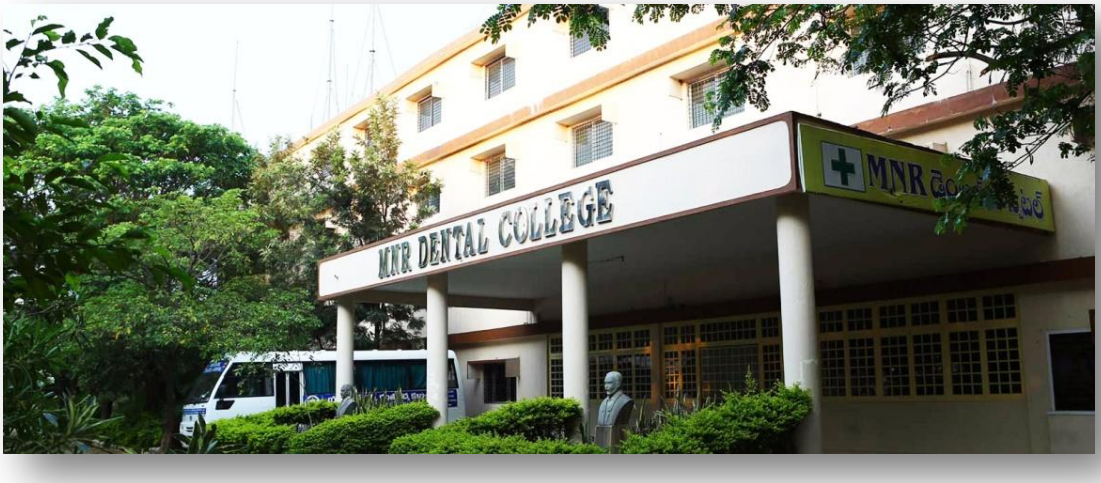

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COURSE STRUCTURE FOR TRAINING AND ASSESSMENT OF STUDENTS IN CLINICAL SKILLS

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Clinical Skills Lab & Simulation Centers

MNR Dental College and Hospital ensures a generous sprinkling of hands-on experience in the clinical skills lab and simulation labs in the campus for the undergraduate and post graduate students.

The objective of the clinical skills labs and simulation labs is to give the students an opportunity to learn the basic concepts and skills in tandem with their stage of training as part of their program. The use of these labs is intended to help students learn the requisite cognitive and psychomotor skills.

The labs are equipped with a wide selection of varied and state of the art facilities housed within concerned departments to cater to specific teaching and learning needs of the students.

The clinical skills labs act as a bridge between the theoretical learning and evidence based ethical patient treatment practices by the development of the requisite skill set needed by the undergraduate and postgraduate students in a supervised low risk environment.

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Department of Prosthodontics and Crown & Bridge

Basic clinical skills/simulation training models:

Report on Preclinical Prosthodontics dentistry excercises:

Exercise: Arrangement of artificial teeth on articulated final cast assembly using mean value articulator for Complete Denture fabrication to be completed in one month.

Target students: II BDS

Instructor

DR. SHREYA COLVENKAR - Professor

DR. SHANTHI PRIYA K - Reader

DR. SUMAN P - Reader

DR .SRI HARSHA P -Lecturer

Purpose: Before entering the clinics and dealing with the patient, students should be able to develop the skills of making impression and understanding the anatomy of arches. Students should be able to learn, understand and arrange the anterior and posterior teeth in proper position and occlusion so as to replicate themissing natural teeth.

Learning objectives:

- To understand and identify the maxillary and mandibular anatomical landmarks.
- To learn the manipulation of impression material for making impression
- To develop the skills of evaluating the impression.
- To understand the concepts of occlusion and articulation.
- To identify, understand and learn about mean value articulator.
- To learn the criteria for selection of anterior teeth
- To learn the criteria for selection of posterior teeth
- To learn about Teeth Arrangement of anterior and posterior teeth as per the ideal guidelines.

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12	Exercise on Mandibular Posterior Teeth Arrangement
13	Demonstration on Waxing Carving and Polishing
14	Exercise on Waxing Carving and Polishing
15	Demonstration on flasking of trial denture - Base Flasking, Counter Flasking
16	Exercise on flasking of trial denture - Base Flasking, Counter Flasking
17	Demonstration on Dewaxing of trial complete denture
18	Exercise on Dewaxingof trial complete denture
19	Demonstration on Packing with heat cured acrylic resin for complete denture fabrication
20	Exercise on Packing with heat cured acrylic resin for complete denture fabrication
21	Demonstration on Deflasking, finishing and polishing of complete denture
22	Exercise on Deflasking, finishing and polishing of complete denture
23	Submission

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Course Name: **I BDS Dental Materials**

Department: **Prosthodontics and Crown & Bridge**

The Under graduate Dental Materials prosthodontics lab is located on the 3" "floor. The Ist BDS students attend Dental Materials practicals in the lab.

