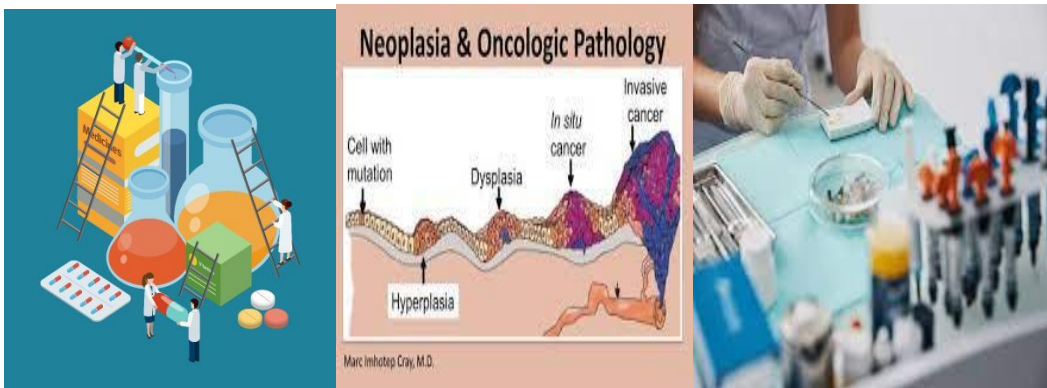




# RIHS MEDICAL & DENTAL COLLEGE



MODULE XI: 20611  
MODULE XII: 20612

STUDY GUIDE BLOCK 6  
PLANNED & DESIGNED BY  
DME, RIHS

**Module XI: 20611**

**Module XII: 20612**

**Session 2024-25**

**Pre-requisite: Block 5**

**Teaching faculty & Curriculum committee members**

	<b>Disciplines</b>	<b>Name of Faculty</b>
1.	<b>Principal</b>	<b>Prof. Dr. Saad Asad</b>
5.	<b>Pathology</b>	<b>Dr. Shafaq Khadija</b>
6.	<b>Pharmacology</b>	<b>Prof. Dr. Seemi Gul</b>
7.	<b>Community Dentistry</b>	<b>Prof. Dr. Rubina Mumtaz</b>
8.	<b>Dental Materials</b>	<b>Dr. Sadaf Humayoun</b>
9.	<b>Behavioral Sciences</b>	<b>Ms. Nargis Munir</b>
10.	<b>Junior Operatives</b>	<b>Dr. Farah Mushtaq</b>
11.	<b>Junior Prosthetics</b>	<b>Dr. Amna Amjad</b>
12.	<b>DME</b>	<b>Dr. Madiha Akhwand</b>
<b>Block duration</b>		<b>12 Weeks</b>
<b>Block Coordinator</b>		<b>Prof. Dr. Rubina Mumtaz Dr. Sadaf Humayoun</b>

<p><b>Integrated Curriculum</b></p>	<ul style="list-style-type: none"> <li>• The Integrated Curriculum is becoming an increasingly popular concept internationally, in the field of Medicine.</li> <li>• The goal of integration is to break down barriers between the basic and clinical sciences, currently in practice as a result of traditional curricular models.</li> <li>• Integration should promote retention of knowledge and acquisition of skills through repetitive and progressive development of concepts and their applications.</li> <li>• There are three areas in need of improvement and clarification for successful integration:             <ol style="list-style-type: none"> <li>1. Ensuring synchronous presentation of material</li> <li>2. Avoiding the tendency to diminish the importance of the basic sciences, and</li> <li>3. Using unified definitions</li> </ol> </li> </ul> <p>(MEDICAL TEACHER)</p> <ul style="list-style-type: none"> <li>• The model adapted in this institution is an <b>Integrated, modular, system based, spiral curriculum.</b></li> <li>• First spiral is for two years &amp; second spiral is spread over three years.</li> </ul>
<p><b>Students as a curriculum coordinator and Class Representative</b></p>	<p>Student involvement in an integrated curriculum is the key to the process of making him a self-directed, competent and ethical learner who can adjust and compete with the latest trends in medical education in today's and tomorrow's world. In order to achieve this:</p> <ol style="list-style-type: none"> <li>1. Students will help the Module coordinators in accomplishing all tasks assigned to him/her.</li> <li>2. They will be a part of curriculum planning and implementing team.</li> <li>3. They will inform/discuss the ongoing activities /problems in teaching and learning with module coordinators and curriculum chairperson.</li> </ol>
<p><b>Module Rationale:</b></p>	<p>The module XI equips students with critical knowledge and skills in dental and medical sciences, focusing on CNS pharmacology, neoplasia, respiratory infections, and dental materials. It covers the essentials of dental cements, implants, casting processes, and endodontic materials, ensuring comprehensive understanding for effective clinical practice. Additionally, it addresses strategies for oral disease prevention, health promotion, and managing occupational hazards, preparing students for safe and responsible professional practice.</p> <p>The module XII provides essential knowledge and skills for dental practice, covering pharmacology, pathology, and materials science. It emphasizes understanding and managing infections, using dental materials effectively, and integrating social sciences to enhance patient care and promote oral health. By addressing these areas, students are prepared for comprehensive and empathetic dental practice.</p>

