

Institute of Dentistry, CMH Lahore Medical College Curriculum and study Guide 2nd Year BDS Session 2021-2022 Department of Preclinical Operative deaniod@cmhlahore.edu.pk

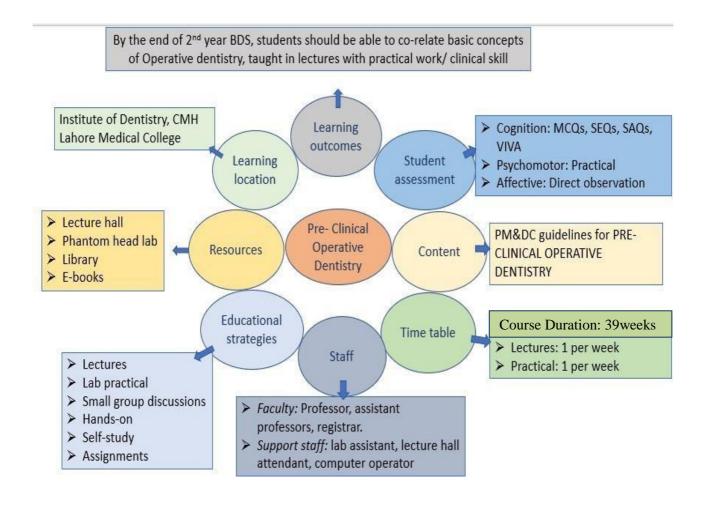
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INTRODUCTION TO PRE-CLINICAL OPERATIVE

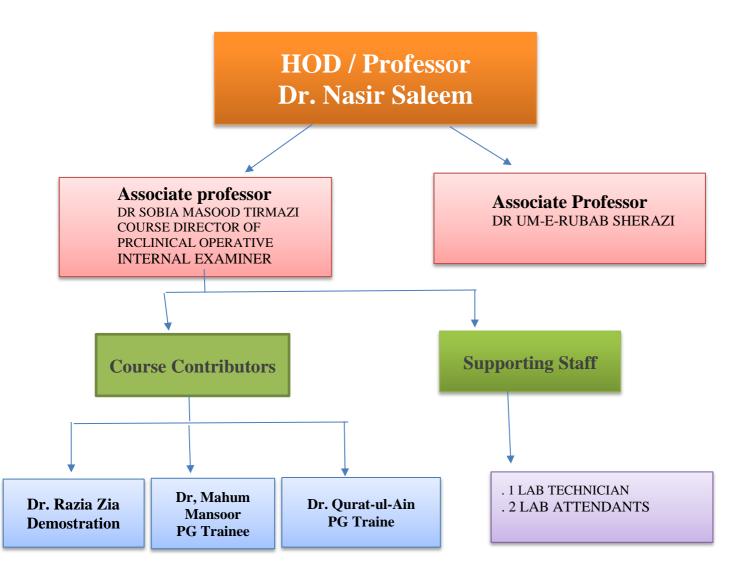
This is a subject which includes the knowledge of Etiology, diagnosis, prevention and treatment of the problems and conditions of natural teeth vital or non-vital so as to preserve natural dentition and to restore them to the best state of health, function and aesthetics. It has been recognized as the foundation of dentistry and base from which most other aspects of dentistry evolved. This is one year course made up of Didactic and preclinical skills as an introduction to Operative Dentistry.

Curricular Map of Pre-clinical Operative Dentistry



ORGANOGRAM

DEPARTMENT OF PRECLINICAL OPERATIVE DENTISTRY



RESOURCES

- 1. Teaching resources
- 2. Supporting staff
- 3. Infrastructure resources

Teaching resources

Sr. #.	Faculty Name	Designation as per PM & DC certificate	Qualification
1	Prof. Dr. Nasir Saleem	Professor	BDS, FCPS, MSc
2	Dr. Umm e Rubab Sherazi	Associate professor	BDS, FCPS
3	Dr. Sobia Masood Tirmazi	Associate professor	BDS, FCPS
4	Dr. Mahum Mansoor	Registrar	BDS
5	Dr. Qurat Ul Ain	Registrar	BDS
6	Dr. Razia Zia	Demonstrator	BDS

Supporting Staff

	Pre-Clinical Operative Dentistry						
1	Mehwish Asghar	Computer operator					
2	Zulfiqar Ali	Lab attendant					
3	Muhammad Asif	Lab attendant					

Labortary Technician Staff:

		Pre- Clinical Operative Dentistry
1	<u>Shakeel</u>	Lab Technician

<u>Infrastructure resources</u>

Sr. #.	Infrastructure Resources	Quantity
1	Lecture hall	1
2	Phantom Head LabsLab A- Phantom headsLab B- Phantom heads	2 • 20 • 20
3	Reception	1
4	Mini Library	1
5	Staff Room	1
6	Dental stores	1

TEACHING AND LEARNING STRATEGIES

Multiple educational methods will be used comprising of self-study, interactive lectures, group discussions, and practical skill sessions.

(i) Methods for achieving cognitive objectives.

- Interactive lectures using audio visual aids on power point presentation
- Group discussions in form of large group and small group
- Hands on demonstrations
- Tutorials
- Collaborative learning
- Self-study and reading from learning resources

(ii) Methods for achieving psychomotor objectives.

• Lab skills

(iii) Methods for achieving affective objectives.

- Interaction with peers, group members, teachers, support staff etc.
- Group discussions (small and large)
- Oral presentations by students

LEARNING METHODOLOGIES

The following teaching / learning methods are used to promote better understanding:

- Interactive Lectures
- Small Group Discussion
- Case- Based Learning
- Skills session
- E- Learning
- Self- Directed Study

INTERACTIVE LECTURES

In large group, the lecturer introduces a topic or common clinical conditions and explains the underlying phenomena through questions, pictures, videos of patients, interviews, exercise etc. students are actively involved in the learning process.

SMALL GROUP DISCUSSION (SGD)

This format helps students to clarify concepts acquire skills or attitudes. Sessions are structured with the help of specific exercise such as patient case, interviews or discussion topics. Students exchange opinions and apply knowledge gained from lectures, tutorials and self- study. The facilitator role is to ask probing questions, summarize, or rephrase to help clarify concepts.

CASE- BASED LEARNING

A small group discussion format where learning is focused around a series of questions based on a clinical scenario. Students' discuss and answer the questions applying relevant knowledge gained in clinical and basic health sciences during the module.

SKILLS SESSION

Skills relevant to respective module are observed and practiced where applicable in skills laboratory.

