

Department of Medical Education
Multan Medical & Dental College



Junior Operative Dentistry LOG BOOK
3rd Year BDS 2020- 2021

Multan Medical & Dental College



Junior Operative Dentistry LOG BOOK 2020- 2021

PATRON:

Mr. Imran Rasool

COO,

Multan Medical and Dental College

CURRICULUM COMMITTEE:

- | | |
|---|-----------|
| • Dr. Sharina
(Professor of Operative Dentistry) | Chairman |
| • Dr. Ejaz Sahu
(Professor of Community Dentistry) | Secretary |

MEMBERS:

- Dr. Saleem Shaukat (Professor of Dental Materials)
- Dr. M. Awais Khan (Assistant Professor)
- Dr. Sakina Joiya (Demonstrator)

EDITED AND COMPILED BY:

- Dr. Asad Ali (Demonstrator)

MULTAN MEDICAL & DENTAL COLLEGE



MISSION STATEMENT

To Produce Professionally Competent, Research Oriented Health Care Providers, Through Modern Medical Education, Meeting the Local And Global Needs And Committed To Serve Humanity

VISION

Working in Consonance with the vision of UHS, the Federal and provincial Health Authorities to groom best quality Medical Professionals by providing the best quality Education based on Modern Teaching Techniques. Also, committed to develop a strong spectrum of research-oriented activities.

Envisaging an example in eliminating Health disparities faced by the different strata of the society by finding their solution through research and execution of Public Health Programs.

OUTCOMES

By the end of (MBBS/BDS) program the graduates of MM&DC will be able to:

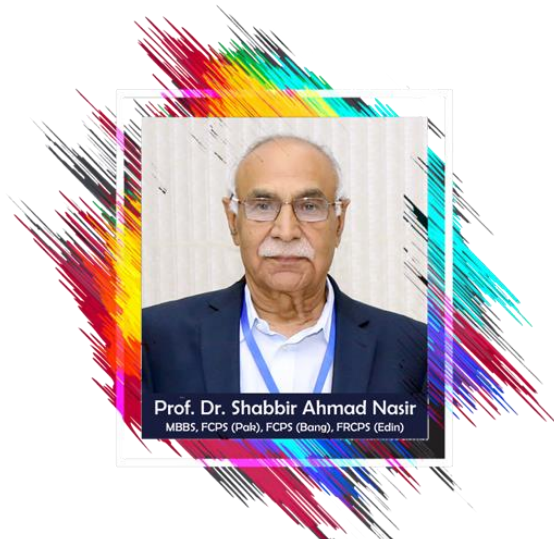
1. Perform various basic Medical/Surgical and Dental procedures independently.
2. Demonstrate Knowledge and comprehension of common Medical/Surgical and Dental procedures.
3. Assist in management of Critically ill patient.
4. Manage common non critical conditions Independently.
5. Demonstrate professional, ethical and culturally appropriate behavior.
6. Advocate health promotion and disease prevention.
7. Involve in research programs.
8. **Quality Outcomes:** Develop a habit of reflection, critical thinking and applying the knowledge to reach the level of Creativity.

MESSAGE FROM PRINCIPAL

Prof. Dr. Shabbir Ahmad Nasir

Chief Executive & Principal Multan Medical & Dental College

Avicenna once said “The extraordinary faith put in oneself & in one’s creator, as one takes the very first step for a new journey, shall mark itself as a milestone to one’s eternal glory”. This was my vision and that of my team to provide quality medical education to the students at Multan Medical & Dental College, when we laid the foundation stone of this nascent Alma Mata, seven years ago. This college has come of a small age in terms of years but we feel a genuine pride to see that it is fledgling with powerful wings to embark towards its destination of eternal glory in the field of quality medical education. A journey, which apparently seemed to be less promising at the beginning, has now turned into a story of achievements at every front. It is indeed a matter of immense pleasure to welcome applications for the Seven batch at Multan Medical & Dental College with a mission to impart profound quality medical education.



In consonance with the vision of the Government to extend healthcare to all segments of society and groom the best quality medical professionals, Multan Medical & Dental College has responded positively well to this national cause. We have taken the pledge to keep serving this noble mission and prove our credentials as a beacon so that our nation reposes its full confidence in our commitment to excellence. Besides providing quality education, based on modern teaching techniques, I am sure the college shall also develop a strong spectrum of research-oriented activities. Owing to a top-class faculty, supported by a 600-bedded modern hospital, Ibn-e-Siena Hospital & Research Institute, I am confident that its graduates shall emerge as doctors upholding the highest intellectual, professional & social values.

Institutions are developed through professional acumen and commitment to the cause. My advice to the students & faculty alike is to leave no stone unturned to keep on bringing laurels to themselves and this institution as they have done it in their initial trials. In their endeavors, they shall always find me at their back to provide them a genuine direction and elan to help channel their energies into a glorious outcome.