## Module Outcomes

### Module XI:

- Describe the drugs acting on the Central Nervous System
- Discuss the pathogenesis of Neoplasia
- Describe the pathogenesis, brief clinical features, prevention, and diagnosis of infections of the respiratory system
- Classify dental cements, detailing their clinical applications, composition, setting reaction, properties, and uses
- Describe dental implant materials, focusing on osseointegration, biocompatibility, advantages, and disadvantages
- Discuss the steps of the casting process, including compensation for shrinkage, common defects, and methods to avoid them
- Explain the objectives of endodontic materials, their types, uses, and ideal requirements
- Examine and implement basic concepts and strategies for preventing and controlling major oral diseases
- Evaluate methods of health promotion and health education
- Summarize and differentiate occupational hazards in dentistry, considering their impact on human health and the environment

### Module XII:

- Explain the use and mechanisms of cytotoxic drugs, and medications for UTIs, herpes, and toxoplasmosis.
- Describe the pathology of various genetic disorders.
- Discuss the pathogenesis of central nervous system infections.
- Outline the pathogenesis, clinical features, prevention, and diagnosis of skin and soft tissue infections.
- Detail the pathogenesis, clinical features, prevention, and diagnosis of genitourinary system infections.
- Review different investment materials used in dentistry.
- Discuss the composition, properties, and manipulation of dental casting alloys.
- Classify dental ceramics and describe their composition, uses, and properties.
- Examine the application of sociology, psychology, and anthropology in dentistry, focusing on pediatric dentistry, dental anxiety, and the dentist-patient relationship.
- Apply principles and strategies from behavior change theories to improve oral health behaviors.
- Analyze the impact of social determinants on oral health behavior.

**Teaching and Learning methodology**

**Large Group Interactive Sessions (IL):** The goal of interactive lecture is to engage the students' attention, through ways to interact with the content, the instructor, and their classmates. Accordingly, interactive lectures include segments of knowledge transfer combined with segments where students interact. One of the things that make the lecture interactive is the ability of the instructor to select the content of the lecture segments based on the students' needs. This demands a prior search for the baseline knowledge of the students at the start of the lecture. If students have difficulty answering a question, or an activity fails to develop the concept in most student groups, it's time to find a new and better way to deal with the material. IL clearly gives a better concept of the content and keeps students' attention captured throughout, as compared to yester years' didactic lectures.

**Small Group Discussion (SGD):** 'The purpose and technique of small group teaching is that it is learner-centered, with all students joining in free discussion on a particular topic. A typical 'small group' is around eight to 12 learners facilitated by a teacher. The steps of SGD are Forming, Storming, Norming & Performing. The teacher acts only as a facilitator. Students are allowed to use their books or other search material during the discussion. SGD is a good method to clear the concepts and develop communication and conflict solving skills in the students.

**Departmental teaching Practical Demonstrations:** This is performance-based teaching & learning methodology where students learn handling and uses of Practical Demonstration oratory equipment and models, safety rules and various clinical skills.

**Dissection:** Where necessary teaching of gross Anatomy is aided by cadaver dissection / model demonstration.

**Problem based/ Task based/ Case based learning (PBL/TBL/CBL):** Students are presented with real life problems/tasks/cases. They are motivated through a standard process to seek answers to the given problem, task or case. This is a highly effective method to capture and maintain students' interest in patients' problems and their solution.

**Flipped Class Room:** A flipped classroom reverses traditional learning by having students study new material at home through videos or readings, and then using class time for interactive, hands-on activities and discussions. This method enhances student engagement and allows for personalized instruction.

**Assignments and Presentations:** Both of methodologies are meant to make the students self-directed learners and good communicators by seeking knowledge from multiple sources and presenting it.