SELF DIRECTED STUDY

Students' assume responsibilities of their own learning through individual study, sharing and discussing with peer, seeking information from Learning Resource center, teachers and resource persons within and outside the college. Students can utilize the time within the college scheduled hours of self- study.

E-LEARNING

E-Learning is a strategy by which learning occurs through the utilization of electronic media, typically the Internet. The basic aspects of medical professionalism and ethics will be addressed through and E- Learning course.

CURRICULUM IMPLEMENTATION

Curriculum implementation refers to putting into practice the official document including course content, objectives, learning and teaching strategies. Implementation process helps the learner to achieve knowledge, skills and attitudes required of the learning tasks. Learners are a pertinent component of the implementation process. Implementation occurs when the learner achieves the intended learning experiences, knowledge, ideas, skills and attitudes which are aimed to make the learner an effective part of the society. Curriculum implementation also refers to the stage at which curriculum is put into effect. There has to be an implementing agent as well. Teacher is an important part of this process and implementation of the curriculum is the way the teacher selects and utilizes various components of the curriculum. Implementation occurs when the teacher's formulated course content, teacher's personality and teaching and learning environment interact with the learners. Therefore, curriculum implementation is how the officially planned course of study is translated and reflected by the teacher into schemes of work, lesson plans, syllabus and resources are effectively transferred to the learners. Curriculum implementation can be affected by certain factors such as teachers, learners, learning environment, resource materials and facilities, culture and ideology, instructional supervision and assessments.

a. Lectures delivery by:

- Prof. Dr. Muhammad Nasir Saleem (Professor)
- Dr. Sobia Masood Tirmazi (Associate Professor)
- Dr. Umm E Rubab Sherazi (Associate professor)

b. Contributors for practicals and small group discussion sessions:

- Dr. Mahum Mansoor
- Dr. Qurat Ul Ain
- Dr. Razia Zia
- c. Lecture hall Attendant: one attendant is nominated by Medical Education Department
- **d. Computer assistant:** one computer assistant nominated by the Medical Education Department

Course Outline

Time frame

Course duration: 39 weeks

Lectures: Thursday: (8:00 am to 8:50 am)

Practical: **Wednesday:** (8:50 am to 11:25 am)

Thursday: (8:50 am to 11:25 am)

Study hours of lecture/week \longrightarrow 50 min

Study hours practicals \longrightarrow 155 min/week

Tutorial \rightarrow 60 mins/week

Self-directed study \longrightarrow 60 mins/week

Total study time \longrightarrow 295 mins/week

In 39 weeks \longrightarrow 39x295=11,505 min

In hours = 191 hours/39 weeks

• According to Latest 2nd year BDS Curriculum (2020-2021)

Required contact hours for Pre-clinical Operative Dentistry = 135

Table of specification for teaching, learning objectives and assessment

At the end of 2nd year BDS the students will be able to:

TOPIC	FACULTY	LEARNING DOMAIN (CPA)	LEARNING STRATEGY	AS	SESSM	IENT M	ЕТНО	D
PRE-CLINICAL OPERATIVE DENTIST	RY			Practicals	OSPE	NUMS MCQs	NUM S SEQs	WEIGH TAGE %
1. Introduction to allocation: led	_	_	ime		X			
Definition of operative dentistry		С	Interactive lecture					
Discuss the factors affecting operative treatment	Dr. Sobia Masood tirmazi	С	Interactive lecture/ Case- based discussion					
Explain the future demand of operative dentistry		С	Interactive lecture/ Case- based discussion					
2. Introdu Time allocation: lectur		mamentari min.) Pra	um ectical: (X	2	-	5%
Identify various hand instruments for cutting		СРА	Interactive lecture/ practical/ Small group discussion					
Discuss advantages of various hand cutting instruments	Dr. Sobia Masood	СРА	Interactive lecture / practical/ Small group discussion					
Discuss disadvantages of various hand cutting instruments		СРА	Interactive lecture/ practical/ Small group Discussion					
Define a basic set of instruments appropriate for diagnosis		СРА	Interactive lecture/ Small group discussion/ practical					

Identify powered cutting instruments		СРА	Interactive lecture/ Case- based discussion/ practical			
Discuss advantages of powered cutting instruments		С	Interactive lecture/ Case- based discussion			
Discuss disadvantages of powered cutting instruments		С	Interactive lecture/ Case- based discussion			
Discuss different cutting mechanics		С	Interactive lecture			
Explain various techniques of handling instruments		СРА	Interactive lecture/ Case- based discussion/ practical			
Discuss hazards with cutting instruments and their prevention		С	Interactive lecture/ Case- based discussion			
Rubber dam and its application				X		
Introduction to isolation methods		СРА	Interactive lecture / practical			
Enlist goals of isolation		С	Interactive lecture			
Enlist advantages of rubber dam	Dr.	С	Interactive lecture			
Enlist disadvantages of rubber dam	Sobia Masood	С	Interactive lecture			
Explain the components of rubber dam kit		С	Interactive lecture/ practical/ Small group Discussion			

Explain the procedure to apply rubber dam		СРА	Interactive lecture/ Small group discussion / practical				
Explain different techniques to apply rubber dam		СРА	Interactive lecture/ Small group discussion / practical				
Identify different types of rubber dam sheet		СРА	Interactive lecture/ practical				
demonstrate methods of isolation other than rubber dam		СРА	Interactive lecture/ Small group discussion/ practical				
Time allocation: le	3. Dental	_ _	tical: (10)	X	2	1	21%
Define dental caries		C	Interactive lecture/ case-based discussion				
Discuss different etiological factors of dental caries		С	Interactive lecture/ case-based discussion				
Discuss the classification of dental caries		С	Interactive lecture/ Small group discussion				
Discuss clinical characteristics of normal and altered enamel	Dr. Sobia Masood Tirmazi	С	Interactive lecture/ Small group discussion				
Discuss different zones of enamel caries		С	Interactive lecture				
Discuss different zones of dentinal caries		С	Interactive lecture				
Describe different dentinal reactions to caries		С	Interactive lecture				

Identification of risk factors		С	Interactive lecture				
Enlist the methods of caries treatment by medical model		СРА	Interactive lecture/ Small group discussion/ practical				
Discuss different treatment strategies		C	Interactive lecture/ Small group Discussion				
Discuss clinical considerations in caries prevention		СРА	Interactive lecture/ Small group discussion				
4. Prii Time allocation	nciples of ca lecture: (1: (30hrs.)		ration ractical:	X	3	1	25%
Define tooth preparation		С	Interactive lecture/ case-based discussion				
Discuss the need for a restoration		СРА	Interactive lecture/s Small group discussion/ practical				
Enlist the classification of tooth preparation	Dr. Sobia	СРА	Interactive lecture/ Small group discussion/ practical				
Discuss the objectives of tooth preparation	Masood	С	Interactive lecture				
Enlist and explain the stages and steps of tooth preparation		СРА	Interactive lecture/ Small group discussion/ practical				
Enlist the factors to be considered before tooth preparation		СРА	Interactive lecture/ Small group discussion/ practical				

