rules and regulations of LCMD
- b) Students shall behave in a civilized manner during their stay in college. They must be co-operative with fellow students, faculty and staff and must not indulge in any action that is humiliating for others.
- c) Students shall avoid sitting on stairs, floors, and hallways.



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- d) Students shall avoid gathering and shouting near the lecture halls, labs, office areas etc.
- e) Students shall avoid using mobile phones during lectures/practicals/tutorials/clinicals/ and in library
- f) Students shall present themselves with dignity befitting their status as mature, law abiding and responsible person and show tolerance toward religious, ethical, social and other differences.
- g) Students must not enter into any kind of monetary dealings with the teaching and non-teaching staff of the college, nor offer any gifts or gratifications in any form to them with a view to ease or resolve their academic related matters
- h) Refrain from any activity which is subversive of discipline and will bring the institute into disrepute

3. **Inappropriate use of language:**

Students shall not use any such language or words that disturbs the other person emotionally or psychologically and/or is insulting.

4. **Outing during classes:**

Students are to stay within the campus during the schedule of their classes/practicals/tutorials/ clinicals/exams. Should going out of the campus during these timings, should seek permission in writing from HoDs/ Principal/Registrar/Incharge Student Affairs.

5. **Usage of college premises:**

Students must leave the college building after their classes are over unless they have specific assigned tasks or want to avail the library facilities. They are not expected to loiter in the college before or after their college timings.

6. **Substance abuse and addictions:**

Students at no cost are expected to get into substance abuse as use of drugs and alcohol. If found involved in these will lead to strict disciplinary action.

Intoxicants as smoking, sheesha, tobacco, pan, chalia gutka chewing are strictly prohibited in college.

7. **Possession of items:**

Students shall have in their possession only those items allowed by law and rules and/or college policies and rules



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DRESS CODE:

1. Principles:

Dress code is based on following principles:

- Safety and respect
- Self-worth and self discipline
- Cleanliness and hygiene
- Appropriateness to the learning environment
- Accordance to the social and cultural values

2. General Attire

- Wearing and displaying of student ID cards
- Wearing of Doctor's white coat (for students of clinical years, surgical scrubs may be worn instead according to policy of the department of rotation)
- Wearing of proper attire

Proper attire for Males:

- Formal shirt/dress pants(Shalwar Kameez allowed on Fridays only) that are clean and ironed
- Formal shoes along with socks
- T-shirts, jeans, bermudas, shorts, sandals, knocking heels not allowed
- Short hair (no longer than nape of neck)
- Punk /spiked hairstyle not allowed
- Trimmed or shaved beard
- Neatly cut nails
- Visible tattoos not allowed

Proper attire for Females:

- Presentable, decent concealing dress that is clean and ironed.
- T-shirts, jeans. knocking heels not allowed
- Neatly tied hair
- Rattling jewelry not allowed
- Dupattas / chadders to be tucked inside doctor's white coat
- Doctor's white coat to be donned over the abayas (if worn by someone)
- Neatly cut nails
- Visible tattoos not allowed

3. Library Rules:

a. Decorum:

- Students shall maintain silence in the library and shall not disturb others
- Smoking eating drinking talking chewing laughing is strictly prohibited in library
- Use of mobile phones is strictly prohibited in library
- While entering the library the students shall leave their personal belonging like bags, personal books, helmets etc at the counter outside library

b. Damage to library property

Student shall not deface, mark, cut, mutilate or damage the reading material of the library in any way. Those found doing so may be fined apart from being asked to pay the cost of the damage.