**Assessment methodology:**

**Multiple Choice Questions (MCQs): Single best type  
SEQs: Short Essay Questions**

**Objective      Structured      Practical/Clinical      Examination**

**(OSPE /OSCE)**

	<b>Learning Objectives</b> By the end of this block, students will be able to:	<b>Learning Domain</b>	<b>Teaching &amp; learning strategy</b>	<b>Assessment</b>
	<b>PHARMACOLOGY</b>			
1	Discuss the drugs acting on Central Nervous System			
	<b>Sedative Hypnotic agents</b> <ul style="list-style-type: none"> <li>Classify Sedative Hypnotic agents.</li> <li>Explain Mode of action of Sedative Hypnotic agents</li> <li>Describe Therapeutic uses of Sedative Hypnotic agents</li> <li>Explain Adverse effects of Sedative Hypnotic agents</li> <li>Describe Pharmacokinetics properties of Sedative Hypnoticagents .</li> </ul>	C <sub>1</sub> C <sub>2</sub> C <sub>3</sub>	IL SGD Practical Demonstration	MCQ SEQ OSPE
	<b>Antianxiety drugs</b> <ul style="list-style-type: none"> <li>Classify Antianxiety drugs</li> <li>Explain Mode of action of Antianxiety drugs</li> <li>Explain Therapeutic uses of Antianxiety drugs</li> <li>Describe Adverse effects and Pharmacokinetics propertiesof Antianxiety drugs</li> </ul>	C <sub>1</sub> C <sub>2</sub> C <sub>3</sub>	ILSGD Practical Demonstration	MCQ SEQ OSPE
	<b>Antiepileptic drugs</b> <ul style="list-style-type: none"> <li>Classify Antiepileptic drugs</li> <li>Explain Mode of action of Antiepileptic drugs</li> <li>Describe Therapeutic uses of Antiepileptic drugs</li> <li>Explain Adverse effects of Antiepileptic drugs</li> <li>Describe Pharmacokinetics properties of Antiepilepticdrugs</li> </ul>	C <sub>1</sub> C <sub>2</sub> C <sub>3</sub>	ILSGD Practical Demonstration	MCQ SEQ OSPE
	<b>General anesthetic agents</b> <ul style="list-style-type: none"> <li>Classify General anesthetic agents</li> <li>Explain Mode of action of General anesthetic agents</li> <li>Describe Therapeutic uses of General anesthetic agents</li> <li>Explain Adverse effects of General anesthetic agents</li> <li>Explain Pharmacokinetics properties of General anestheticagents</li> </ul>	C <sub>1</sub> C <sub>2</sub> C <sub>3</sub>	ILSGD Practical Demonstration	MCQ SEQ OSPE
	<b>Local anesthetic drugs</b>			