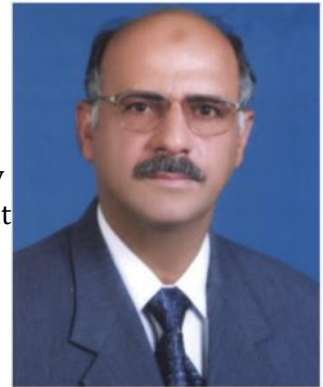
I wish the best of luck to all those who are associated with this project for the fulfillment of this already being realized dream.

MESSAGE FROM DENTAL PRINCIPAL

Prof. Dr. Muhammad Zulfiqar

A Dentist's Profession is noble as well as challenging. To be successful and undaunted, one should be adequately equipped with the knowledge, skill and attitude to meet the rising expectations of society. Hence, it can hardly be overemphasized that the objective of Dental Profession is an attainment of highest level of Dental health. Besides, a Dentist owes an obligation to fulfil the ethical standards of the profession by showing, at the same time, an awareness of the statutory regulations of the profession.

It is often criticized that the model of Dental education in our country is fashioned after the Western model. Hence there is a growing demand on the dental colleges in the country to develop curriculum appropriate to indigenous conditions in which they are to function & for this challenge Multan Dental College is emerging as a foremost beacon of hope, sensitizing dental graduates to the needs of public at large.



DEPARTMENTS

BASIC SCIENCES

- Anatomy
- Biochemistry
- Physiology
- Pharmacology
- Pathology
- Forensic Medicine
- Community Medicine
- Behavioral Sciences

CLINICAL SCIENCES

- Medicine
- Neurology
- Pulmonology
- Nephrology
- Gastroenterology
- Dermatology
- Surgery
- Orthopedics surgery
- Pediatric surgery
- Neurosurgery
- Plastic Surgery
- Urology surgery
- Thoracic Surgery
- Psychiatry
- Anesthesia
- Pediatrics
- Urology
- ENT
- Obstetrics & Gynecology
- Ophthalmology

DENTISTRY

- Dental Materials
- Operative Dentistry
- Orthodontics
- Oral & Maxillary Surgery
- Oral Pathology
- Prosthodontics
- Periodontology
- Oral Biology
- Community Dentistry
- Oral Medicine
- Phantom Head

Instructions for Log Book Management

1. Write your full name and roll no on the log book.
2. Write on all pages with pen and do not tear any page.
3. One page is reserved for each amalgam filling & separate page is reserved for composite, G.I.C & temporary filling.
4. Completely fill the patient medical & dental history form & comprehensive examination & treatment plan chart.
5. Get your log book signed by the supervisor on the same day.
6. All steps of restoration should be examined and signed by same supervisor.
7. Write all your daily work in the department indoor patient register.
8. Clean and wash your instruments, pack in sterilization pouches and hand over to assistant for sterilization & storage.

STUDENT INFORMATION

Paste your Picture

Name: _____

Father's Name: _____

Roll No: _____ Class: _____

Address: _____

UHS Enrollment No: _____

UHS Roll No: _____

PREFACE

Purpose of Logbook

The purpose of this logbook is to develop, record, assess and certify student's activities during clinical and other rotations. These desired activities are based on the learning objectives defined in the curriculum document. Recording and certification of clinical and educational activities provides an evidence during assessment of student and evaluation of the overall performance of institution. Record of these activities will ultimately improve patient safety, as the students will be aware of the responsibilities, limits and duties.

Director
Medical Education,
Multan Medical & Dental College, Multan

LOGBOOK GUIDE

Rotation in Operative Dentistry is represented into 3 parts; 1st part represents clinical skills and activities like knowledge imparted during rotation and record of history taking and clinical examinations. 2nd part includes attributes of behavior and professionalism. 3rd Part includes assessment. The level of competency is graded and assessed as:

KEY FOR LEVEL CHECKLIST:

O	O bserved treatment, been attending treatment
A	A ssisted during treatment
B	B eginner, the student fails to perform the treatment correctly without much help and instruction
BL	B eginner/ L earner, student needs help and instruction to carry out the treatment
L	L earner, student needs some help and little instruction to carry out the treatment
LC	L earner/ C ompetent, student needs to discuss therapy but can carry out the treatment independently in a competent manner
C	C ompetent, student can carry out the treatment independently
E	E xperienced, student can carry out the treatment independently in a fast and efficient manner

This log book will have an important weightage in final assessments of students and students who fail to present this log book in final assessment will not be considered for promotion to next class. Students are advised to make a copy of all these activities so that it can be retrieved in times of loss of log book at the end of the year.