4. Handling Of College Property:



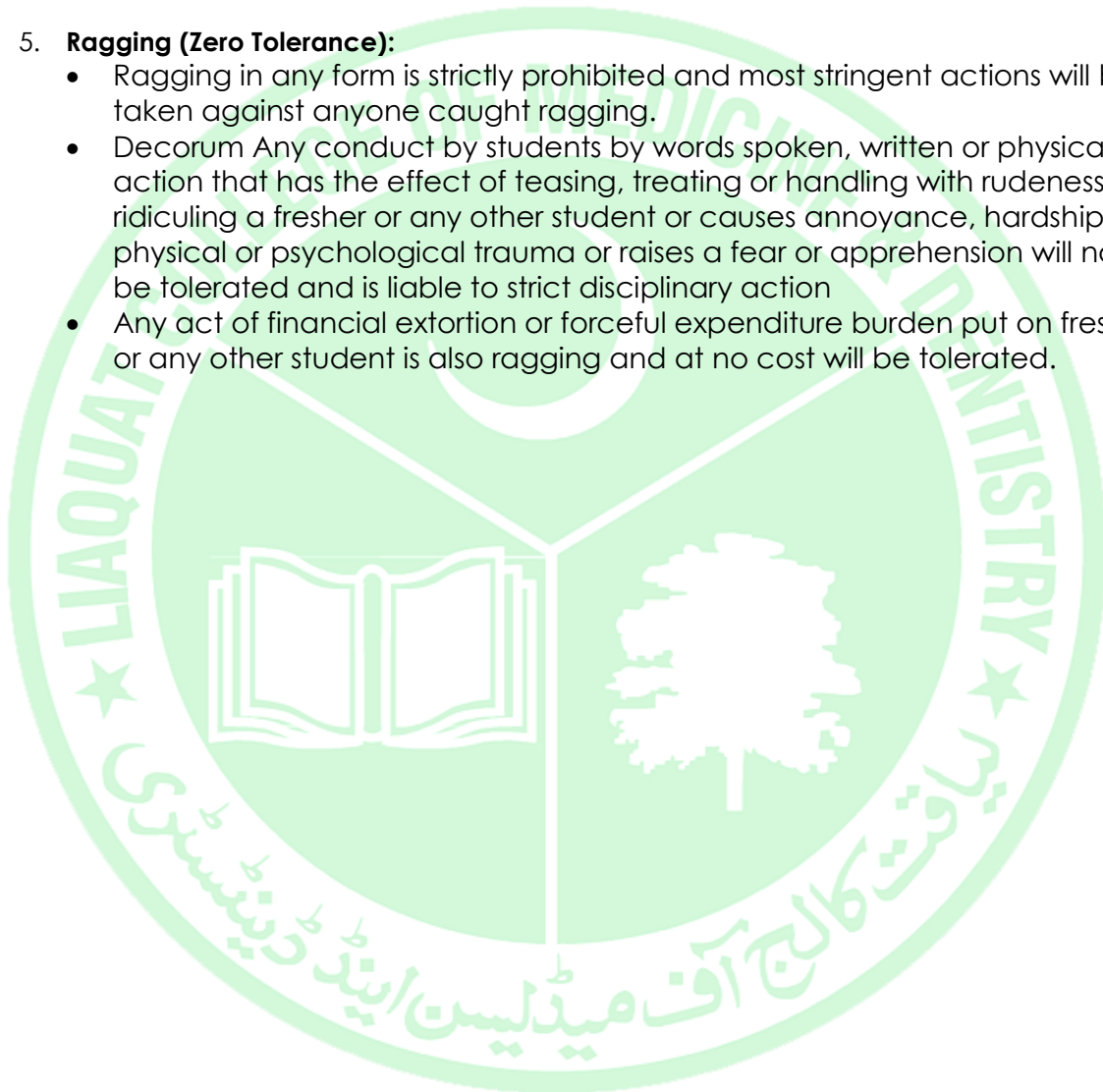
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- College's property is an asset for the students. It is the responsibility of the students not only to keep the property intact but to protect it as well
 - Any item; book, journal, models, mannequins, bones, instruments, devices etc issued to the students to complete the assigned task must be returned in due time and in original condition. In case of any mishandling or damage, student would be asked to pay the cost of the damage
 - Students must take care not to deface any part of the college premises. Writing on the walls is not allowed, pasting of any kind of posters, charts pamphlets etc of any kind is not permitted without prior permission of the Principal
 - Tampering with notice board is prohibited
5. **Ragging (Zero Tolerance):**
- Ragging in any form is strictly prohibited and most stringent actions will be taken against anyone caught ragging.
 - Decorum Any conduct by students by words spoken, written or physical action that has the effect of teasing, treating or handling with rudeness or ridiculing a fresher or any other student or causes annoyance, hardship, physical or psychological trauma or raises a fear or apprehension will not be tolerated and is liable to strict disciplinary action
 - Any act of financial extortion or forceful expenditure burden put on fresher or any other student is also ragging and at no cost will be tolerated.





DISCIPLINARY ACTION AGAINST STUDENT

The disciplinary action taken when the facts of the case warrant it will be determined by the severity of the offence. Persistent breaches of the same or similar rules will lead to progressively more severe action occurring.

A. INFORMAL ACTION

Where an allegation of misconduct is made, it does not necessarily follow that disciplinary procedures have to be invoked. Where the decision maker (HOD/ supervisor/ incharge) judges it appropriate, the allegation may be resolved informally by the provision of advice for future behavior. If the misconduct is Minor in nature and the concerned student accepts responsibility of the act, the concerned authority as the head of department, immediate supervisor, or incharge would counsel the student alongwith constructive feedback.

B. FORMAL ACTION:

1. MINOR OR INTERMEDIATE MISCONDUCT

1. STAGE 1- VERBAL WARNING

If the conduct does not meet acceptable standards, and where previous such minor misconducts have been committed and past counseling/s have not improved the conduct, a formal VERBAL WARNING would be given. The student will be informed of the reason of the warning. A brief note of verbal warning will be kept in student's record file in the concerned department. The HOD/ supervisor/incharge of concerned department will also send this note to the student affairs department for record keeping. However, it will be disregarded for disciplinary action after 2 months, subject to satisfactory conduct and performance.

Upto 2 VERBAL WARNINGS may be given

Only HOD/supervisors/incharges are authorized to give verbal warnings.

2. STAGE 2- FIRST WRITTEN WARNING

If the misconduct is more serious/ moderate in nature, or if it is



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repeated within 6 months of the previous verbal warnings or even if another nature of minor misconduct is committed by the same student, a FIRST WRITTEN WARNING will be handed over to him/her. This will be inclusive of the details of the complaint and inappropriate circumstances, the improvement required and time scale within which to achieve that improvement. It will also warn the student that action under STAGE- 3 will be considered if there is no satisfactory improvement or any repetition of misconduct.

The student shall be asked to submit a written apology admitting the misconduct and agreeing not to redo the same in other case will be responsible for the consequences.

A copy of the written warning alongwith the apology letter will be kept in the student's record file in the concerned department. One copy will be sent to the student affairs department which will keep it in the student's record file. However, it will be disregarded for disciplinary action after 6 months, subject to satisfactory conduct and performance.

Only HOD/supervisors/incharges will be authorized to give first written warnings.

3. **STAGE 3- FINAL WRITTEN WARNING**

If there is still failure to improve and/or conduct or performance is still unsatisfactory, a FINAL WRITTEN WARNING will be handed over to the student. This will give details of the complaints, the improvement required and time scale within which to achieve that improvement. It will also warn the student that case will be forwarded to the Student affairs department and strict disciplinary action under STAGE- 4 will be considered if there is no satisfactory improvement or any repetition of misconduct.