Explain following terminologies a. Simple, compound and complex tooth preparation b. Tooth preparation walls c. Tooth preparation angles d. Dentinoena mel junction e. Cementoena mel junction f. Enamel margin		СРА	Interactive lecture/ case-based discussion/ Small group Discussion / practical			
strength Class I cavity preparation for Amalgam restoration						
Simple class I cavity preparation a. Enlist steps of cavity preparation b. Write down different dimensions of cavity preparation Explain the restorative techniques	Dr. Sobia Masood.		Interactive lecture/ small group discussion/ practical			

• Class I occlusolingual preparation a. Enlist steps of cavity preparation b. Write down different dimensions of cavity preparation Explain the restorative techniques			Interactive lecture/ small group discussion/ practical			
Class II cavity preparation for Amalgam restoration						
Enlist steps of cavity preparation		СРА	Interactive lecture/ Small group discussion/ practical			
Write down different dimensions of cavity preparation	Prof. Dr. Nasir Saleem	СРА	Interactive lecture/ Small group discussion/ practical			
Explain the restorative techniques		СРА	Interactive lecture/ Small group discussion/ practical			
Explain the importance of bevel		СРА	Interactive lecture/ Small group discussion/ practical			
Explain the importance of reverse S curve		СРА	Interactive lecture/ Small group discussion/ practical			

Class III cavity preparation for composite restoration						
Give classification of class III cavity design		CA	Interactive lecture/ case-based discussion			
Explain different approaches for cavity preparation		С	Interactive lecture/ Small group Discussion			
Enlist indications of each approach	Dr. Rubab Sherazi	С	Interactive lecture/ case-based discussion			
Enlist contraindications of each approach		С	Interactive lecture/ case-based discussion			
Explain the importance of conventional class III type		С	Interactive lecture/ Small group Discussion			
Explain the importance of Beveled class III type		CA	Interactive lecture/ Small group Discussion			
Explain the importance of modifies class III type		CA	Interactive lecture/ Small group Discussion			
Class IV cavity preparation for composite restoration						
Give classification of class IV cavity design		CA	Interactive lecture/ Small group Discussion			
Explain different approaches for cavity preparation		СРА	Interactive lecture/ Small group Discussion			

Enlist contraindications of each approach		С	Interactive lecture/ case-based discussion			
Enlist indications of each approach	Dr. Rubab Sherazi	С	Interactive lecture/ case-based discussion			
Explain the importance of conventional class IV type		C	Interactive lecture/ Small group Discussion			
Explain the importance of Beveled class IV type		СРА	Interactive lecture/ Small group Discussion			
Explain the importance of modified class IV type		СРА	Interactive lecture/ Small group discussion			
Class V cavity preparation for composite						
Explain the importance of conventional class V type		С	Interactive lecture/ case-based discussion			
Explain the importance of Beveled class V type	Dr. Sobia Masood	СРА	Interactive lecture/ case-based discussion			
Explain the importance of modified class V type		СРА	Interactive lecture/ Small group discussion			
Enlist secondary retentive features of class V cavity design		СРА	Interactive lecture/ Small group discussion			

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Explain the restorative techniques	СРА	Interactive lecture/ Small group discussion			

Sy alloc	and Retaine stems Time ation: lectures.) Practical (10hrs.)	e:		X	2	1	27%
Define retainer		С	Interactive lecture				
Give classification of matrix and retainer systems		СРА	Interactive lecture/ case-based discussion/ practical				
Explain different designs of matrix and retainer systems	Dr. Sobia Masood	СРА	Interactive lecture/ Small group discussion/ practical				
Enlist indications of each system		С	Interactive lecture/ case-based discussion				
Enlist advantages of each system		С	Interactive lecture/ case-based discussion				
Enlist disadvantages of each system		С	Interactive lecture/ case-based discussion				
Time allocation: lec	6. Liners at ture: (2hrs.)		cal: (15hrs.)	X	2	-	-
Define liners		С	Interactive lecture				
Define bases		С	Interactive lecture				
Differentiate between liners and bases	Dr. Rubab Sherazi	С	Interactive lecture/ Small group Discussion				
State the objectives of liners and bases		С	Interactive lecture				
Enlist different types of liners and bases		С	Interactive lecture/ Small group Discussion				

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Enlist advantages of each type of liners and bases C Interactive lecture/ case-based discussion			
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Discuss clinical considerations of all types of liners and bases	СРА	Interactive lecture/ Small group discussion / practical
Demonstrate application of liner and base in a cavity design	СРА	Interactive lecture/ Small group discussion/ practical

7. Introdu	iction to rest	torative mate	erials			<u>'</u>		
Time allocation:	Time allocation: lecture (4hrs.) Practical (10hrs.)							
Define terminologies Amalgam, Composites, GIC		С	Interactive lecture/ case-based discussion					
Explain classification of amalgam, composite		СРА	Interactive lecture/ Small group discussion / practical					
Explain their composition, structure and properties	Dr. Rubab Sherazi	С	Interactive lecture					
Give clinical considerations of different materials		СРА	Interactive lecture/ case-based discussion/ practical					
Enlist indications of amalgam, composites and GIC		С	Interactive lecture/ case-based discussion/					
Enlist contraindications of amalgam, composite and GIC		С	Interactive lecture/ case-based discussion/					
Enlist advantages of amalgam, composite and GIC		C	Interactive lecture/ case-based discussion					
Enlist disadvantages of amalgam, composite and GIC		С	Interactive lecture/ case-based discussion					