Rules and Regulations in Dental Clinic

- Students must be trained about the usage of a dental instrument or machine before using it on a patient.
- Students must wear white overall in the clinical rotation.
- Students must wear mask in the ward.
- Students must wear gloves before starting the dental procedure and remove them after ending the dental procedure.
- Students must have their log books at the start of session and they must keep them safe and maintain the record timely
- Students must submit their quota books at the end of the session to the relevant head of department.
- Students must bring their own gloves, masks, disposable glasses, napkins and sterilization pouches at the start of clinical rotation.
- Students should pack their used instruments in the sterilization pouches after ending the clinical procedures and label them with their names and roll no. and give them to the dental assistant.
- Student must inform the demonstrator or the supervisor before starting and ending any clinical procedure.
- Students should not use mobile phones in the clinical wards.
- Students should never perform any dental procedure alone. The demonstrators and the dental assistant must be there with the student.
- Students must always remove or secure anything that might get caught in moving machinery. Female students should never work with loose hair and jewelry etc.
- Students should never wear open toe shoes in the labs or wards.
- Students should always wear appropriate safety glasses when working or cleaning tools in lab.
- Always keep your hands at a safe distance from sharp instruments.

Required Instruments

1. Dental mirror
2. Explorer double-ended
3. College tweezers.
4. Excavators double ended
5. High Speed Handpiece.
6. Diamond burs- cylindrical fissure, round, flame, pear shaped.
7. Cement spatula double ended.
8. Glass slab.
9. Plastic instrument double ended
10. Calcium hydroxide applicator.
11. Morter pestle
12. Amalgam gun
13. Amalgam condenser double ended
14. Amalgam carver double ended.
15. Amalgam burnisher double ended.
16. Tofflemire and band roll.
17. Scissor.
18. Wooden wedges
19. Dappen dish.
20. Mylar strips.
21. Iwansons gauge for thickness measurement.
22. Perio probe graduated.
23. Millimeter scale.
24. Lead pencils.
25. Extracted teeth.

INSTRUMENTS

	1	2	3	4	5
HOLDING TECHNIQUE					
IDENTIFICATION					
USES					
TOTAL					
	6	7	8	9	10
HOLDING TECHNIQUE					
IDENTIFICATION					
USES					
TOTAL					

INSTRUCTIONS FOR THE SUPERVISOR:

1. Every student has to attain 100% marks

2. Use lead pencil to fill the table

SIGNATURE OF SUPERVISOR

DENTAL UNIT & OPERATORS POSITION

DENTAL UNIT AND ACCESSORIES	
1- Dental chair	
2- Dental light	
3- Instrument tray	
4- Spittoon	
5- Cup filler	
6- Compressor	
7- Hand Piece (High/Slow speed)	
8- Triple syringe	
9- Suction (High/Low)	

OPERATORS SEATING POSITION		
Standard Position of Dental Unit	Dentist	Dental Assistant
1- Maxillary anterior teeth		
2- Maxillary right quadrant		
3- Maxillary left quadrant		
4- Mandibular anterior teeth		
5- Mandibular right quadrant		
6- Mandibular left quadrant		

SIGNATURE OF SUPERVISOR

MATERIALS USED IN OPERATIVE DENTISTRY

MATERIALS	COMPOSTION	DISPENSING	PROPORTIONS	MANIPULATION	APPLICATION
AMALGAM					
COMPOSITES					
GLASS IONOMER					
ZINC PHOSPHATE					
CALCIUM HYDROXIDE					

SIGNATURE OF SUPERVISOR

RUBBER DAM APPLICATIONS

SR. NO	STEPS OF RUBBER DAM PLACEMENT	GRADING CRITERIA	WINGED TECHNIQUE	WINGLESS TECHNIQUE	ANTERIOR TEETH
1	Clamp Identification (3)	Clamp selection according to tooth type			
2	Clamp application (4)	Clamp stable Four point contact of clamp jaws on tooth Placement in infra bulge area above the gingiva			
3	Sheet Application (1)	No leaks holes or tear			
4	Frame Application (1)	Evenly stretched sheet in all direction			
5	Removal of sheet (1)	No sheet tags remaining			
6	Total Grading = 10 Marks				

REMARKS: _____

SIGNATURE OF SUPERVISOR

**CAVITY PREPARATION
FOR
AMALGAM**

CLASS 1 CAVITY PREPARATION

Case 1

SR.NO	STEPS OF CAVITY PREPARATION	MAXILLARY MOLAR (OCCLUSAL)	MAXILLARY PREMOLAR (OCCLUSAL)
1	Outline form (5)		
2	Resistance form (2)		
3	Retention form (2)		
4	Finishing of the walls (1)		
5	Lining		
6	Filling		
7	Finishing		