The student shall be asked to submit a written apology admitting the repetition of misconduct and agreeing not to redo the same in other case will be responsible for the consequences.

A copy of the written warning alongwith the apology letter will be kept in the student's record file in the concerned department. One copy will be sent to the student affairs department which will keep it in the student's record file. However, it will be disregarded for disciplinary action after 3 months, subject to satisfactory conduct and performance

Only the highest designation of the concerned department as



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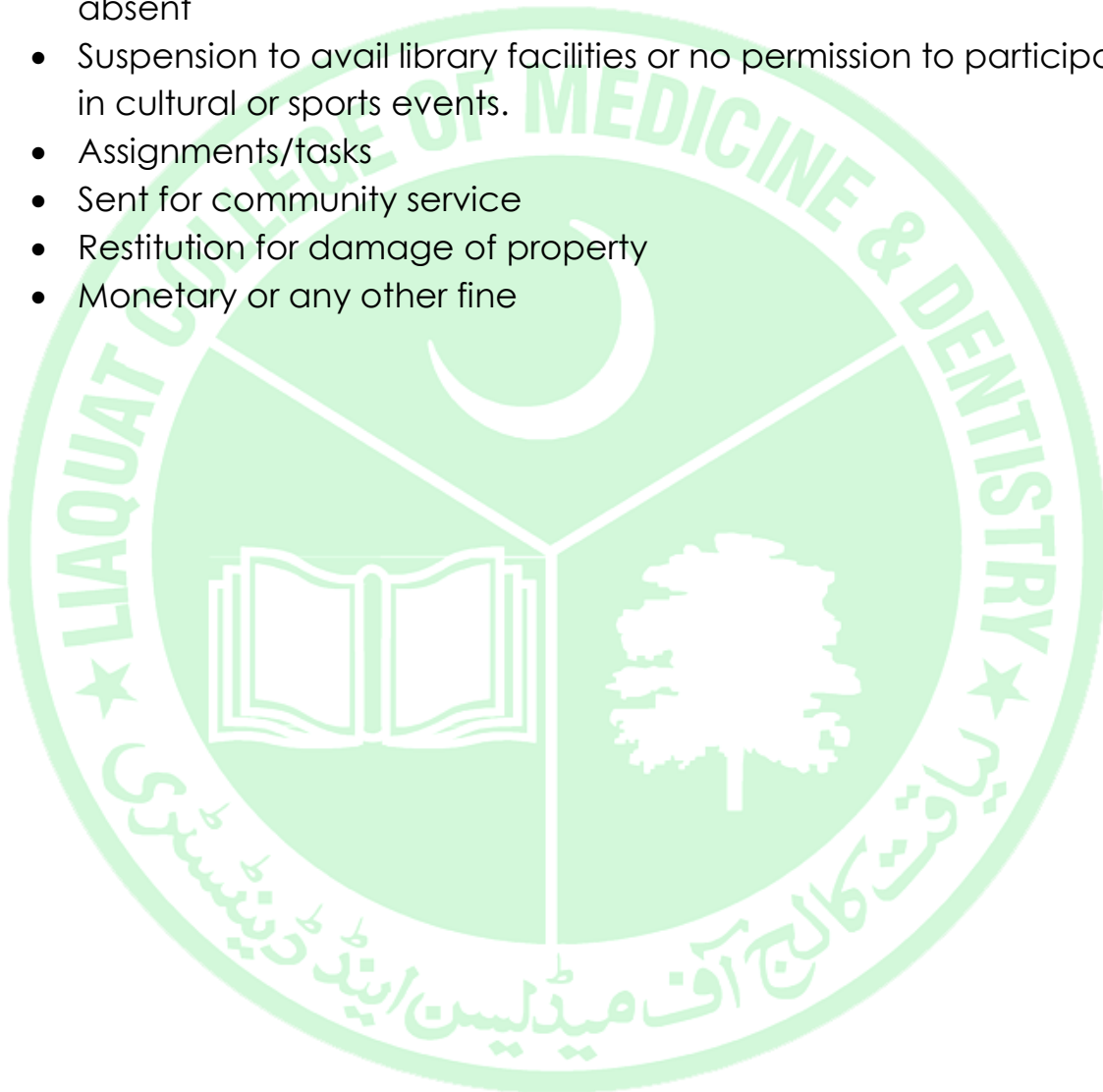
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HOD/incharge will be authorized to give final written warnings.

Depending upon the policy of the individual department, or as per discretion of the HOD/incharge of the concerned department, the HOD/ incharge in addition to giving the final written warning may impose penalties as:

- Suspension from academic activities; lectures/ tutorials, practicals/OPDs for upto 3 days to 7 days
- Allowed to attend academic activities but being marked as absent
- Suspension to avail library facilities or no permission to participate in cultural or sports events.
- Assignments/tasks
- Sent for community service
- Restitution for damage of property
- Monetary or any other fine





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4. STAGE 4- REFERRAL TO STUDENT AFFAIRS

If the conduct or performance is still unsatisfactory and the student fails to reach the prescribed standards within 3 months of the final written warning or if another misconduct of serious nature is committed by the same student then a written complaint in the incident form duly signed by the HOD and mentioning the details along with the copies of previous notes of verbal and written warnings (if any) shall be forwarded to the department of Student Affairs to deal with the case.

Till the time the Student Affairs decides the action to be taken, the student may be suspended from all sorts of academic activities or even visiting the institute.

Only highest designation in the dept; HOD / incharge is authorized to file this complaint.