<ul style="list-style-type: none"> <li>Classify Local anesthetic drugs</li> <li>Explain Therapeutic uses of Local anesthetic drugs</li> <li>Describe Adverse effects of Local anesthetic drugs</li> <li>Explain Pharmacokinetics properties of Local anesthetic drugs</li> </ul>	C <sub>1</sub> C <sub>2</sub> C <sub>3</sub>	IL SGD Practical Demonstration	MCQ SEQ OSPE
<b>Skeletal Muscle Relaxant</b> <ul style="list-style-type: none"> <li>Classify Skeletal Muscle Relaxants</li> <li>Explain Mode of action of Skeletal Muscle Relaxant</li> <li>Describe Therapeutic uses of Skeletal Muscle Relaxant</li> <li>Explain Adverse effects of Skeletal Muscle Relaxant</li> <li>Describe Pharmacokinetics properties of Skeletal Muscle Relaxant</li> </ul>	C1 C2 C3	IL SGD Practical Demonstration	MCQ SEQ OSPE
<b>Alcohol</b> <ul style="list-style-type: none"> <li>Classify Alcohols</li> <li>Explain Mode of action of Alcohol</li> <li>Describe Therapeutic uses of Alcohol</li> <li>Explain Adverse effects of Alcohol</li> <li>Describe Pharmacokinetics properties of Alcohol</li> </ul>	C1 C2 C3	IL SGD Practical Demonstration	MCQ SEQ OSPE
<b>Drugs for Migraine Headache</b> <ul style="list-style-type: none"> <li>Classify drugs for Migraine Headache</li> <li>Explain Therapeutic uses of drugs for Migraine Headache</li> <li>Describe Adverse effects of drugs for Migraine Headache Explain Pharmacokinetics properties of drugs for Migraine Headache</li> </ul>	C1 C2 C3	IL SGD Practical Demonstration	MCQ SEQ OSPE
<b>CNS stimulant agents</b> <ul style="list-style-type: none"> <li>Classify CNS stimulant agents</li> <li>Explain Mode of action of CNS stimulant agents</li> <li>Describe Therapeutic uses of CNS stimulant agents</li> <li>Explain Adverse effects of CNS stimulant agents</li> <li>Describe Pharmacokinetics properties of CNS stimulant agents</li> </ul>	C1 C2 C3	IL SGD Practical Demonstration	MCQ SEQ OSPE
<b>Antipsychotic drugs</b> <ul style="list-style-type: none"> <li>Classify Antipsychotic drugs</li> <li>Explain Mode of action of Antipsychotic drugs Laxatives</li> <li>Describe Therapeutic uses of Antipsychotic drugs</li> <li>Explain Adverse effects of Antipsychotic drugs</li> <li>Describe Pharmacokinetics properties of Antipsychotic drugs</li> </ul>	C1 C2 C3	IL SGD Practical Demonstration	MCQ SEQ OSPE
<b>Antidepressant agents</b> <ul style="list-style-type: none"> <li>Classify Antidepressant agents</li> <li>Describe Therapeutic uses of Antidepressant agents</li> <li>Explain Adverse effects of Antidepressant agents</li> <li>Describe Pharmacokinetics properties of Antidepressant agents</li> </ul>	C <sub>1</sub> C <sub>2</sub> C <sub>3</sub>	ILSGD Practical Demonstration	MCQ SEQ OSPE

	<b>Drugs used in Parkinsonism</b> <ul style="list-style-type: none"> <li>Classify drugs used in Parkinsonism</li> <li>Explain Mode of action of drugs used in Parkinsonism</li> <li>Describe Therapeutic uses of drugs used in Parkinsonism</li> <li>Explain Adverse effects of drugs used in Parkinsonism</li> <li>Describe Pharmacokinetics properties of drugs used in Parkinsonism</li> </ul>	C <sub>1</sub> C <sub>2</sub> C <sub>3</sub>	ILSGD Practical Demonstration	MCQ SEQ OSPE
	<b>Opioids</b> <ul style="list-style-type: none"> <li>Classify Opioids</li> <li>Explain Mode of action of Opioids</li> <li>Describe Therapeutic uses of Opioids</li> <li>Explain Adverse effects of Opioids and Pharmacokinetics properties of Opioids</li> </ul>	C <sub>1</sub> C <sub>2</sub> C <sub>3</sub>	ILSGD Practical Demonstration	MCQ SEQ OSPE
	<b>Drugs for treating Bronchial asthma</b> <ul style="list-style-type: none"> <li>Classify Antiasthmatic drugs</li> <li>Describe Therapeutic uses of Antiasthmatic drugs</li> <li>Explain Adverse effects of Antiasthmatic drugs</li> <li>Describe Pharmacokinetics properties of Antiasthmatic drugs</li> </ul>	C <sub>1</sub> C <sub>2</sub> C <sub>3</sub>	ILSGD Practical Demonstration	MCQ SEQ OSPE
	<b>Drugs used in COPD</b> <ul style="list-style-type: none"> <li>Classify drugs used in COPD</li> <li>Explain Mode of action of drugs used in COPD</li> <li>Describe Therapeutic uses of drugs used in COPD</li> <li>Explain Adverse effects of drugs used in COPD</li> <li>Explain Pharmacokinetics properties of drugs used in COPD</li> </ul>	C <sub>1</sub> C <sub>2</sub> C <sub>3</sub>	IL, SGD Practical Demonstration	MCQ SEQ OSPE
	<b>Antitussive drugs</b> <ul style="list-style-type: none"> <li>Classify Antitussive drugs</li> <li>Explain mode of action of Antitussive drugs</li> <li>Describe therapeutic uses of Antitussive drugs</li> <li>Explain Adverse effects of Antitussive drugs</li> <li>Describe pharmacokinetics of Antitussive drugs</li> </ul>	C <sub>1</sub> C <sub>2</sub> C <sub>3</sub>	ILSGD Practical Demonstration	MCQ SEQ OSPE
2.	<b>Discuss the Cytotoxic drugs and drugs used in UTI, herpes and toxoplasmosis &amp; Drug - drug interaction</b>			
	<ul style="list-style-type: none"> <li>Cytotoxic drugs</li> <li>Drugs for TB</li> <li>Drugs used in meningitis</li> <li>Quinolones</li> <li>Cell wall synthesis inhibitors</li> <li>Drugs used in herpes</li> <li>Drugs for treating toxoplasmosis</li> <li>Drug - drug interaction</li> </ul>	C <sub>1</sub> C <sub>2</sub> C <sub>3</sub>	IL, SGD Practical Demonstration	MCQ SEQ OSPE
<b>PATHOLOGY</b>				
3	<b>Genetics</b>			
	<ul style="list-style-type: none"> <li>Classify Genetic disorders</li> <li>Explain the transmission pattern of Single gene disorders</li> <li>Explain the pathogenesis and clinical features of diseases caused by mutations in genes encoding structural proteins, receptor proteins, enzyme proteins.</li> </ul>	C C C	ILSGD Practical Demonstration	MCQ SEQ OSPE