REMARKS:_____

SIGNATURE OF SUPERVISOR

CLASS 1 CAVITY PREPARATION

Case 2

SR.NO	STEPS OF CAVITY PREPARATION	MAXILLARY MOLAR (OCCLUSAL)	MAXILLARY PREMOLAR (OCCLUSAL)
1	Outline form (5)		
2	Resistance form (2)		
3	Retention form (2)		
4	Finishing of the walls (1)		
5	Lining		
6	Filling		
7	Finishing		

REMARKS:_____

SIGNATURE OF SUPERVISOR

CLASS 1 CAVITY PREPARATION

Case 3

SR.NO	STEPS OF CAVITY PREPARATION	MAXILLARY MOLAR (OCCLUSAL)	MAXILLARY PREMOLAR (OCCLUSAL)
1	Outline form (5)		
2	Resistance form (2)		
3	Retention form (2)		
4	Finishing of the walls (1)		
5	Lining		
6	Filling		
7	Finishing		

REMARKS:_____

SIGNATURE OF SUPERVISOR

CLASS 1 CAVITY PREPARATION

Case 4

SR.NO	STEPS OF CAVITY PREPARATION	MAXILLARY MOLAR (OCCLUSAL)	MAXILLARY PREMOLAR (OCCLUSAL)
1	Outline form (5)		
2	Resistance form (2)		
3	Retention form (2)		
4	Finishing of the walls (1)		
5	Lining		
6	Filling		
7	Finishing		

REMARKS:_____

SIGNATURE OF SUPERVISOR

CLASS 1 CAVITY PREPARATION

Case 5

SR.NO	STEPS OF CAVITY PREPARATION	MAXILLARY MOLAR (OCCLUSAL)	MAXILLARY PREMOLAR (OCCLUSAL)
1	Outline form (5)		
2	Resistance form (2)		
3	Retention form (2)		
4	Finishing of the walls (1)		
5	Lining		
6	Filling		
7	Finishing		

REMARKS:_____

SIGNATURE OF SUPERVISOR

CLASS 1 CAVITY PREPARATION

Case 1

SR.NO	STEPS OF CAVITY PREPARATION	MANDIBULAR MOLAR (OCCLUSAL)	MANDIBULAR PREMOLAR (OCCLUSAL)
1	Outline form (5)		
2	Resistance form (2)		
3	Retention form (2)		
4	Finishing of the walls (1)		
5	Lining		
6	Filling		
7	Finishing		

REMARKS: _____

SIGNATURE OF SUPERVISOR

CLASS 1 CAVITY PREPARATION

Case 2

SR.NO	STEPS OF CAVITY PREPARATION	MANDIBULAR MOLAR (OCCLUSAL)	MANDIBULAR PREMOLAR (OCCLUSAL)
1	Outline form (5)		
2	Resistance form (2)		
3	Retention form (2)		
4	Finishing of the walls (1)		
5	Lining		
6	Filling		
7	Finishing		

REMARKS: _____

SIGNATURE OF SUPERVISOR

CLASS 1 CAVITY PREPARATION

Case 3

SR.NO	STEPS OF CAVITY PREPARATION	MANDIBULAR MOLAR (OCCLUSAL)	MANDIBULAR PREMOLAR (OCCLUSAL)
1	Outline form (5)		
2	Resistance form (2)		
3	Retention form (2)		
4	Finishing of the walls (1)		
5	Lining		
6	Filling		
7	Finishing		

REMARKS: _____

SIGNATURE OF SUPERVISOR

CLASS 1 CAVITY PREPARATION

Case 4

SR.NO	STEPS OF CAVITY PREPARATION	MANDIBULAR MOLAR (OCCLUSAL)	MANDIBULAR PREMOLAR (OCCLUSAL)
1	Outline form (5)		
2	Resistance form (2)		
3	Retention form (2)		
4	Finishing of the walls (1)		
5	Lining		
6	Filling		
7	Finishing		

REMARKS: _____

SIGNATURE OF SUPERVISOR

CLASS 1 CAVITY PREPARATION

Case 5

SR.NO	STEPS OF CAVITY PREPARATION	MANDIBULAR MOLAR (OCCLUSAL)	MANDIBULAR PREMOLAR (OCCLUSAL)
1	Outline form (5)		
2	Resistance form (2)		
3	Retention form (2)		
4	Finishing of the walls (1)		
5	Lining		
6	Filling		
7	Finishing		

REMARKS: _____

SIGNATURE OF SUPERVISOR

CLASS 11 CAVITY PREPARATIONS

Case 1

SR.NO	STEPS OF CAVITY PREPARATION	MANDIBULAR MOLAR (OCCLUSAL)	MANDIBULAR PREMOLAR (OCCLUSAL)
1	Outline form (5)		
2	Resistance form (2)		
3	Retention form (2)		
4	Finishing of the walls (1)		
5	Lining		
6	Filling		
7	Finishing		