After receiving the complaint, the Student Affair Incharge will consider the allegations and may do any of the following:

- Meet with the student suspected of the misconduct;
- investigate further by any means deemed necessary and appropriate; or
- refer the matter to the Chairperson Disciplinary Committee

If the Student Affair Incharge believes that the suspected misconduct does not require corrective action or that the Committee is not likely to find facts that would result in disciplinary action, the Student Affair Incharge may discontinue further action. Upon discontinuing further action, the Student Affair Incharge will notify the Committee and the student named in the allegations in writing of their decision.

If the Student Affair Incharge believes that non-academic misconduct has occurred, he may determine what, if any, steps the student could take to correct or resolve the matter. If the student agrees to the resolution proposed by the Student Affair Incharge, an agreement outlining the steps to be taken by the student will be drawn up and signed by the student. If the student does not agree, the student affair will refer the matter to the Disciplinary Committee.

2. GROSS MISCONDUCT

If the incharge student affairs finds the misconduct committed by the student to be of Gross nature then the student affairs will directly



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forward the case to disciplinary committee or a written complaint in the incident form duly signed by the HOD and mentioning the details may be directly forwarded to the Disciplinary Committee to deal with the case, by the concerned HOD. A copy of the complaint/incident form would be sent to the department of student affairs to be kept into the student's record file.

The student shall be informed of all the proceedings.

Till the time the disciplinary committee decides the action to be taken, the student shall be suspended from all sorts of academic activities or even visiting the institute.

Only highest designation in the dept; HOD / incharge is authorized to file this complaint

C. THE PROCEDURE AND THE DISCIPLINARY HEARING:

- Where necessary, prior to any disciplinary hearing by the committee, an investigation will be conducted into the circumstances of the alleged offence. The purpose of this investigation will be to establish a fair and balanced view of the facts relating to any disciplinary allegations.
- The investigation may involve interviewing and taking statements from the alleged student and any witnesses and/or reviewing relevant documents. Investigative interviews are solely for the purpose of fact finding and no disciplinary action would be taken until the hearing has been held.
- The investigator/s would be one or more of the members of the disciplinary committee in addition to the incharge student affairs
- Proceedings will be treated in confidence and records kept as confidential as practically possible.
- If decided by the committee the student may be suspended from all academic activities during the investigation. However, this suspension is not a disciplinary action and does not imply that the decision has already been made.
- At the conclusion of the investigation, the investigator/s will write the findings and present it to the chair disciplinary committee together with copies of statements, interview notes and any other evidence that has been collected within 3 working days.
- Based upon the investigation, the chair disciplinary committee will decide, whether the matter can be resolved informally without



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recourse to the formal hearing or if a disciplinary hearing needs to be arranged.

- In case a disciplinary hearing needs to be arranged, the student will be informed about the date, time and place, either verbally or in written.
- Failure to attend the hearing without any valid reason, by the student, will be treated as misconduct in itself.
- The purpose of the disciplinary hearing is to review the evidence and enable the student to respond to any allegations that have been made against him.
- The hearing will be inclusive of all members of the Disciplinary Committee and presence of the investigator would be must. (if any member, secretary or chair of the committee is a part of the incidence or involved in any way, will not be included in the entire process)
- The student will NOT have a right to call for a witness or an advocate.
- The chair may recall any of the witnesses or interviewees if required.
- The chair may call for a meeting with parents of the student
- The hearing may have additional sittings if further investigations are required.
- Within 5 working days of the hearing, the committee shall present the report alongwith its conclusive decision to the Principals, College of Dentistry, and/or College of Medicine.
- The Principal/s shall make the final decision.
- The student shall be informed once final decision has been made by the Principal/s.
- The committee reserves the right to omit any of the above mentioned stages or procedure if and when the need is felt and depending upon the gravity of the misconduct and the circumstances.
- An adequate record of the all the proceedings shall be maintained

D. LEVELS OF DISCIPLINARY ACTIONS FOLLOWING HEARING:

In arriving at a decision to what sanctions to impose for violation of code of conduct, depending upon the nature of infraction and the extent and gravity of the conduct, the Committee may decide to impose any of the following sanctions:

- Written apology and undertaking from the student and/or parents



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- Withholding/ withdrawing scholarship/ fellowship and other benefits
- Debarring from appearing in test/ examination or other evaluation processes
- Withholding test /exam results
- Debarring from representing the institution in any regional, national or international meet, tournament, festival etc.
- Monetary fine
- Restitution for the damage of property
- Prolonged suspension from academic, Co curricular /extra curricular activities. (in certain circumstances, readmission may be required following completion of suspension period)
- Suspension from hostel
- Cancellation of admission
- Rustication/expulsion from institution for an indefinite period or permanent (in which case student will not be considered to readmission)
- FIR with local police in case of student has alleged to have committed a criminal offence

E. **APPEAL:**

Any student who believes he/she has been disciplined unjustly may pursue a grievance within 5 working days of the receiving decision from the committee. (this excludes those misconducts that fall under the zero tolerance policy)

F. **ZERO TOLERANCE:**

Zero tolerance refers to the set of discipline policies and practices that mandate predetermined consequences that are typically severe, punitive and enforced with immediate effect. Circumstances where the accused would be liable to expulsion from institute at first offence include but not limited to:

- A serious threat of violence against another student, faculty or staff
- Actual violence or physical assault
- Supplying illegal drugs to others in the college
- Sexual assault
- Carrying and using banned items as weapons
- Ragging of students within college and/or hostel premises