	<ul style="list-style-type: none"> <li>Describe the pathogenesis of different Chromosomal disorders</li> <li><b>Practical:</b> Interpret the Diagnostic tests for Genetic disorders</li> </ul>	C P		
4	<b>Infections of Central Nervous System</b>			
	<ul style="list-style-type: none"> <li>Enlist the causative organisms of Meningitis (Bacterial, fungal, viral, parasitic).</li> <li>Describe the clinical features and pathogenesis of Meningitis</li> <li>Describe the clinical features and pathogenesis of Rabies.</li> <li>Describe the clinical features and pathogenesis Polio.</li> <li>Describe the clinical features and pathogenesis Viral Encephalitis.</li> <li><b>Practical:</b> Interpret the CSF R/E report</li> </ul>	C C C C P	IL,SGD Practical Demonstration	MCQ SEQ OSPE
5	<b>Skin &amp; Soft Tissue Infections</b>			
	<ul style="list-style-type: none"> <li>Enlist the causative organisms of skin and soft tissue infections.</li> <li>Describe the brief clinical features and pathogenesis of abscesses (folliculitis, carbuncle, furuncle).</li> <li>Describe the brief clinical features and pathogenesis of herpes.</li> <li>Describe the brief clinical features and pathogenesis of measles.</li> <li>Describe the brief clinical features and pathogenesis of mumps.</li> <li>Describe the brief clinical features and pathogenesis of chicken pox</li> <li><b>Practical:</b> Diagnose the cases of skin and soft tissue infections.</li> </ul>	C C C C P	IL,SGD Practical Demonstration	MCQ SEQ OSPE
6	<b>Infections of Respiratory tract</b>			
	<b>Upper respiratory tract infections</b> <ul style="list-style-type: none"> <li>Enlist the Bacteria causing upper respiratory tract infections</li> <li>Describe Lancefield Classification of streptococci</li> <li>Describe the pathogenesis of upper respiratory infections (bacterial, viral fungal)</li> <li>Describe the pathogenesis of Pneumonia.</li> <li>Describe the Pathogenesis, Brief clinical features, of tuberculosis.</li> <li>Describe the prevention and diagnosis of Mycobacterium / A typical Mycobacteria.</li> <li>Describe the Pathogenesis, Brief clinical features of corona virus infection</li> <li><b>Practical:</b> Perform and interpret ZN stain Interpret tuberculin test</li> </ul>	C C C C C P	IL,SGD Practical Demonstration	MCQ SEQ OSPE
7	<b>Neoplasia</b>			
	<ul style="list-style-type: none"> <li>Describe the Characteristics of Benign and malignant neoplasms</li> <li>Explain the Nomenclature of neoplasia</li> <li>Differentiate between anaplasia and dysplasia</li> <li>Describe Role of screening for tumor Carcinogenesis Tumor suppresser genes,</li> <li>Define Tumour immunity</li> <li>Describe the course of Tumour progression</li> <li>Describe the Role of FNAC, Tissue biopsy</li> </ul>	C	IL SGD Practical Demonstration	MCQ SEQ OSPE