The students perform the following activities:

1. Introduction to dental materials and their applications, Instrument used.
2. Study of gypsum products- manufacturing, properties, manipulation, uses, advantages, disadvantages.
3. Making of cube
4. Demonstration of all impression materials and the impressions made using them. Discussion of classification of impression materials
5. Study of medium fusing impression compound general requirements, classification, composition

manipulation, properties and clinical application.

6. Making of Thumb impression.
7. Making of primary cast from thumb impression.
8. Study of spacer wax, tray material
9. Making of tray.
10. Adaptation of spacer wax and making of custom tray for ZOE impression

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Course Name: **II BDS Dental Materials**

Department**: Prosthodontics and Crown & Bridge**

The Under graduate Dental Materials prosthodontics lab is located on the 3"floor. The IInd BDS students attend Dental Materials practicals in the lab.

The students perform the following activities:

1. Making Of Tray Using Shellac Baseplate
2. Making Of Impression of Zinc Oxide Eugenol Impression paste
3. Making Of The Thumb Tray Using Tray Material
4. Making Of Impression Using Alginate
5. Making Of Impression of Zinc Oxide Eugenol Impression paste
6. Study And Applications Of Low Fusing Compound
7. Revision of Manipulation Of Thumb Impression Of Impression Compound
8. Revision of Manipulation Of Dental Plaster to make plaster cube
9. Making Of The Thumb Tray Using Tray Material
10. Making Of Impression Using Alginate
11. Discussion of manipulation of all materials
12. Demonstration of Investment Material And Procedure
13. Demonstration Of Casting Procedure
14. Demonstration Of Finishing And Polishing Agent

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Dental Materials Exercises for I BDS 1" Term

SR.No	NAME OF THE TOPIC	NO. OF CLASS
1	Introduction to dental materials and their applications, Instruments used	1
2	Study of gypsum products- manufacturing, properties, manipulation, uses, advantages, disadvantages. Making of cube (demo)	1
3	Assignment correction and viva on gypsum products	
4	Practicals for cube making	2
5	Submission of The Cube	1

Dental Materials Exercises for I BDS 2nd Term

SR. NO.	NAME OF TOPIC	NO.OF CLASSES
1.	Demonstration of all impression materials and the impressions made using them. Discussion of classification of impression materials	1
2.	Study of medium fusing impression compound : general requirements, classification, compositi on, manipulation, properties and clinical application. Making of Thumb impression. (demo)	1
3.	Assiimment correction and viva on impression compound	
4.	Making of Thumb impression.(prac)	2
5.	Submission	1
6.	Visit to clinic to see clinicalapplication of impression comoound	
7.	Making of primary cast from thumb imoression. (demo)	1
8.	Making of primary cast from thumb impression. (prac)	2
9.	Submission	1
10.	Study of spacer wax, tray material Making of tray. (demo)	1
11.	Assienment correction and viva on wax, tray material	
12.	Adaptation of spacer wax and making of custom tray for ZOE impression (Prac)	2
13.	Submission	1
14.	Visit to plaster lab	

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12.	Spotter display	2
13.	Discussion of manipulation of all materials	I
14.	Tour To Prostho Clinic To Visualize Use Of Different Impression Materials On Patients	2
15.	Tour To Ceramic Lab and Prosthodontic Lab.	2
16.	Revision of spotters	2
17.	Demonstration Of Investment Material And Procedure	2
18.	Demonstration Of Casting Procedure	2
19.	Demonstration Of Finishing And Polishing Agents	1

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Course Name: 1 BDS Pre-clinical Prosthodontics.