Pre-Clinical Operative Dentistry 2nd Year BDS **Lecture Schedule 2022**

			Every Thursda	y 8:00 am to 8:50 am
Sr. #	Date	TOPIC	NO OF LECTURES	INSTRUCTOR
		BLOCK I (1- 13 Weeks)		
1	6/1/2022	Introduction to Operative Dentistry	1	Dr. Sobia
2	13/1/2022	Introduction to Instruments and equipment	1	Dr. Sobia
3	20/1/2022	Sterilization & Disinfection of instruments	1	Dr.Rubab
4	27/1/2022	Role of Isolation in Dentistry	1	Dr. Sobia
5	3/2/2022	Components of rubber dam and its application	1	Dr. Sobia
6	10/2/2022	1ST CLASS TEST	D	r. Sobia
7	17/2/2022	Dental Caries etiology, Classification, Radiographic appearance, Histologic features	1	Dr. Sobia
8	24/2/2022	Diagnosis of Dental Caries	1	Dr. Sobia
9	3/3/2022	Dental Caries, Management of Dental Caries	1	Dr. Sobia
10	7/3/2022 to 13/3/2022	SPORTS DAY		
11	17/3/20222	2ND CLASS TEST	D	r. Sobia
12	23/3/2022	PAKISTAN DAY		
13	24/3/2022	Pits & Fissure sealants	1	Dr. Rubab
14	25/3/2022 to 4/4/2022	BLOCK 1 EXAM		
15	30/3/2022	Exam Pre-Clinical Operative / Pre-Clinic	al Prosthodo	ntics
		BLOCK II (14- 30 Weeks)		
16	7/4/2022	Principles of Cavity Preparation Part 1	1	Dr. Sobia
17	14/4/2022	Principles of Cavity Preparation Part 2	1	Dr. Sobia
18	21/4/2022	Class I Cavity Preparation for Amalgam (Mandibular Premolar+ Molars)	1	Dr. Sobia
19	28/4/2022	Class I Cavity Preparation for amalgam (Maxillary molars)	1	Dr. Sobia
20	3/5/2022 to 5/5/2022	EID UL FITAR		
21	12/5/2022	Liners and bases application	1	Dr. Rubab
22	19/5/2022	3RD CLASS TESTT		or. Sobia r. Rubab

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23	26/5/2022	Class II Cavity Preparation for Amalgam	1	Dr. Nasir			
24	2/6/2022	Class II Cavity Preparation for Amalgam	1	Dr. Nasir			
25	9/6/2022	Class II Cavity Preparation for Amalgam	1	Dr. Nasir			
26	11/6/2022 to 17/7/2022	SUMMER VACATIONS	S				
27	21/7/2022	REVISION LECTUR ON CLASS 1 CAVIT	Y PREPARA	ATION			
28	22/7/2022 to 1/8/2022	BLOCK 1I EXAM					
29	27/7/2022	Exam Pre-Clinical Operative / Pre-Clinic	al Prosthodo	ntics			
		BLOCK III (31- 46 Weeks)					
30	4/8/2022	Matrix bands, retainers and their importance	1	Dr. Sobia			
31	8/8/2022 to 9/8/2022	ASHURA					
32	11/8/2022	Matrix bands, retainers and their importance	1	Dr. Sobia			
33	18/8/2022	Class III Cavity Preparation for Composite	1	Dr. Rubab			
34	25/8/2022	Class IV Cavity Preparation for Composite	1	Dr. Rubab			
35	1/9/2022	Class V Cavity Preparation for Composite	1	Dr. Sobia			
36	8/9/2022	Class VI Cavity Preparation for Composite	1	Dr. Rubab			
37	15/9/2022	Restorative Materials (Dental Amalgam)	1	Dr. Rubab			
38	22/9/2022	Restorative Materials (Dental Compostie)	1	Dr. Nasir			
39	29/9/2022	Restorative Materials (Glass Ionomers)	1	Dr. Rubab			
40	6/10/2022	4TH CLASS TEST	D	Or. Sobia Or. Nasir r. Rubab			
41	13/10/2022	REVISION LECTUR CLASS III CAVIT	Y PRPARAT	TION			
42	20/10/2022	RVISION LECTURE CLASS IV CAVITY	PREPARA	ΓΙΟΝ			
43	22/10/2022 to 30/10/2022	Prep Leave for Pre-Annual F	Exam				
44	31/10/2022 to 16/11/2022	Pre-Annual Exam					
45	9/11/2022	Pre-clinical Operative/ Pre-clinical Prosthod	ontics Writte	n Exam			
46	10, 11, 14, 15, 16 Nov, 2022	Pre-clinical Operative/ Pre-clinical Prosthodo					
47	17/11/2022 to 4/12/2022	Prep Leave for Annual Exa	Prep Leave for Annual Exam				
48	05/12/2022 to 16/12/2022	Professional Exam Preclinical Operative					

Pre-Clinical Operative Dentistry

2nd Year BDS (2022)

Phantom Head Lab Demonstration Schedule

Venue: Phantom Head Lab Days and Timing: Wednesday (08:50 am to 11:25 am) Thursday (08:50 am to 11:25 am)

Date	Topice	Instructor	Contributors	Batches
	Block I (1 - 13 W	reeks)		
5/1/2022	Introduction to Instruments & Pt. Positioning	Dr. Sobia Masood	Dr. Razia Zia Dr. Mahum Mansoor Dr. Qurat-ul-Ain	Batch A
6/1/2022	Introduction to Instruments & Pt. Positioning	Dr. Sobia Masood	Dr. Razia Zia Dr. Mahum Mansoor Dr. Qurat-ul-Ain	Batch B
12/1/2022	Practice Session (Introduction to Instruments & Pt. Positioning	Dr. Sobia Masood	Dr. Razia Zia Dr. Mahum Mansoor Dr. Qurat-ul-Ain	Batch A
13/1/2022	Practice Session (Introduction to Instruments & Pt. Positioning	Dr. Sobia Masood	Dr. Razia Zia Dr. Mahum Mansoor Dr. Qurat-ul-Ain	Batch B
19/1/2022	Test (Introduction to Instruments & Pt. Positioning	Dr. Sobia Dr. Rubab	Dr. Razia Zia Dr. Mahum Mansoor Dr. Qurat-ul-Ain	Batch A
20/1/2022	Test (Introduction to Instruments & Pt. Positioning	Dr. Sobia Dr. Rubab	Dr. Razia Zia Dr. Mahum Mansoor Dr. Qurat-ul-Ain	Batch B
26/1/2022	Isolation Methods (Rubber Dam)	Dr. Sobia Masood	Dr. Razia Zia Dr. Mahum Mansoor Dr. Qurat-ul-Ain	Batch A
27/1/2022	Isolation Methods (Rubber Dam)	Dr. Sobia Masood	Dr. Razia Zia Dr. Mahum Mansoor Dr. Qurat-ul-Ain	Batch B
2/2/2022	Practice Session (Rubber dam Application)	Dr. Sobia Masood	Dr. Razia Zia Dr. Mahum Mansoor Dr. Qurat-ul-Ain	Batch A