REMARKS: _____

SIGNATURE OF SUPERVISOR

CLASS 11 CAVITY PREPARATIONS

Case 2

SR.NO	STEPS OF CAVITY PREPARATION	MANDIBULAR MOLAR (OCCLUSAL)	MANDIBULAR PREMOLAR (OCCLUSAL)
1	Outline form (5)		
2	Resistance form (2)		
3	Retention form (2)		
4	Finishing of the walls (1)		
5	Lining		
6	Filling		
7	Finishing		

REMARKS: _____

SIGNATURE OF SUPERVISOR

CLASS 11 CAVITY PREPARATIONS

Case 3

SR.NO	STEPS OF CAVITY PREPARATION	MANDIBULAR MOLAR (OCCLUSAL)	MANDIBULAR PREMOLAR (OCCLUSAL)
1	Outline form (5)		
2	Resistance form (2)		
3	Retention form (2)		
4	Finishing of the walls (1)		
5	Lining		
6	Filling		
7	Finishing		

REMARKS: _____

SIGNATURE OF SUPERVISOR

CLASS 11 CAVITY PREPARATIONS

Case 4

SR.NO	STEPS OF CAVITY PREPARATION	MANDIBULAR MOLAR (OCCLUSAL)	MANDIBULAR PREMOLAR (OCCLUSAL)
1	Outline form (5)		
2	Resistance form (2)		
3	Retention form (2)		
4	Finishing of the walls (1)		
5	Lining		
6	Filling		
7	Finishing		

REMARKS: _____

SIGNATURE OF SUPERVISOR

CLASS 11 CAVITY PREPARATIONS

Case 5

SR.NO	STEPS OF CAVITY PREPARATION	MANDIBULAR MOLAR (OCCLUSAL)	MANDIBULAR PREMOLAR (OCCLUSAL)
1	Outline form (5)		
2	Resistance form (2)		
3	Retention form (2)		
4	Finishing of the walls (1)		
5	Lining		
6	Filling		
7	Finishing		

CLASS 11 CAVITY PREPARATIONS

Case 1

SR.NO	STEPS OF CAVITY PREPARATION	MAXILLARY MOLAR (OCCLUSAL)	MAXILLARY PREMOLAR (OCCLUSAL)
1	Outline form (5)		
2	Resistance form (2)		
3	Retention form (2)		
4	Finishing of the walls (1)		
5	Lining		
6	Filling		
7	Finishing		

CLASS 11 CAVITY PREPARATIONS

Case 2

SR.NO	STEPS OF CAVITY PREPARATION	MAXILLARY MOLAR (OCCLUSAL)	MAXILLARY PREMOLAR (OCCLUSAL)
1	Outline form (5)		
2	Resistance form (2)		
3	Retention form (2)		
4	Finishing of the walls (1)		
5	Lining		
6	Filling		
7	Finishing		

REMARKS: _____

SIGNATURE OF SUPERVISOR

CLASS 11 CAVITY PREPARATIONS

Case 3

SR.NO	STEPS OF CAVITY PREPARATION	MAXILLARY MOLAR (OCCLUSAL)	MAXILLARY PREMOLAR (OCCLUSAL)
1	Outline form (5)		
2	Resistance form (2)		
3	Retention form (2)		
4	Finishing of the walls (1)		
5	Lining		
6	Filling		
7	Finishing		

REMARKS: _____

SIGNATURE OF SUPERVISOR

CLASS 11 CAVITY PREPARATIONS

Case 4

SR.NO	STEPS OF CAVITY PREPARATION	MAXILLARY MOLAR (OCCLUSAL)	MAXILLARY PREMOLAR (OCCLUSAL)
1	Outline form (5)		
2	Resistance form (2)		
3	Retention form (2)		
4	Finishing of the walls (1)		
5	Lining		
6	Filling		
7	Finishing		

REMARKS: _____

SIGNATURE OF SUPERVISOR

CLASS 11 CAVITY PREPARATIONS

Case 5

SR.NO	STEPS OF CAVITY PREPARATION	MAXILLARY MOLAR (OCCLUSAL)	MAXILLARY PREMOLAR (OCCLUSAL)
1	Outline form (5)		
2	Resistance form (2)		
3	Retention form (2)		
4	Finishing of the walls (1)		
5	Lining		
6	Filling		
7	Finishing		

REMARKS: _____

SIGNATURE OF SUPERVISOR

CLASS III CAVITY PREPARATION

Case 1

SR.NO	STEPS OF CAVITY PREPARATION	INCISOR TOOTH	CANINE TOOTH
1	Outline form (5)		
2	Resistance form (2)		
3	Retention form (2)		
4	Finishing of the walls (1)		
5	Lining		
6	Filling		
7	Finishing		