TYPES OF MISCONDUCT BY STUDENTS

Misconduct means conduct prejudicial to good order or working discipline contrary to LCMD's regulations and /or student's code of conduct

A. MINOR MISCONDUCT

Minor misconduct refers to the behavior which breaches the standards of conduct set out in the STUDENT'S CODE OF CONDUCT (2.1C), but where the extent, seriousness or impact of the breach is not substantial. However, misconducts that are committed repeatedly even when the student has previously been counseled about the standards of conduct required by the LCMD will not be considered as minor. It is not possible to include each and every type of act that is labeled as misconduct. However following is the list that provides examples of Minor Misconduct. In addition is to be highlighted that inclusion of an example in the list does not mean that the misconduct can only be dealt with as minor: judgments will always be needed to be made about the scale of the misconduct and any aggravating circumstances which may justify the misconduct being dealt with as Gross Misconduct

- Verbal abuse or intimidation
- Failure to comply with explicit rules or regulations particularly in non-designated areas: smoking in premises, eating pan chalia gutka, talking loudly in library, causing disturbance in lectures, practical's and examinations, entering into unauthorized area, littering in college
- Failure to accomplish assigned tasks by the superiors
- Uninformed absenteeism and late arrivals and early leaves.
- Refusal to respond to reasonable requests by senior faculty or non-faculty staff, e.g. refusing to confirm identity when asking to do so, refusing to wait for the turn or stand in a queue, refusing to obey when asked to not to sit on floors, stairways etc
- Causing distress to others by excessive or unacceptable levels of noise
- Causing minor damage to property as defacing or tearing of library books
- Anti – social behavior which causes distress to others and/or



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reputational harm to LCMD's relationship with its stake holders.

- Violation of dress-code of LCMD
- Playing any games at inappropriate places like corridors, lecture halls etc.
- Wastage of water and electricity
- Meaninglessly arguing with the seniors with no justification of view point
- Sleeping during academic sessions
- Misuse of college's property





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B. MODERATE MISCONDUCT

All those minor misconducts committed repeatedly and intentionally, to damage or stop the work process, even after student counseling and advice may be classified as moderate misconduct but may not be limited to these.

C. GROSS MISCONDUCT

A Gross Misconduct is an act or behavior that is harmful or dangerous influence to others at the institute typically involving flagrant or willful violation of law, policy or standards of performance or conduct. Gross Misconduct may result in any level of discipline up to and including immediate dismissal at the Disciplinary Committee's discretion.

Examples of acts classified under Gross Misconduct include but may not be limited to these:

- Verbal abuse or intimidation to the level that is highly objectionable,
- Ragging and/or bullying
- Violent behavior or that causing physical harm
- Sexual harassment
- Serious negligence which causes unacceptable loss, damage or injury
- Serious violation of health and safety rules jeopardizing the health and safety of self and/or others
- Possession and/or consumption of alcohol or intention to supply
- Possession and/or consumption of substances of abuse or intention to supply
- Possession of weapons or dangerous instruments or intention to supply
- Taking recourse to unfair means during examination and assessment.
- Damage to or destruction of LCMD's property; equipment devices of the institute rendering it useless.
- Damage to or destruction of private property of fellows, senior and/or junior faculty or non-faculty staff, patients or other visitors.
- Anti-social activities against the Institute and/or State
- Breach of security
- Disrespect to the faculty or non-faculty staff to the point that it is threatening
- Possession / use of pornographic material (books, magazines, CDs, internet)
- Publishing / distributing materials that may be damage /tarnish



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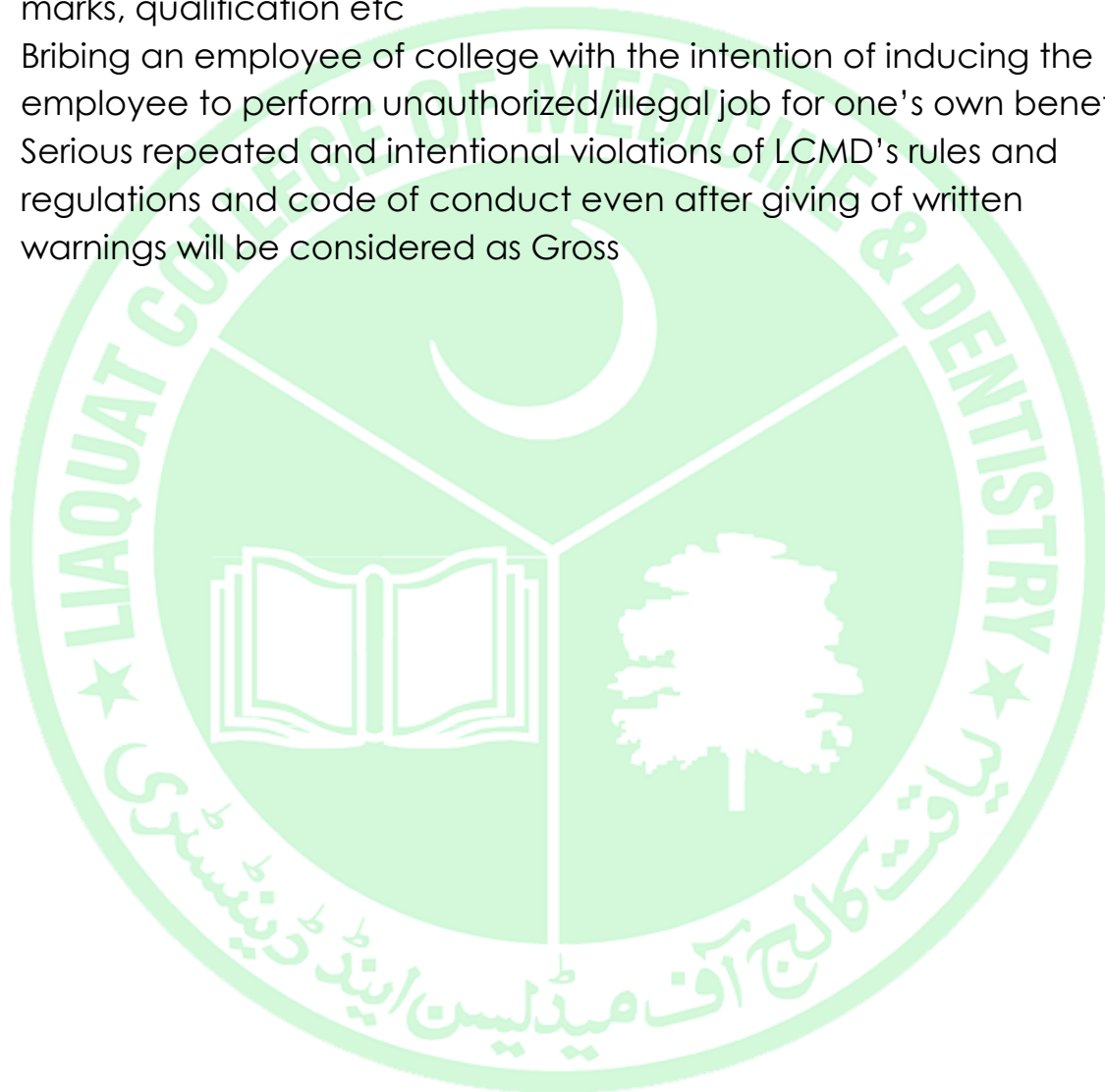
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LCMDs image