Department: Prosthodontics and Crown & Bridge

The Undergraduate Pre-clinical prosthodontics lab is located on the floor. The 1st BDS students attend pre-clinical prosthodontic a practical in the lab

The students perform the following activities

1 Identification & marking of anatomic landmark on cast

2. Temporary record base adaptation- Shellac Base plate

3. Fabrication of Wax Occlusal rims on maxillary and mandibular record bases

4. Transfer of Jaw relation on mean value articulator

5. Anterior teeth Arrangement

6. Posterior teeth Arrangement

7. Waxing. Carving and Sealing of denture bases

8. Elasking of Complete dentures

9. Dewaxing of complete dentures

10. Packing of Complete denture

11. De flasking of Complete denture

12 Finishing and Polishing of Complete Dentures

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I BDS 1st Term

SR.No	NAME OF TOPIC	NO OF CLASSES
1	Introduction, Aims, Objective and Scope.	1
2	Identification & marking of anatomic landmark on cast -Discussion of Anatomical Landmarks	1
3	Marking of anatomical landmarks by students	1
4	Demonstration of Temporary record base adaptation (shellac base plate) on maxillary & mandibular final casts	1
5	Temporary resin base adaptation- Shellac Base plate by students	2
6	Demonstration of fabrication of Wax Occlusal rims on maxillary and mandibular record bases by Students	1
7	Fabrication of Wax Occlusal rims on maxillary and mandibular record bases by Students	4
8	Transfer of Jaw relation on mean value articulator- Demonstration	1

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I BDS 2nd Term

SR. NO	NAME OF TOPIC	NO:OF CLASSES
1	Transfer of Jaw relation on mean value articulator- exercise by students	2
2	Demonstration of anterior teeth arrangement	1
3	Anterior teeth Arrangement by students	2
4	Demonstration of posterior teeth arrangement	1
5	Posterior teeth Arrangement by students	2
6	Demonstration of Waxing and carving	1
7	Waxing, Carving and Sealing of denture bases by students	2
8	Demonstration of Flasking of Complete dentures	1
9	Flasking of Complete dentures by students	2
10	Demonstration for de waxing of complete dentures	1
11	Dewaxing of complete dentures by students	1
12	Demonstration of Packing of Complete denture	1
13	Packing of Complete denture by students	2
14	Demonstration of de-flasking of Complete deoture	1
15	De-flaskingof Complete denture by students	1
16	Demonstration for Finishing and Polishing of Complete dentures	1
17	Finishing and Polishing of Complete Dentures by students	2

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Course Name: **11 BDS Pre-clinical Prosthodontics**

Department: **Prosthodontics and Crown & Bridge**

The Under graduate Preclinical prosthodontics lab is located on the 3rdtloor. The llnd BDS students attend Preclinical prosthodontics practicals in the lab.

The students perform the following activities:

I. Anterior Teeth Arrangement
2. Posterior Teeth Arrangement
3. Waxing and Carving
4. Flasking of Complete dentures
5. Dewaxing of complete dentures
6. Packing of Complete denture
7. De-flasking of Complete denture
8. Finishing and Polishing of Complete Dentures
9. Tooth Preparation
10. Impression of tooth preparation

The students are supposed to do 5 teeth settings and process one denture

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II BDS 1st Term

Sr.NO	NAME OF TOPIC	NO:OF CLASSES
1)	Anterior Teeth Arrangement	2
2)	Posterior Teeth Arrangement	2
3)	Waxing and Carving	I
4)	Demonstration of Flasking of Complete dentures	2
5)	Flasking of Complete dentures by students	2
6)	Demonstration for Dewaxing of complete dentures	4
7)	Dewaxing of complete dentures by students	I
8)	Demonstration of Packing of Heat cure acrylic resin for Complete Denture	2
9)	Packing of Heat cure acrylic resin for Complete denture by students	2
10)	Demonstration of de-flasking of Complete denture	4
11)	Dc-flasking of Complete denture by students	I
12)	Demonstration for Finishing and Polishing of Complete dentures	2
13)	Finishing and Polishing of Complete Dentures by students	I
14)	Journal completion, submission and viva	2
IS)	Submission of Complete Dentures by students	1

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PRECLINICAL PROSTHODONTICS EXERCISES FOR 2nd BDS

BDS 2nd Term

SR.NO	NAME OF TOPIC	NO:OF CLASSES
I	Submission of Complete Dentures	1
2	Wax rims for 2nd teeth arrangement	2
3	Mounting for 2nd teeth arrangement	1
4	2nd teeth arrangement	2
5	Wax rims for Terminal exams	2
6	Articulation and Mounting for Terminal exams	1
7	Demo of Single-tooth RPD in self cure with indexing	1
8	Fabrication of Single-tooth RPD self- cure RPD	2
9	Finishing and polishing RPD	2
10	Wax rims for 3rdteeth arrangement	2
11	Mounting for 3rdteeth arrangement	1
12	3rdteeth arrangement	2
13	Wax rims for 4thteeth arrangement	2
14	Mounting for 4lhteetb arrangement	1
15	4lhteeth arrangement	2

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Course Name :**Post Graduate Pre-clinical Exercises**