REMARKS: _____

SIGNATURE OF SUPERVISOR

CLASS III CAVITY PREPARATION

Case 2

SR.NO	STEPS OF CAVITY PREPARATION	INCISOR TOOTH	CANINE TOOTH
1	Outline form (5)		
2	Resistance form (2)		
3	Retention form (2)		
4	Finishing of the walls (1)		
5	Lining		
6	Filling		
7	Finishing		

REMARKS:_____

SIGNATURE OF SUPERVISOR

CLASS III CAVITY PREPARATION

Case 3

SR.NO	STEPS OF CAVITY PREPARATION	INCISOR TOOTH	CANINE TOOTH
1	Outline form (5)		
2	Resistance form (2)		
3	Retention form (2)		
4	Finishing of the walls (1)		
5	Lining		
6	Filling		
7	Finishing		

REMARKS:_____

SIGNATURE OF SUPERVISOR

CLASS V CAVITY PREPARATION

Case 1

SR.NO	STEPS OF CAVITY PREPARATION	INCISOR TOOTH	MOLAR TOOTH
1	Outline form (5)		
2	Resistance form (2)		
3	Retention form (2)		
4	Finishing of the walls (1)		
5	Lining		
6	Filling		
7	Finishing		

REMARKS: _____

SIGNATURE OF SUPERVISOR

CLASS V CAVITY PREPARATION

Case 2

SR.NO	STEPS OF CAVITY PREPARATION	INCISOR TOOTH	MOLAR TOOTH
1	Outline form (5)		
2	Resistance form (2)		
3	Retention form (2)		
4	Finishing of the walls (1)		
5	Lining		
6	Filling		
7	Finishing		

REMARKS: _____

SIGNATURE OF SUPERVISOR

CLASS V CAVITY PREPARATION

Case 3

SR.NO	STEPS OF CAVITY PREPARATION	INCISOR TOOTH	MOLAR TOOTH
1	Outline form (5)		
2	Resistance form (2)		
3	Retention form (2)		
4	Finishing of the walls (1)		
5	Lining		
6	Filling		
7	Finishing		

REMARKS: _____

SIGNATURE OF SUPERVISOR

CLASS V CAVITY PREPARATION

Case 4

SR.NO	STEPS OF CAVITY PREPARATION	INCISOR TOOTH	MOLAR TOOTH
1	Outline form (5)		
2	Resistance form (2)		
3	Retention form (2)		
4	Finishing of the walls (1)		
5	Lining		
6	Filling		
7	Finishing		

REMARKS: _____

SIGNATURE OF SUPERVISOR

CLASS 111 CAVITY PREPARATION AND TOOTH COLORED RESTORATIONS

Sr.No	Steps Of Restoration	Grading Criteria (For Phantom Head Teeth)	Grading (For Natural Teeth)	Anterior Tooth
1	Cavity Preparation (3)	Approach from lingual side Extension in incisal & gingival direction minimal Rectangular form with well rounded corners 0.5 mm clearance from adjacent teeth Retention grooves in inciso-pulpal & gingiva-pulpal line angles Retention grooves not too deep Beveling in areas not under occlusal forces Margin smooth		
2	Matrix Placement (1)	Mylar strip extending above and below prepared cavity by 1 mm		
3	Wedge placement (1)	Wedge fitting gingival embrasure holding matrix in place		
4	Etching (1)	Etchant restricted to prepared cavity Proper etching time observed No etchant remnants after washing A glistening surface in area of dentine depicting a moist dentine surface achieved		
5	Bonding (1)	A thin and even layer of bonding agent applied and cured		
6	Composite placement (1)	First layer of flowable composite placed on pulpal walls Incremental placement observed No voids between increments Contact point resorted		
7	Curing Finishing Polishing (2)	Smooth transition from tooth surface to restoration No voids No overhangs Tooth surface not damaged by finishing process Polished restoration surface		
Grade	TOTAL = 10			

REMARKS:_____

SIGNATURE OF SUPERVISOR

**INLAY/ONLAY
PREPARATION FOR
CAST METAL
RESTORATION**

IN-LAY PREPARATION

SR.NO	STEPS OF CAVITY PREPARATION	GRADING CRITERIA (for Phantom head teeth)	MOLAR (occlusal)	PREMOLAR (occlusal)	MOLAR (Disto- palatal)
1	Outline form (5)	Width of cavity should not extend more then $\frac{1}{4}$ the distance between cusp tips All defective pits & fissures included			
2	Resistance form (2)	Depth of cavity = mm Rounded internal line angles Flat floor Cavosurface margin = 135° Adequate bulk of mesial & distal marginal ridges preserved			
3	Retention form (2)	All walls slightly divergent towards the occlusal (adequate wall height available for retention via luting cement)			
4	Finishing of the walls (1)	Smooth walls Cavosurface margin = 135°			
GRADE	TOTAL = 10				