3/2/2022	Practice Session (Rubber dam Application)	Dr. Sobia Masood	Dr. Razia Zia Dr. Mahum Mansoor Dr. Qurat-ul-Ain	Batch B
9/2/2022	Practice Session (Rubber dam Application)	Dr. Sobia Masood	Dr. Razia Zia Dr. Mahum Mansoor Dr. Qurat-ul-Ain	Batch A
10/2/2022	Practice Session (Rubber dam Application)	Dr. Sobia Masood	Dr. Razia Zia Dr. Mahum Mansoor Dr. Qurat-ul-Ain	Batch B
16/2/2022	Pits & Fissure Sealant	Dr. Sobia Masood	Dr. Razia Zia Dr. Mahum Mansoor Dr. Qurat-ul-Ain	Batch A
17/2/2022	Pits & Fissure Sealant	Dr. Sobia Masood	Dr. Razia Zia Dr. Mahum Mansoor Dr. Qurat-ul-Ain	Batch B
23/2/2022	Lab test (Rubber dam +Pits & Fissure Sealant)	Dr. Sobia Dr. Rubab	Dr. Razia Zia Dr. Mahum Mansoor Dr. Qurat-ul-Ain	Batch A
24/2/2022	Lab test (Rubber dam +Pits & Fissure Sealant)	Dr. Sobia Dr. Rubab	Dr. Razia Zia Dr. Mahum Mansoor Dr. Qurat-ul-Ain	Batch B
2/3/2022	Class I Cavity Preparation in Mandibular Premolars and molars	Dr. Sobia Masood	Dr. Razia Zia Dr. Mahum Mansoor Dr. Qurat-ul-Ain	Batch A
3/3/2022	Class I Cavity Preparation in Mandibular Premolars and molars	Dr. Sobia Masood	Dr. Razia Zia Dr. Mahum Mansoor Dr. Qurat-ul-Ain	Batch B
7/3/2022 to 13/3/2022	SPORT	TS DAY		
16/3/2022	Class I Cavity Preparation in maxillary molars(simple)	Dr. Sobia Masood	Dr. Razia Zia Dr. Mahum Mansoor Dr. Qurat-ul-Ain	Batch A
17/3/2022	Class I Cavity Preparation in maxillary molars(simple)	Dr. Sobia Masood	Dr. Razia Zia Dr. Mahum Mansoor Dr. Qurat-ul-Ain	Batch B
23/3/2022	Pakistan Day Ga	zetted HOLID	OAY	
25/3/2022 to 4/4/2022	BLOCK	1 EXAM		
	BLOCK II (14- 30	Weeks)		
6/4/2022	Class I Cavity Preparation in maxiilary molars(occlusolingual)	Dr. Rubab Shirazi	Dr. Razia Zia Dr. Mahum Mansoor Dr. Qurat-ul-Ain	Batch A

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7/4/2022	Class I Cavity Preparation in maxillary molars(occlusolingual)	Dr. Rubab Shirazi	Dr. Razia Zia Dr. Mahum Mansoor Dr. Qurat-ul-Ain	Batch B
13/4/2022	Test Class I Cavity Preparation	Dr. Sobia Prof. Dr. Nasir	Dr. Razia Zia Dr. Mahum Mansoor Dr. Qurat-ul-Ain	Batch A
14/4/2022	Test Class I Cavity Preparation	Dr. Sobia Prof. Dr. Nasir	Dr. Razia Zia Dr. Mahum Mansoor Dr. Qurat-ul-Ain	Batch B
20/4/2022	Liner & Bases	Dr. Sobia Masood	Dr. Razia Zia Dr. Mahum Mansoor Dr. Qurat-ul-Ain	Batch A
21/4/2022	Liner & Bases	Dr. Sobia Masood	Dr. Razia Zia Dr. Mahum Mansoor Dr. Qurat-ul-Ain	Batch B
27/4/2022	Class I dental Amalgam restoration in Mandibular Premolar and molars	Dr. Rubab Shirazi	Dr. Razia Zia Dr. Mahum Mansoor Dr. Qurat-ul-Ain	Batch A
28/4/2022	Class I cavity Amalgam restoration in Mandibular Premolars & molars	Dr. Rubab Shirazi	Dr. Razia Zia Dr. Mahum Mansoor Dr. Qurat-ul-Ain	Batch B
			Quiat-ui-Aiii	
3/5/2022 to 5/5/2022	EID UL	FITAR	Qurat-ur-Ain	
to	Lab Test (Liner & Bases + Class I cavity preparation in Mandibular molar and Amalgam restoration	Dr. Sobia Dr. Rubab	Dr. Razia Zia Dr. Mahum Mansoor Dr. Qurat-ul-Ain	Batch A
to 5/5/2022	Lab Test (Liner & Bases + Class I cavity preparation in Mandibular molar and	Dr. Sobia	Dr. Razia Zia Dr. Mahum Mansoor Dr. Qurat-ul-Ain Dr. Razia Zia Dr. Mahum Mansoor Dr.	Batch A Batch B
to 5/5/2022 11/5/2022	Lab Test (Liner & Bases + Class I cavity preparation in Mandibular molar and Amalgam restoration Lab Test (Liner & Bases + Class I cavity preparation in Mandibular molar and	Dr. Sobia Dr. Rubab	Dr. Razia Zia Dr. Mahum Mansoor Dr. Qurat-ul-Ain Dr. Razia Zia Dr. Mahum	
to 5/5/2022 11/5/2022 12/5/2022	Lab Test (Liner & Bases + Class I cavity preparation in Mandibular molar and Amalgam restoration Lab Test (Liner & Bases + Class I cavity preparation in Mandibular molar and Amalgam restoration	Dr. Sobia Dr. Rubab Dr. Sobia Dr. Rubab Prof. Dr.	Dr. Razia Zia Dr. Mahum Mansoor Dr. Qurat-ul-Ain Dr. Razia Zia Dr. Mahum Dr. Razia Zia Dr. Mahum Dr. Razia Zia	Batch B
to 5/5/2022 11/5/2022 12/5/2022 18/5/2022	Lab Test (Liner & Bases + Class I cavity preparation in Mandibular molar and Amalgam restoration Lab Test (Liner & Bases + Class I cavity preparation in Mandibular molar and Amalgam restoration Class II Cavity Preparation	Dr. Sobia Dr. Rubab Dr. Sobia Dr. Rubab Prof. Dr. Nasir Prof. Dr.	Dr. Razia Zia Dr. Mahum Mansoor Dr. Qurat-ul-Ain Dr. Razia Zia Dr. Mahum Dr. Razia Zia Dr. Mahum Mansoor Dr.	Batch B Batch A