	<ul style="list-style-type: none"> <li>Discuss the various clinical applications of dental cements as: <ul style="list-style-type: none"> <li>Filling material</li> <li>Liners</li> <li>Bases</li> <li>Luting Agents</li> <li>Cavity Varnish</li> <li>Differentiate between liner and base</li> <li>Discuss endodontic cements.</li> </ul> </li> </ul> <p><b>Practical:</b> Manipulation of different cements</p>	C		
		P		
10	<b>Dental Implants</b>			
	<ul style="list-style-type: none"> <li>Classify dental Implants</li> <li>Enlist materials for dental implants</li> <li>Explain Osseo integration</li> <li>Discuss biocompatibility of dental implants</li> <li>Discuss the advantages and disadvantages of dental implants</li> </ul>	C	IL SGD	MCQ SEQ
11	<b>Base Metal Alloys &amp; Noble Metal Alloys</b>			
	<ul style="list-style-type: none"> <li>Describe and discuss the Composition and properties of <ul style="list-style-type: none"> <li>Cobalt chromium</li> <li>Nickel chromium alloys</li> </ul> </li> <li>Describe and discuss the manipulation of base metal casting alloys in relation to their: <ul style="list-style-type: none"> <li>Fusion temperature</li> <li>Mode of melting</li> <li>Type of investment material used</li> <li>Trimming and polishing</li> </ul> </li> <li>Compare and contrast properties of base metal casting alloy and casting gold alloy</li> <li>Discuss biocompatibility of various constituents of base metal alloys</li> </ul>	C	IL SGD	MCQ SEQ
12	<b>Endodontic Materials</b>			
	<ul style="list-style-type: none"> <li>Classify endodontic material</li> <li>Discuss the Ideal requirement of <ul style="list-style-type: none"> <li>Lubricants</li> <li>Irrigants</li> </ul> </li> <li>Discuss and enlist Intracanal medicaments</li> <li>Describe sealants and their properties</li> <li>Discuss bulk filling material in endodontic treatment</li> </ul>	C	IL SGD	MCQ SEQ
13	<b>Casting Alloys</b>			
	Describe the composition, properties and manipulation of casting alloys	C	IL SGD	MCQ SEQ
14	<b>Casting process</b>			
	<ul style="list-style-type: none"> <li>Describe the types of casting</li> <li>Describe the components of investment molds and their function</li> <li>Discuss the defects in casting and methods to avoid them</li> </ul>	C	IL SGD	MCQ SEQ
15	<b>Investment materials</b>			
	<ul style="list-style-type: none"> <li>Outline steps in making cast restoration</li> </ul>	C & P		

	<ul style="list-style-type: none"> <li>• Enlist three main groups of investment material</li> <li>• Discuss composition, setting reaction, properties and uses of different types</li> <li>• Discuss the compensating expansion takes place in each investment material.</li> <li>• Compare the properties of investment material</li> </ul>	C C C C	ILSGD Practical Demonstration	MCQ SEQ OSPE
16	<b>Dental Ceramics</b>			
	<ul style="list-style-type: none"> <li>• Define Dental Porcelain and discuss its <ul style="list-style-type: none"> <li>➤ Composition</li> <li>➤ Processing of Porcelain Fused to metal prosthesis</li> <li>➤ Uses</li> <li>➤ Firing, glazing of porcelain</li> </ul> </li> <li>• Define the following terms <ul style="list-style-type: none"> <li>➤ Sintering</li> <li>➤ Casting and Slip Casting</li> <li>➤ Hot Pressing</li> <li>➤ CAD/CAM</li> </ul> </li> <li>• Explain Properties of Dental Ceramics</li> <li>• Describe Toughening mechanism of Dental Ceramics</li> <li>• Discuss aluminous porcelain</li> <li>• Discuss injection molded and pressed ceramic</li> <li>• Discuss the advantages of CAD-CAM restoration</li> </ul>	C	IL SGD	MCQ SEQ
<b>COMMUNITY DENTISTRY</b>				
17	<b>Basic concepts and strategies for preventing and controlling major oral diseases</b>			
	<p>Levels of prevention</p> <ul style="list-style-type: none"> <li>• Summarize and interpret the four levels of prevention of primordial, primary, secondary &amp; tertiary prevention</li> <li>• Summarize and interpret the two approaches to prevention</li> <li>• Application of prevention levels for Oral cancers as an example</li> </ul> <p>Prevention of caries</p> <ul style="list-style-type: none"> <li>• Explain aetiology of caries progression</li> <li>• Describe the epidemiology of caries</li> <li>• Examine role of diet and nutrition in caries</li> <li>• Identify and interpret caries activity tests</li> <li>• Examine role of Fluorides, fluoridation techniques</li> <li>• Demonstrate application of topical fluoride</li> <li>• Demonstrate application of ART</li> <li>• Demonstrate application of Pit and fissure sealants</li> <li>• Discuss the concept of a caries vaccine</li> </ul> <p>Plaque and its prevention</p> <ul style="list-style-type: none"> <li>• Describe composition of plaque</li> </ul>	C C P C P P P C C	ILSGD DSL Practical Demonstration & Clinic	MCQ SEQ OSPE Logbook