Department: **Prosthodontics and Crown & Bridge**

The Post graduate pre-clinical Prosthodontics lab is located on the 3rd floor. The students perform the following activities:

COMPLETE DENTURE

- Anatomical landmarks of Maxilla & Mandible
- Designing spacers on Maxillary & Mandibular Casts
- Custom tray in self cure resin/tray material
  - Maxillary
  - Mandibular
- Adaptation of Temporary denture base
  - Shellac
  - Self cure acrylic resin
  - Heat cure acrylic resin
- Class I - Dentogenic concept
  - Arrangement of teeth
  - Processing of denture finishing of denture
  - Lab remount
- Class II - (Temporary base in self cure)
- Arrangement of teeth Class II] -(Vacuum formed base)
- Class I complete denture - balanced occlusion/permanent bases
- Relining of Mandibular Complete denture
- Immediate denture Maxillary
- Over denture with different attachment systems

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MNR DENTAL COLLEGE

Department of Pedodontics & Preventive dentistry.

Standard operating procedures for manipulation of dental materials

Manipulation of cements: Zinc phosphate, Zinc polycarboxylate, Zinc oxide eugenol, silver amalgam Glass Ionomer cement.

Purpose

- To manipulate cements in proper consistency.
- To apply the cement as per the consistency required which could be luting for cementation. of indirect restorations/ base or lining for pulp protection during restoration of teeth.

Demonstration of manipulation

- Manipulation of cement is demonstrated on glass slab using spatula.
- Attaining perfect consistency is demonstrated for each cement.
- Application of the cement is demonstrated.

Evaluation:

- The students are asked to manipulate cements under the supervision of staff.
- Each step is thoroughly evaluated and appropriate corrections are done.
- Application of base is evaluated as deemed.
- Grading is done following manipulation and application.

Manipulation of Silver Amalgam

Purpose

- To dispense alloy powder and mercury accurately.
- To triturate correctly and follow the steps.
- To condense amalgam properly.
- To develop to ability to carve an amalgam restoration.

Demonstration of manipulation

- Dispensing silver alloy powder and mercury proportionately
- Trituration of silver alloy powder and mercury in mortar and pestle and amalgamator.
- Removal of excess mercury by squeezing in muslin cloth and mulling.
- Condensation of silver amalgam using round and parallelogram condensers in the prepared cavity.
- Burnishing of the condensed silver amalgam restoration and carving.

Evaluation:

- The students are asked to dispense, triturate, squeeze out the excess mercury and mull the amalgam.
- Each step is thoroughly evaluated and appropriate corrections are suggested.

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Department of Pedodontics & Preventive dentistry.

Basic clinical skills/simulation training models:

Preclinical Pediatric dentistry exercises:

1. Exercise: wax carvings and Cavity preparation On Typodont teeth models and GIC restoration to be completed in one month.

Target students: III BDS

Purpose: Typodont teeth models resemble the natural teeth, hence the students willbe able to appreciate the details of the cavity preparation better and incorporate the features that are needed in order to optimally restore the teeth.

Learning objectives:

- Morphology of primary teeth can be well known by wax carvings.
- To apply the knowledge of G V Black's classification.
- Identify class 1, extended class 1, class 2, MOD's and class 5 cavities
- To understand the outline form, resistance form, retention form and convenience form.
- To evaluate the internal anatomy of the cavity so that it is commensurate with the principles of cavity preparation which includes outline form, resistance form, retention form and convenience form.

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- To restore the cavities prepared in the typodont tooth , to carve the occlusal anatomy of restorations as per the teeth restored.

Outcome assessment:

- After receiving the demonstration, the students prepare the cavities on plaster models under the guidance of the instructors. Each step is evaluated and the strong and weak points of the cavity prepared is communicated to the students. The work is graded from A to C.

(Gradations: A: Very Good, B+: Good, B: Average, C: Unsatisfactory)

- Periodic exams are conducted throughout the academic year to assess the progress of the students.