- Gambling in any form
- Indulging in any form of criminal activities
- Affiliation active involvement in political activities within campus
- Theft, fraud, corruption and deliberate falsification of records
- Unauthorized possession of institute's items, such as documents, exam papers, keys or ID cards etc. with the intention to misuse them.
- Forgery or furnishing false information regarding of one's identity, marks, qualification etc
- Bribing an employee of college with the intention of inducing the employee to perform unauthorized/illegal job for one's own benefit.
- Serious repeated and intentional violations of LCMD's rules and regulations and code of conduct even after giving of written warnings will be considered as Gross



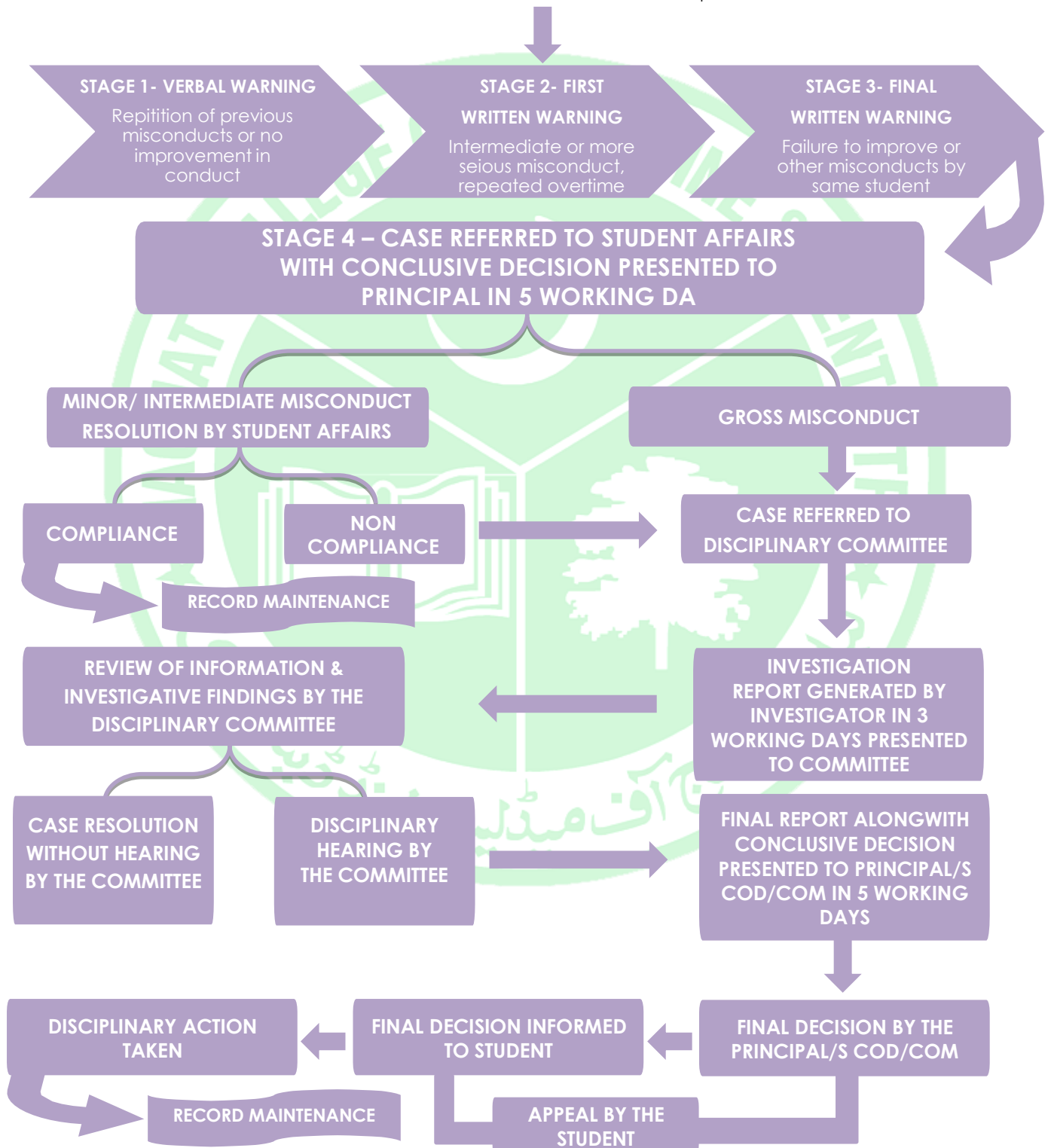
**FLOW CHART OF SOPs IN CASE OF BREACH OF
CODE OF CONDUCT BY THE STUDENT**

A. INFORMAL ACTION

Minor misconduct, first time, student accepts responsibility; case resolved by counseling and advice by HOD

B. FORMAL ACTION

Minor misconduct or intermediate misconduct or repetition





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DEPARTMENT OF HEALTH PROFESSIONS EDUCATION
COLLEGE OF DENTISTRY

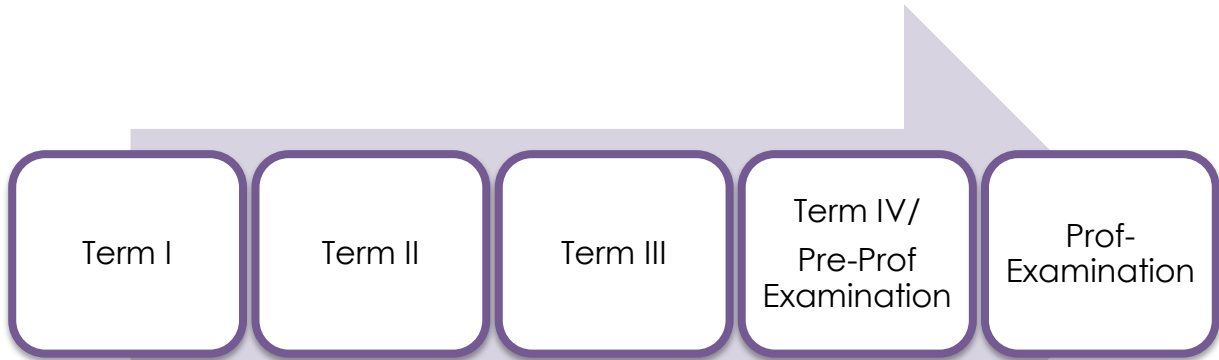


RECOMMENDED BOOKS

S. No	Subject	Book
1.	Oral Surgery	<ul style="list-style-type: none">Contemporary oral & maxillofacial surgery by Mayron R. tucker 5th editionLocal anesthesia in dentistry by Geoffery L. howe 5th editionMedical Emergency in Dentistry by ScullyLocal Anesthesia by MallamaidKilley's Fracture of the mandible by Peter Banks 5th editionKilley's Fracture of the middle third of the facial skeleton by Peter Banks 5th editionPerterson's principles of Oral & Maxillofacial Surgery by Peter Waite 4th EditionOral & Maxillofacial Pathology by Neville 4th EditionTextbook of Oral & Maxillofacial Surgery by Neelima Anil Malik 4th Edition