	<ul style="list-style-type: none"> <li>Review progress outcomes of accumulation of plaque</li> <li>Demonstrate plaque clinically</li> <li>Review and demonstrate chemical methods of plaque removal</li> <li>Review and demonstrate mechanical methods of plaque removal</li> </ul> <p>Periodontal disease and its prevention</p> <ul style="list-style-type: none"> <li>Summarize progression of gingivitis and periodontitis</li> <li>Apply and interpret tools of periodontal diagnosis</li> <li>Differentiate levels of periodontal disease</li> <li>Justify treatment needs according to level of periodontal disease</li> </ul>	<p>P P P</p> <p>C P C</p> <p>C &amp; P</p>		
18	<b>Methods of health promotion and health education</b>			
	<p>Definition and principles of oral health promotion</p> <ul style="list-style-type: none"> <li>Define and describe principles of oral health promotion</li> <li>Discuss and apply principles of OHP to the Ottawa Charter of health</li> <li>Interpret the upstream-downstream approach</li> <li>Summarize approaches to oral health promotion</li> </ul> <p>Definition and principles of oral health education</p> <ul style="list-style-type: none"> <li>Define and describe principles of oral health education</li> <li>Demonstrate methods of imparting health education</li> <li>Organize and plan a health education program</li> <li>Differentiate between oral health education and oral health promotion</li> </ul>	<p>C</p> <p>C</p> <p>A</p> <p>C</p>	<p>ILSGD Practical Demonstration</p>	<p>MCQ SEQ OSPE</p>
19	<b>Occupational hazards in dentistry to human health and the Environment</b>			
	<p>Categories of occupational hazards for dental professionals</p> <ul style="list-style-type: none"> <li>Classify categories of occupational hazards for dental professionals</li> <li>Summarize Infectious hazards and infection control protocols for dentistry</li> <li>Demonstrate waste disposal management</li> <li>Summarize, assess, and implement against non-infectious hazards</li> <li>Ergonomic hazards,</li> <li>Psychosocial hazards</li> <li>Burn out</li> </ul> <p>Mercury as a health and environmental hazard</p> <ul style="list-style-type: none"> <li>Demonstrate amalgam use protocols</li> <li>Summarize the role of Amalgam in the Global Mercury Cycle</li> <li>Mercury as a health hazard to the dental profession and</li> <li>Demonstrate amalgam Waste management in a dental office</li> </ul>	<p>C</p> <p>C &amp; P</p> <p>P</p> <p>C</p> <p>C</p> <p>C</p> <p>C C C</p>	<p>ILSGD DSL Practical Demonstration</p> <p>IL SGD DSL</p>	<p>MCQ SEQ OSPE</p>
20	<b>Sociology, psychology and anthropology as applied to dentistry with a special focus on child psychology for pediatric dentistry and dentist-patient relationship in view of dental anxiety</b>			