2nd YEAR BDS PRE-CLINICAL OPERATIVE

1/6/2022	Matrix band & Retainer	Dr. Sobia Masood	Dr. Razia Zia Dr. Mahum Mansoor Dr. Qurat-ul-Ain	Batch A
2/6/2022	Matrix band & Retainer	Dr. Sobia Masood	Dr. Razia Zia Dr. Mahum Mansoor Dr. Qurat-ul-Ain	Batch B
8/6/2022	Class II Amalgam restoration with retainer	Prof. Dr. Nasir	Dr. Razia Zia Dr. Mahum Mansoor Dr. Qurat-ul-Ain	Batch A
9/6/2022	Class II Amalgam restoration with retainer	Prof. Dr. Nasir	Dr. Razia Zia Dr. Mahum Mansoor Dr. Qurat-ul-Ain	Batch B
11/6/2022 to 17/7/2022	SUMMER V	VACATIONS		
22/7/2022 to 1/8/2022	BLOCK	1I EXAM		
	BLOCK III (31-46	6 Weeks)		
3/8/2022	Class III cavity preparation with Composite Restoration	Dr. Rubab Shirazi	Dr. Razia Zia Dr. Mahum Mansoor Dr. Qurat-ul-Ain	Batch A
4/8/2022	Class III cavity preparation with Composite Restoration	Dr. Rubab Shirazi	Dr. Razia Zia Dr. Mahum Mansoor Dr. Qurat-ul-Ain	Batch B
8/8/2022	A CHILD A			
to 9/8/2022	ASHURA			
11/8/2022	Class IV cavity preparation with composite Restoration	Dr. Sobia Masood	Dr. Razia Zia Dr. Mahum Mansoor Dr. Qurat-ul-Ain	Batch A
12/8/2022	Class IV cavity preparation with composite Restoration	Dr. Sobia Masood	Dr. Razia Zia Dr. Mahum Mansoor Dr. Qurat-ul-Ain	Batch B
17/8/2022	Practice Session (Class III & Class IV composite restoration)	Dr. Rubab Dr. Sobia	Dr. Razia Zia Dr. Mahum Mansoor Dr. Qurat-ul-Ain	Batch A
18/8/2022	Practice Session (Class III & Class IV composite restoration)	Dr. Rubab Dr. Sobia	Dr. Razia Zia Dr. Mahum Mansoor Dr. Qurat-ul-Ain	Batch B
24/8/2022	Class V cavity preparation with restoration	Dr. Sobia Masood	Dr. Razia Zia Dr. Mahum Mansoor Dr. Qurat-ul-Ain	Batch A

IOD CMH LAHORE MEDICAL COLLEGE

2nd YEAR BDS PRE-CLINICAL OPERATIVE

25/8/2022	Class V cavity preparation with restoration	Dr. Sobia Masood	Dr. Razia Zia Dr. Mahum Mansoor Dr. Qurat-ul-Ain	Batch B		
31/8/2022	Class VI cavity Preparation and restoration	Dr. Sobia Masood	Dr. Razia Zia Dr. Mahum Mansoor Dr. Qurat-ul-Ain	Batch A		
1/9/2022	Class VI cavity Preparation and restoration	Dr. Sobia Masood	Dr. Razia Zia Dr. Mahum Mansoor Dr. Qurat-ul-Ain	Batch B		
7/9/2022	Dental Amalgam restoration of Occlusolingual cavity in Maxillary molar with barton matrix	Dr. Sobia Masood	Dr. Razia Zia Dr. Mahum Mansoor Dr. Qurat-ul-Ain	Batch A		
8/9/2022	Dental Amalgam restoration of Occlusolingual cavity in Maxillary molar with barton matrix	Dr. Sobia Masood	Dr. Razia Zia Dr. Mahum Mansoor Dr. Qurat-ul-Ain	Batch B		
14/9/2022	Polishing of Dental Amalgam restorations	Dr. Sobia Masood	Dr. Razia Zia Dr. Mahum Mansoor Dr. Qurat-ul-Ain	Batch A		
15/9/2022	Polishing of Dental Amalgam restorations	Dr. Sobia Masood	Dr. Razia Zia Dr. Mahum Mansoor Dr. Qurat-ul-Ain	Batch B		
22/10/2022 to 30/10/2022	Prep Leave for P	Prep Leave for Pre-Annual Exam				
31/10/2022 to 16/11/2022	Pre-Ann	Pre-Annual Exam				
9/11/2022	Pre-clinical Operative/ Pre-clinic	Pre-clinical Operative/ Pre-clinical Prosthodontics Written Exam				
10, 11, 14, 15, 16 Nov, 2022	Pre-clinical Operative/ Pre-clinical Prosthodontics Practical Exam					
17/11/2022 to 4/12/2022	Prep Leave for Annual Exam					
05/12/2022 to 16/12/2022	Professional Exam Preclinical Operative Dentistry					

Preclinical Operative Dentistry Tutorial / Small Group Discussion Day & Time: Monday (14:00 pm - 15:00 pm)

Venue: Phantom head Lab

Data	Da	T	T of	Contribut
Date	Day	Topic	Instructor	Contributor
01-10-22	Monday	Introduction to Instruments	Dr. Sobia Masood	Dr. Razia Zia Dr. Mahum Mansoor Dr. Qurat-ul-Ain
24/1/2022	Monday	Isolation in Dentistry	Dr. Sobia Masood	Dr. Razia Zia Dr. Mahum Mansoor Dr. Qurat-ul-Ain
02-07-22	Monday	Rubber Dam application	Dr. Sobia Masood	Dr. Razia Zia Dr. Mahum Mansoor Dr. Qurat-ul-Ain
21/2/2022	Monday	Dental Caries instructions	Dr. Sobia Masood	Dr. Razia Zia Dr. Mahum Mansoor Dr. Qurat-ul-Ain
7/3/2022 to 13/3/2022	SPORTS DAY			
14/3/2022	Monday	Diagnosis of Dental caries	Dr. Sobia Masood	Dr. Razia Zia Dr. Mahum Mansoor Dr. Qurat-ul-Ain
23/3/2022	PAKISTAN DAY HOLIDAY			
25/3/2022 to 4/4/2022		BLOCK I E	XAM	
04-11-22	Monday	Management of Dental caries	Dr. Sobia Masood	Dr. Razia Zia Dr. Mahum Mansoor Dr. Qurat-ul-Ain
25/4/2022	Monday	Pits & Fissure Sealant	Dr. Sobia Masood	Dr. Razia Zia Dr. Mahum Mansoor Dr. Qurat-ul-Ain
3/5/2022 to 5/5/2022	EID UL FITAR			
05-09-22	Monday	y Principles of cavity preparation Dr. Sobia Masood		Dr. Razia Zia Dr. Mahum Mansoor Dr. Qurat-ul-Ain