2.	Operative Dentistry	<ul style="list-style-type: none">Summitt's Fundamentals of Operative DentistrySturdevant's Art and Science of Operative Dentistry
3.	Endodontics:	<ul style="list-style-type: none">Endodontics: Principles and Practice (Torabinejad, Fouad & Walton)Harty's Endodontics in Clinical PracticeCohen's Pathways of the Pulp
4.	Pediatric Dentistry:	<ul style="list-style-type: none">Pediatric Dentistry (Richard Welbury)
5.	Orthodontics	<ul style="list-style-type: none">Contemporary Orthodontics by William R. Proffit 6th Edition
6.	Prosthodontics	<ul style="list-style-type: none">Partial denture<ol style="list-style-type: none">McCracken'sNallaswamyRemovable partial denture by StevardComplete denture<ol style="list-style-type: none">ZarbJohn J. ManappallilFennTemporomandibular joint and maxillofacial Prosthesis<ol style="list-style-type: none">ZarbJohn J. ManappallilTyson (Reference Book)Material<ol style="list-style-type: none">McCabeCrowns and Bridges<ol style="list-style-type: none">Planning and Making Crowns and Bridges (Bernard G N Smith)Contemporary Fixed Prosthodontics (Stephen F. Rosenstiel)Fundamentals of Fixed Prosthodontics (Shillingburg)Implants<ol style="list-style-type: none">Contemporary Fixed Prosthodontics (Stephen F. Rosenstiel)



EXAMINATION



Continuous Assessment:

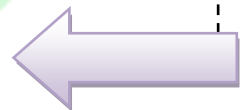
This will include:

1. Term I
2. Term II
3. Term III
4. Term IV/ Pre-Prof Examination
5. Prof Examination

Continuous Assessment will have a weightage of 20 % of all Exams. The college will send your continuous assessment marks directly to JSMU.

Prof-Exam conducted by JSMU will include:

1. Theory paper of One Best Answer
2. OSCE Exam
3. Continuous Assessment results





SCHEME OF EXAMINATION

The following scheme of examination has been approved by the competent authority for the year 2025.