REMARKS: _____

SIGNATURE OF SUPERVISOR

ON-LAY PREPARATION

SR.NO	STEPS OF CAVITY PREPARATION	GRADING CRITERIA (for Phantom head teeth)	MOLAR (Disto-occlusal)
1	Outline form (5)	Width of cavity should not extend more then $\frac{1}{4}$ the distance between cusp tips All defective pits & fissures included	
2	Resistance form (2)	Depth of cavity = 1.5 mm in occlusal box beyond the height of contour in proximal box Rounded internal line angles Flat floor for occlusal & proximal boxes Cavosurface margin = 135 Adequate bulk of unaffected mesial /distal marginal ridge preserved Rounding axio-pulpal line angle Beveling of Cavosurfacemargina t gingival floor Cuspal reduction should follow cuspal contours with a minimum of 1.0 – 1.5 mm reduction on functional cusp & 1.0 mm on non-functional cusp Cuspal ledge 1.0 mm wide on functional cusps only	
3	Retention form (2)	All walls slightly divergent towards the occlusal (adequate wall height available for retention via luting cement) Place retentive grooves proximally in bucco-axial &linguo-axial line angles Dove tail preparation	
4	Finishing of the walls (1)	Smooth walls Cavosurface margin = 135°	
GRADE	TOTAL = 10		

REMARKS: _____

SIGNATURE OF SUPERVISOR

INTERNAL ASSESSMENT

DATE	MCQ		SEQ		VIVA/ PRACTICAL		TOTAL
	TOTAL MARKS	OBTAINED MARKS	TOTAL MARKS	OBTAINED MARKS	TOTAL MARKS	OBTAINED MARKS	

Dental Student Assessment Tool

Competencies for the New General Dentist	
1	Critical Thinking: Graduates must be competent to:
1.1	Evaluate and integrate emerging trends in health care as appropriate.
1.2	Utilize critical thinking and problem-solving skills
1.3	Evaluate and integrate best research outcomes with clinical expertise and patient values for evidence-based practice.
2	Professionalism: Graduates must be competent to
2.1	Apply ethical and legal standards in the provision of dental care.
2.2	Practice within one's scope of competence and consult with or refer to professional colleagues when indicated.
2.3	Communication and Interpersonal Skills Graduates must be competent to:
2.4	Apply appropriate interpersonal and communication skills.
2.5	Apply psychosocial and behavioral principles in patient- centered health care.
2.6	Communicate effectively with individuals from diverse populations.
3	Health Promotion Graduates must be competent to:
3.1	Provide prevention, intervention, and educational strategies
3.2	Participate with dental team members and other health care professionals in the management and health promotion for all patients.
3.3	Recognize and appreciate the need to contribute to the improvement of oral health beyond those served in traditional practice settings.
4	Practice Management and Informatics Graduates must be competent to:
4.1	Evaluate and apply contemporary and emerging information including clinical and practice management technology resources.
4.2	Evaluate and manage current models of oral health care management and delivery.
4.3	Apply principles of risk management, including informed consent and appropriate record keeping in patient care.
4.4	Demonstrate effective business, financial management, and human resource skills.
4.5	Apply quality assurance, assessment, and improvement concepts.
4.6	Develop a catastrophe preparedness plan for the dental practice.
5	Patient Care: Assessment, Diagnosis, and Treatment Planning Graduates must be competent to:
5.1	Manage the oral health care of the infant, child, adolescent, and adult, as well as the unique needs of women, geriatric, and special needs patients.
5.2	Prevent, identify, and manage trauma, oral diseases, and other disorders.
5.3	Obtain and interpret patient/medical data, including a thorough intra/extra oral examination, and use these findings to accurately assess and manage all patients.
5.4	Select, obtain, and interpret diagnostic images for the individual patient.

5.5	Recognize the manifestations of systemic disease and how the disease and its management may affect the delivery of dental care.
5.6	Formulate a comprehensive diagnosis, treatment, and/or referral plan for the management of patients.
6	Patient Care: Establishment and Maintenance of Oral Health Graduates must be competent to:
6.1	Utilize universal infection control guidelines for all clinical procedures
6.2	Prevent, diagnose, and manage pain and anxiety in the dental patient
6.3	Prevent, diagnose, and manage temporomandibular disorders.
6.4	Prevent, diagnose, and manage periodontal diseases.
6.5	Develop and implement strategies for the clinical assessment and management of caries.
6.6	Manage restorative procedures that preserve tooth structure, replace missing or defective tooth structure, maintain function, are esthetic, and promote soft and hard tissue health.
6.7	Diagnose and manage developmental or acquired occlusal abnormalities.
6.8	Manage the replacement of teeth for the partially or completely edentulous patient.
6.9	Diagnose, identify, and manage pulpal and periradicular diseases
6.10	Diagnose and manage oral surgical treatment needs.
6.11	Prevent, recognize, and manage medical and dental emergencies.
6.12	Recognize and manage patient abuse and/or neglect.
6.13	Recognize and manage substance abuse.
6.14	Evaluate outcomes of comprehensive dental care.
6.15	Diagnose, identify, and manage oral mucosal and osseous diseases.