IOD CMH LAHORE MEDICAL COLLEGE 2nd YEAR BDS PRE-CLINICAL OPERATIVE

OD CIVILI DE	MITORE IVE	EDICAL COLLEGE	2 I LAK DDS I	RE-CLINICAL OI ER
23/5/2022	Monday	Principles of class I cavity preparation	Dr. Sobia Masood	Dr. Razia Zia Dr. Mahum Mansoor Dr. Qurat-ul-Ain
06-06-22	Monday	Class I cavity preparation	Dr. Sobia Masood	Dr. Razia Zia Dr. Mahum Mansoor Dr. Qurat-ul-Ain
11/6/2022 to 17/7/2022		SUMMER VAC	CATIONS	
22/7/2022 to 1/8/2022		BLOCK II F		
08-08-22		ASHUR	A	
15/8/2022	Monday	Liner & bases applications	Dr. Sobia Masood	Dr. Razia Zia Dr. Mahum Mansoor Dr. Qurat-ul-Ain
29/8/2022	Monday	Dental Amalgam restorations	Dr. Sobia Masood	Dr. Razia Zia Dr. Mahum Mansoor Dr. Qurat-ul-Ain
09-12-22	Monday	Class II cavity preparation	Dr. Sobia Masood	Dr. Razia Zia Dr. Mahum Mansoor Dr. Qurat-ul-Ain
26/9/2022	Monday	Class III cavity preparation	Dr. Sobia Masood	Dr. Razia Zia Dr. Mahum Mansoor Dr. Qurat-ul-Ain
10-10-22	Monday	Class IV cavity preparation	Dr. Sobia Masood	Dr. Razia Zia Dr. Mahum Mansoor Dr. Qurat-ul-Ain
		Class V cavity preparation		
22/10/2022 to 30/10/2022		PREP LEAVE FOR PRE-	-ANNUAL EXAN	IS

LEARNING RESOURCES

<u>Sr. #.</u>	<u>Topics</u>	Resources
1	Introduction to Operative dentistry	Sturdevant's Art and science
2	Introduction to armamentarium	Sturdevant's Art and science
3	Rubber dam and its application	Sturdevant's Art and science
4	Dental Cariology	Sturdevant's Art and science
<u>5</u>	Principles of cavity preparation	Sturdevant's Art and science
<u>6</u>	Introduction to restorative materials	Sturdevant's Art and science
7	Class I cavity preparation for Amalgam restoration	Sturdevant's Art and science
8	Class II cavity preparation for Amalgam restoration	Sturdevant's Art and science
9	Matrix and Retainer Systems	Sturdevant's Art and science
<u>10</u>	Class III cavity preparation for composite restoration	Sturdevant's Art and science
11	Class IV cavity preparation for composite restoration	Sturdevant's Art and science
12	Class V cavity preparation for composite	Sturdevant's Art and science
<u>13</u>	Class VI cavity preparation for composite	Sturdevant's Art and science

OTHER LEARNING RESOURCES

Hands- on Activities / Practical	Students will be involved in Practical sessions and hands- on activities that link with the blood module to enhance the learning
<u>Labs</u>	Utilize the lab provides the simulated learning to the specimens and models available.
<u>Skills Lab</u>	A skills lab provides the simulated learning experience to learn the basic skills and procedures.
<u>Videos</u>	Video familiarize the student with the procedures and protocols to assist patients
Computer Lab/CSs/DVDs/ Internet Resources:	To increase the knowledge, students should utilize the available internet resources and CDs/ DVDs. This will be an additional advantage to increase learning.
Self Learning	Self Learning is scheduled to search for information to solve cases, read through different resources and discuss among the peers and with the faculty to clarify the concepts.

SUMMATIVE ASSESMENT METHODS AND POLICIES

Internal Assessment

- a. Weightage of internal assessment shall be 20 %, each for theory and practical, in BDS
 Professional Examination.
- b. The Internal Assessment shall comprise of monthly test / PBL / assignments / Clinical tests / clinical vivas etc
- c. The Internal Assessment record shall be kept in the respective department of the College / Institute and after approval of Principal, a summary as per University registration number shall be furnished to the Controller of Examinations, at least two weeks before the commencement of final examination.
- d. The result of all the class tests / tools which contribute towards IA will be displayed to the students during an academic year.
- e. The same internal assessment shall be counted both for annual and supplementary examinations. The students who are relegated, however, can improve the internal assessment during subsequent year
- f. Internal assessment tools of any subject may be changed after the approval of respective FBS

Annual Examination

- a. The weightage of Annual Examination shall be 80%, each for theory and practical, in BDS.
- b. The examination comprises of a theory paper and practical/clinical examinations as per PMC regulations and the Table of Specifications(TOS) of the University.
- c. The gap between two consecutive theory papers shall not be more than two days.
- d. The Theory Paper shall be of 3-hours duration, held under the arrangements of the university. It shall have two parts; 20 MCQs (20 marks) and 4 SEQs (20 marks each) for the year 2021-22. It may be changed after the approval of Academic Council.

e. Allocated time for MCQs for 2021-22 shall be as

20 MCQs - 30 Minutes

30 MCQs - 40 Minutes

40 MCQs - 50 Minutes

45 MCQs - 60 Minutes

- f. Each MCQs shall have four distractors
- g. The distribution of SAQs/SEQs as well as MCQ difficulty levels for BDS annual examinations is as under: -

Multiple Choice Question (MCQs)

- A multiple choice question (MCQ) consist of a stem that states the question or problem followed by a set of possible answers that contain an option that is best answer to the question.
- After reading the questions students should select the appropriate option from the given possible answers.
- The correct answer carries one mark and incorrect carries zero. There is no negative marking.

Internal Examiner

He/she shall be Professor and Head of Department who has been involved in teaching of the class being examined. Second preference shall be Associate/Assistant Professor who is involved in teaching of the class and posted there for one year. Third preference shall be a recognized Professor of the subject.

External Examiner

He/she shall be a Professor/Associate Professor of a recognized Medical/Dental College or at least an Assistant Professor with three years teaching experience in the relevant subject.

Conflict of Interest

No person shall serve as an examiner whose close relative (wife, husband, son, daughter, adopted son, adopted daughter, grand-son, grand-daughter, brother, sister, niece /nephew, son and daughter- in-law brother and sister- in-law, parental and maternal uncle and aunt etc) is appearing in the examination. All examiners likely to serve as an examiner shall render a certificate in compliance to this para.