TOS				
Exam	MCQs	OSPE		Internal Evaluation
		Observed Station	Unobserved Station	
Term I	50	3	7	-
Term II	50	3	7	-
Term III	75	6	6	-
Pre-Prof.	90	8	9	10 + 15



LIAQUAT COLLEGE OF MEDICINE AND DENTISTRY
DEPARTMENT OF HEALTH PROFESSIONS EDUCATION
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MARKS DISTRIBUTION ACCORDING
TO
JINNAH SINDH MEDICAL UNIVERSITY



SUBJECT	THEORY EXAM (MCQs)	PRACTICAL EXAM (OSCE)	INTERNAL EVALUATION/ CONTINUOUS ASSESSMENT		TOTAL MARKS
			THEORY	OSCE	
Oral Surgery	90	135	10	15	250
Operative Dentistry	90	135	10	15	250
Orthodontics	90	135	10	15	250
Prosthodontics	90	135	10	15	250
GRAND TOTAL					1000



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INTERNAL EVALUATION CLINICAL THEORY

THEORY (10 Marks)						
Roll No	Name	Attendance (03 Marks)				Google Assignments (1.5 Marks)
		Above 90% (03)	80-89% (02)	75-79% (01)	< 75% (0)	submitted (1.5)

THEORY (10 Marks)											
Participation in Flipped Classroom (01 Marks)		Term Exam (4.5 Marks)									Total Marks (10)
Pre-assignment (0.5)	class activities Participation (0.5)	Term 1			Term 2			Term 3			
		Present (0.5)	Pass (0.5)	Position (0.5)	Present (0.5)	Pass (0.5)	Position (0.5)	Present (0.5)	Pass (0.5)	Position (0.5)	

INTERNAL EVALUATION CLINICAL PRACTICAL

Practical (15 Marks)							
Roll No	Name	Attendance (2 Marks)				Log Book & Patient Quota (2 Marks)	
		Above 90% (2)	80-89% (1.5)	75-79% (01)	< 75% (0)	Complete & Good remarks (2)	Complete & satisfactory remarks (1)

Practical (15 Marks)											
OPD Assessment (6 Marks)			Term Exam (3 Marks)						Attitude / Behavior (02)		Total Marks (15)
Present (2)	Pass (2)	Position (2)	Term 1		Term II		Term III		Communication skills (faculty, colleagues, non -faculty) (1.5)	Attire (0.5)	
			Present (0.5)	Pass (0.5)	Present (0.5)	Pass (0.5)	Present (0.5)	Pass (0.5)			



INSTRUCTIONS FOR THE STUDENT

Attire:

- ❖ All Students must wear white lab coat with name tags / ID- Cards and college monogram

Girls:

- ❖ Culturally and socially acceptable dressing
- ❖ No excessive make-up and ornaments
- ❖ Hair properly set and tied up
- ❖ Proper sandals or shoes no stilettos or slippers

Boys:

- ❖ Decent dressing
- ❖ Neatly pressed and clean pant / ShalwarKameez
- ❖ Shirt tucked in pant
- ❖ Only Shoes no chappals or sandals
- ❖ Hair properly cut and set with clean shaved or well-groomed beard

Discipline:

- ❖ Students are not allowed to roam around in the college in their spare time
- ❖ Students are advised not to talk loudly in the corridor/classes/lab/wards/OPD
- ❖ Use of mobile phone during classes/lab/wards/test/examination is strictly prohibited
- ❖ Drinks and eatables are not allowed specifically in class rooms except in cafeteria and common room

Damage/Loss:

- ❖ Students should take care of their belongings, the college will not be responsible for any losses
- ❖ Any damage/loss of college's equipment/asset by student will have to be compensated by students (caution money)

Library Timings:

- ❖ Monday to Friday 8am to 8pm
- ❖ Saturday 9am to 4pm

Attendance:



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- ❖ The eligibility to appear in the university examination is 75% & above.
 - ❖ The university examination forms will only be issued on 75% of cumulative attendance.
 - ❖ The 75% of each student overall attendance comprises of:
 - ❖ Lectures/ OPD/ Wards/ Tutorials 60%
 - ❖ Assignments & Assessments (module/ term/ Pre-Prof Exam.) 15%
 - ❖ It is mandatory for each student to appear at least in any two of the internal college based examinations i.e. (module/ term/ Pre-Prof Exam.)
 - ❖ Exam had two components i.e. theory and OSCE; each student shall appear in both and attendance will mark as double (one lecture & one OPD/Practical); in case only appear in either OSPE or Theory will be considered absent for the entire subject.
 - ❖ Passing all module/ term/ Pro-Prof examination had additional advantage i.e. each theory exam. (Two lectures) and each OSCE/ OSPE (two OPD/Practical attendance)
 - ❖ Students appearing in supplementary exam (one/two papers) should have to attend all lecture/wards/OPDs/Tutorial, whereas students with supplementary exam in three-four subjects will be allowed to resume schedule classes soon after their last subject exam
- As per given SOP' s by the Examination Department, all students shall follow the rules & regulations strictly

Interdictions:

- ❖ Use of narcotics in any form in LCMD, DSH and LCSSH, will not be tolerated
- ❖ Smoking is strictly prohibited
- ❖ Students should not indulge in any political activities

Students who fail to comply with the LCMD policies, strict action may be taken by the Department of Student Affairs and LCMD Disciplinary Committee.

DEPARTMENT OF STUDENT AFFAIRS

Students should contact Department of Student Affairs for complains/grievances, attendance issues, counseling sessions, mentoring sessions or any student related matters

Addressing any other department is strongly discouraged and will be taken into account by Department of Student Affairs

An Affidavit is required by the obtained by the student to follow the rules policies of the institution; otherwise their examination form may not be issued.