	<p>Introduction to behavioral sciences</p> <ul style="list-style-type: none"> <li>Summarize disciplines of behavioral sciences including</li> <li>Sociology</li> <li>Cultural anthropology</li> <li>Health behaviors</li> <li>Psychology in social sciences</li> <li>Discuss Taboos &amp; myths</li> <li>Demonstrate History taking and appropriate chairside mannerism</li> </ul> <p>Introduction to child psychology</p> <ul style="list-style-type: none"> <li>Discuss the significance of child psychology in dentistry</li> <li>Discuss and review Behaviorism</li> <li>Discuss and review theories in child psychology: Psychodynamic and behavioral</li> <li>Discuss and review classical conditioning and instrumental conditioning theories</li> <li>Review factors that affect a child's behavior</li> <li>Apply tools to evaluate degree of child cooperation</li> <li>Review and apply behavior management techniques in children: <ul style="list-style-type: none"> <li>pharmacological and</li> <li>non-pharmacological</li> </ul> </li> </ul>	<p>C</p> <p>C</p> <p>P &amp; A</p> <p>C</p> <p>C</p> <p>C</p>	<p>ILSGD DSL Practical Demonstration</p> <p>IL SGD DSL</p>	<p>MCQ SEQ OSPE</p> <p>MCQ SEQ OSPE</p>
21	<b>Principles and applications of the theories of behavior change in view of health behaviors</b>			
	<ul style="list-style-type: none"> <li>Review and discuss the</li> <li>Health Belief Mode</li> <li>Theory of reasoned action / planned behavior</li> <li>Transtheoretical Model</li> <li>Social cognitive theory</li> <li>Social norms theory</li> <li>Diffusion innovation theory</li> </ul>	<p>C</p> <p>C</p> <p>C</p> <p>C</p>	<p>ILSGD DSL</p>	<p>MCQ SEQ OSPE</p>
22	<b>The role of social determinants of health and their impact on health behavior</b>			
	<p>Determinants of health</p> <ul style="list-style-type: none"> <li>Discuss and review the Biomedical model of health-</li> <li>Discuss and review the social model of health-</li> <li>Differentiate the social determinants of health</li> </ul> <p>Dentist patient communication</p> <ul style="list-style-type: none"> <li>Discuss the Parsons Theory of sick role</li> <li>Review the prototypes of doc-patient relationships</li> <li>Differentiate the influences on doctor-patient relationship</li> <li>Conducting a doctor-patient interaction with history taking</li> <li>Evaluate dental anxiety in a patient</li> <li>Review techniques to handle a dentally anxious patient</li> </ul>	<p>C</p> <p>C</p> <p>C</p> <p>C</p> <p>C</p> <p>C</p> <p>P</p>	<p>IL SGD DSL</p> <p>IL SGD Clinic</p>	<p>MCQ SEQ OSPE</p> <p>MCQ SEQ OSPE Log book</p>
<b>PRE-CLINICAL DENTISTRY</b>				

23	Tooth Arrangement			
24	Class V cavity preparation -Define class V cavity, Conservative and conventional cavities -Explain different forms of class V cavity, -Explain different materials used for class V cavity restoration.	C P	Practical demonstr ation/ SGD	MCQ SEQ OSPE
25	Infiltration technique on phantom head	C P		
26	Chair positioning for different procedures	C P		
27	Manipulation of heat polymerizing resins	C P		
28	Class III cavity preparation: -Define class III cavity, -Explain different forms of class III cavity, -Explain different materials used for restoration	C P		
29	Mandibular nerve block technique on phantom head	C P		

## LEARNING RESOURCES:

### Pharmacology:

- Basic & Clinical Pharmacology by Katzung 14<sup>th</sup> Edition.
- Rang and Dale Pharmacology 8<sup>th</sup> Edition.
- Basis of Pharmacology by Goodman & Gillman Latest Edition.
- Bentley's Textbook of Pharmaceutics by Jain 2012 An adaption.
- Medical Pharmacology & Therapeutics by Walker 3<sup>rd</sup> Edition,
- Netter's illustrated Pharmacology by RAFFA latest Edition.

### Pathology:

- Robbins and Cortan Pathologic basis of disease 10<sup>th</sup> Edition
- Basic Pathology by Kumar and Cotran 10<sup>th</sup> Edition
- Medical Microbiology and Immunology by Warren Levinson 14<sup>th</sup> Edition

### Dental Materials:

- Phillips' Science of Dental Materials by Anusavice, Shen, Rawls 12<sup>th</sup> edition
- Applied Dental Materials by McCabe and Walls 9<sup>th</sup> edition
- Craig's Restorative Dental Materials by Sakaguchi, Powers 13<sup>th</sup> edition

### Community Dentistry:

- A textbook of Public Health Dentistry by C M Marya 1<sup>st</sup> edition
- Essentials of Preventive and Community Dentistry by Soben Peter 4<sup>th</sup> edition
- Textbook of Preventive and Community Dentistry by S SHiremath 2<sup>nd</sup> edition
- Textbook of Preventive and Community Dentistry by Joseph John 3<sup>rd</sup> edition

### Preclinical:

- Sturdevant's Art and Science of Operative Dentistry by Andre Ritter 7<sup>th</sup> edition
- Preclinical manual of Prosthodontics by Lakshmi S 2<sup>nd</sup> edition
- Preclinical Dental Sciences; Workbook for Dental Students by Kefi Iqbal 2<sup>nd</sup> edition

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BLOCK VI STUDY GUIDE

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