Paper Setting

- a Each College / Institute shall forward a set of two question papers as per TOS along with the key for each subject to the Controller of Examinations, at least three months in advance of the annual examination. The question paper as a whole / a question without a comprehensive key shall not be considered towards final paper setting.
- b. The set of question papers shall be prepared by the respective Head of Department (HOD) and furnished to Controller of Examinations through Head of Institution (HOI)
- c. The Controller of Examinations shall approve the faculty for the final paper setting having fair representation of each college / institute.

Paper Assessment

- a. The Controller of Examinations shall approve the faculty for the theory paper marking, to be undertaken in the manner as deemed appropriate.
- b. The Examination Directorate shall coordinate directly with the faculty, earmarked for the paper marking
- c. A student who scores 85% and above marks in any subject shall qualify for distinction in that particular subject.
- d. A fraction in aggregate marks of a subject shall be rounded off to whole number. If it is less than 0.5 then it will be rounded off to the previous whole number while 0.5 or more will be rounded off to the next whole number.

Practical / Clinical Examinations

- a. The Controller of Examiners shall approve the faculty to serve as the internal & external examiners.
- b. The number of external and internal examiners shall be equal.
- c. One external & internal examiner each shall be marked for a group of 100 students.
- d. Candidates may be divided into groups in the clinical and practical examinations and be standardized by incorporating clinical exam
- e. Practical/clinical examination shall be held after the theory examination of the subject but in special cases, it may be held before the theory examination with the approval of

- the Controller of Examinations. For the purpose of practical/clinical examination, the candidates may be divided into sub groups by the examiners.
- f. The assessment of the practical / clinical examination duly signed by internal & external examiner shall be furnished to the Controller of Examinations within one week of the conclusion of examination

Pass Marks

- a. Pass marks for all subjects less Islamic / Pakistan Studies, shall be 50 % in theory and practical, separately.
- b. Pass marks for Islamic / Pakistan Studies shall be 33 % which, however shall not be counted towards final scoring of the professional examination.
- c. No grace marks shall be allowed to any student in any examination.

Declaration of Result.

Every effort shall be made to declare the result of each examination within one month of the last practical examination or earlier.

Promotion.

No student shall be promoted to the higher classes unless he/she passes all the subjects of the previous class

Re-Totaling.

Any student may apply to the Controller of Examinations on a prescribed form along with the specified fee.

Supplementary Examination.

The interval between a supplementary examination and the previous professional examination shall not be more than two months. There shall be no special supplementary examination.

Table of Specification (TOS)

Table of specifications for Annual Professional Examination: Theory

Marks of Written Paper	= 80	Total Time Allowed = 03 hrs
Marks of Int. Asses	=20	(including MCQs)
Max Marks	=80	Date:
Pass Marks	=40	

40 x MCQs (on separate sheet) (40 Marks) (Time: 50 min)

08 x SEQs (05 marks each) (40 Marks) (Time: 2hrs 10 min)

	Part A – Preclinical Prosthodontics				
01	MCQ	20 (01 mark each)	20 Marks	40 Marks	
02	SEQ/SAQ	04 (05 marks each)	20 Marks		
	Part B – Preclinical Operative Dentistry				
01	MCQ	20 (01 mark each)	20 Marks	40 Marks	
02	SEQ/SAQ	04 (05 marks each)	20 Marks		
	Total	80 Marks			
Internal Assessment of both subjects			20 Marks		
Grand Total			100 Marks		

Practical / Viva Examination (90 Marks)

Part A – Preclinical Operative Dentistry			
01	Clinical / LAB	20 Marks	
02	VIVA	20 Marks	
Total		40 Marks	

Part B- Pre Clinical Prosthodontics			
01	Clinical/Lab	20 Marks	
02	VIVA	20 Marks	
Total		40 Marks	

Total	80 Marks
Internal Assessment of both subjects	20 Marks
Grand total	100 Marks

Theory: Internal Assessment calculation (20 Marks)

Exams	Weightings	Exams	Percentage
End of Block & Pre- annual	80%	End of Block Exam- I	20
Exams		End of Block Exam- II	20
		End of Block Exam- III	20
		Pre- Annual Exam	20
Modular/ Class Performance	20%	Class tests	20
Total	100%		100%

Practical: Internal Assessment calculation (20 Marks)

Exam	Weightage	Exams	Percentage
End of Block and Pre- annual	80%	Quota work assigned	60%
Exams		Pre-annual Practical	20%
Class	20%	SGD/CBL/PBL/ Practical	20%
Performance			
Total	100%		100%

Table of specifications for Annual Professional Exam: Practical

Internal assessment	VIVA		Practic al			Total
	Examiner 1	Examiner 2	Rubber Dam application	Operative Procedure	Chair side Viva	50 Marks
10 Marks	10 Marks	10 Marks	5	10	5	

Table of Specification (Detailed)

Sr. No.	Торіс	No. of MCQs (23) 01 mark each	No. of SAQs/SEQs (04) =05 marks each	
1.	Armamentarium of Operative Dentistry	02	-	
2.	Dental cariology	02	01	
3.	Cavity preparation Class I - V	06	01	
4.	Liners and bases	02	01	
5.	Matrix and Retainer system	01		
6.	Restorative Materials	04	01	
Total		20 (20 Marks)	04 (20 Marks)	
	Grand total	40 Marks		

SAMPLE THEORY PAPER QUESTIONS

Sample MCQ

The bulk of restorative material required for class 1 cavity preparation for amalgam is

- a) 1mm
- b) 2mm
- c) 3mm
- d) 4mm

key: b

Short essay question (SEQs)

 Short essay questions require students to present written answers that are used to asses basic knowledge of key facts and provide students with an opportunity to demonstrate reasoning and explain their understanding of the subject.

Sample SEQ

- a. A 35 years old male patient presented to your operative clinic with carious lesion in tooth # 36. Patient complaints of sensitivity to hot and cold. Periapical radiograph shows no signs of pulpal involvement. If during cavity preparation RDT is < 0.5mm, what would be your sequence of restoration?
- b. Also define and discuss role of therapeutic liner in this case.

Key:

a) Sequence of restoration

- Step 1: Liner Ca(OH)₂ is applied on the floor of cavity to protect the pulp.
- Step 2: Base RMGIC/ GIC applied over liner to protect liner and to provide mechanical strength.
- Step 3: Restoration with Amalgam/ Composite

b) Therapeutic liner

- I. High alkaline pH (11-13pH)
- II. Antibacterial activity
- III. Reparative dentine formation
- IV. Dentinal bridge formation
- V. Reduced permeability or leak