STUDENT SELF ASSESSMENT

Clinical 1. Patient examination & diagnosis 2. Treatment planing & patient management 3. Health promotion & disease prevention 4. Medical & dental emergencies 5. Anaesthesia, sedation, pain & anxiety control 6. Periodontal therapy & management of soft tissue 7. Hard & soft tissue surgery 8. Non-surgical management of the hard & soft tissues of the head and neck 9. Management of the developing dentition 10. Restoration of teeth 11. Replacement of teeth	Professionalism 1. Ethics 2. Professionalism with regard to patients 3. Professionalism with regard to self 4. Professionalism with regard to clinical team & peers
Communication 1. Communication with the patient & family 2. Communication with the clinical team & peers 3. Communication with other professionals	Leadership and management 1. Personal & practice organisation 2. Legislative 3. Financial 4. Leadership & management

Please circle the best description for each item.

Knowledge

Knowledge of Disease State	Makes mistakes when presenting case-specific information about the disease state.	States correct information and recognizes signs, symptoms, & normal/abnormal lab values associated with the disease state.	Demonstrates in-depth understanding of the disease state. Discusses expected signs, symptoms, & lab values even if not indicated in this case.
Knowledge of Drug Therapy	Makes mistakes when presenting case-specific information about drug therapy.	States correct information and answers questions regarding the specific drugs listed in the case (MOA, dose, indication, etc.).	Demonstrates in-depth understanding of the drug classes in the case. Recognizes alternative therapies for specific disease state.

Skills

Patient Assessment	Can not form a problem list for patient. Can not determine desired and undesired therapeutic outcomes.	Identifies some (not all) therapeutic problems. Determines either desired or undesired therapeutic outcomes, but not both.	Identifies therapeutic problems without including unnecessary information. Determines both desired and undesired therapeutic outcomes.
Therapeutic Plan Development	Can not formulate (or provides incorrect) pharmacy-specific therapeutic plan.	Develops a therapeutic plan that includes a change in therapy (addition, deletion, or modification of therapy) without recommending adequate monitoring.	Develops a therapeutic plan that includes a change in therapy (addition, deletion, or modification of therapy). Provides adequate monitoring recommendations.
Communication with Small Group	Does not communicate well with group members. Can not offer and/or justify prepared answers to the case.	Inconsistent communication with small group. May/may not be able to offer and/or justify prepared answers to the case.	Communicates well with the group. Consistently offers and/or justifies prepared answers to the case.
Presentation Style	Speaks too quickly or too slowly. Displays distracting mannerisms. Relies on small group to answer questions related to presentation.	Almost always speaks at proper pace with few distracting mannerisms. Attempts to answer questions before deferring to small group for assistance.	Speaks at a proper pace with no distracting mannerisms. Displays enthusiasm. Maintains good eye-contact. Seldom relies on small group to answer questions related to presentation.

Attitude *

Professional Attire/Appearance	Inappropriately dressed. Does not wear name tag and white coat or wears dirty coat.	Wears name tag and white coat. Appearance is disheveled or wears an inappropriate article of clothing (e.g. jeans, flip-flops, cropped or low-cut top, etc.).	Dressed appropriately and wears name tag and clean white coat.
Respectful Interactions	Does not demonstrate respect for group members. Consistently offers little or no assistance to group members.	Usually respectful in interactions with small group, but contributes less to the group when not selected as the presenter.	Is respectful to group members and always contributes to the small group effort even if not selected as the presenter.
Professional Approach	Demonstrates no desire to participate. Ignores and/or disrespects the instructor.	Speaks, interacts, & contributes meaningful input to the group. Questions about the case are directed toward the faculty rather than the recitation instructor.	Speaks, interacts, & provides meaningful input to the group. Asks questions/seeks input from the recitation instructor before directing questions toward the faculty.
Preparedness	Does not work on cases before recitation. Unprepared to contribute to the group.	Works some, but not all, cases prior to recitation and is usually prepared to contribute to small group discussion.	Works all cases prior to recitation & actively contributes to the discussion of the small group every week.

*The rubric has been modified to reflect the assessment of professional behaviors rather than attitudes. The third dimension's current subtitle is "Behaviors".