Exercises on Typodont tooth Model /To be completed within one month

SnNo.	Exercise
1	Demonstration of Class I on Typodont tooth Model
2	74/ 84 Class 1 Cavity Preparation on Primary Mandibular Molar
3	54/ 55 Class I Cavity on Primary Maxillary Molar (Conservative) Mesial Pit and distal pit cavity.
4	Demo Class I Compound on Primary Mandibular Molar
5	74/84 Class I Compound on Primary Mandibular Molar,(Buccal extension)
6	54/55 Primary Maxillary Molar Distal Pit With Palatal Extension
6	Demo of Class II Cavity Preparation
7	74/84 Class II Cavity Preparation on Primary Mandibular Molar - MO
8	16 Class II Cavity Preparation on Maxillary Molar — MO (Conservative Maxillary) (do this exercise on the tooth where the compound cavity is done)

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9	74/84 Class II MO Cavity preparation on primary Mandibular molar
t0	Demo of Restoration with Glass Ionomer Cement
11	Restoration with Glass Ionomer cement and Completion of Backlog work
12	Submission

2. Exercise: Cavity preparation in extracted primary and young permanent teeth. Placement of base using zinc phosphate or zinc polycarboxylate cement and restoration with silver amalgam to be completed using micromotor and airotor handpieces.

Target students: III BDS

Purpose: Extracted teeth help in understanding working on natural enamel and dentin and develop tactile sense on natural teeth. Hence the students will be able to learn the control of micromotor and airotor during cavity preparation and integrate the knowledge that are needed in order to optimally prepare and restore the natural teeth.

Learning objectives:

- To learn the concepts of grasps, rest and different speeds.
- To develop tactile sensation on natural teeth.
- To develop ability to use rotary for cavity preparation.
- To incorporate the outline form, resistance form, retention form and convenience form while preparing cavity on extracted teeth.
- To learn to apply base and do silver amalgam restoration on extracted Primary teeth.
- To learn proper placement of matrix band and

retainer.

- Outcome assessment:
- After receiving the demonstration, the students prepare the cavities on extracted teeth under the observation of an instructor.

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Each step is evaluated and the strong and weak points of the cavity prepared is conversed to the students. The work is graded from A to C.

- Periodic exams throughout the academic year are conducted to assess the progress of the students help in further instilling.

EXERCISE	TOOTH
Class-1 cavity preparation (4)	Mandibular molar Maxillary molar Mandibular pre molar Maxillary pre molar
Class-II cavity preparation	Mandibular Molar Maxillary Nlolar Mandibular prcmolar Maxillary premolar
Class-1 extension (buccal / palatal) (2)	Buccal extension or Mandibular Molar Palatal cxtension OR Maxillae Molar
keep caries excavation	(05)
Class V GIC	Anterior teeth (2)
Class-I Composite restoration	Primary Molar

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Exercise: Cavity preparation on ivorine teeth and placement of zinc polycarboxylate cement base followed by restoration with silver amalgam.

Target students: III BDS

Purpose: Ivorine teeth work in jawset help in understanding operator chair positions required while working on patients and ergonomics essential while doing various steps in cavity preparation, base application and silver amalgam restorations. Hence the students will be able to learn the use of micromotor and airotor simulating patient work.

Learning objectives:

- To learn chair positions for working in different quadrants of oral cavity by simulation.
- To refine dexterity while working on ivorine teeth
- To understand ergonomics and apply the concepts.
- To evaluate the internal anatomy of the cavity and hone the skills of cavity preparation.
- To restore the cavities prepared using silver amalgam after placement of zinc polycarboxylate base.

Outcome assessment:
After receiving the demonstration, the students prepare the cavities onivorine teeth under the supervision of the instructors. Each step is evaluated and the work is graded from A to C. Periodic exams are conducted throughout the academic year to judgethe growth of the students.

CAVITY DESIGN	TOOTH NO.
class	75 85 36 46
	55 65 16 26

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(Gradations: A: Very Good, B+: Good, B: Average, C: Unsatisfactory)

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Department of Oral Pathology and Microbiology

Clinical Skills Lab & Simulation Centres

Exercise: Oral Pathology & Microbiology Practical

Histopathological slides of oro-facial lesions, developmental anomalies of hard & soft tissues of oral & para-oral structures

Target students:

Third BDS students

Purpose:

Oral pathology involves teaching of the microscopic features of common lesions of head & neck & oro-facial anomalies, polymorphisms with the help of specimens & plaster casts. Knowledge of different etiopathological processes of various diseases involving the oral cavity and also oral manifestations of different systemic disorders can be attained. Understanding the forensic odontology concepts like age estimation, person identification and sex determination.

Learning objectives:

I. Students attains basic knowledge on pathogenesis of oral diseases and neoplasms.

II. Diagnosis and skill to do differential diagnosis based on clinical, radiographic and histopathological features of oral diseases.

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30.	POORLY DIFFERENTIATED SCC
31.	VERRUCOUS CARCINOMA
32.	BASAL CELL CARCINOMA
33.	MALIGANANT MELANOMA
34.	FIBROMA
35.	PERIPHERAL OSSIFYING FIBROMA
36.	LIPOMA
37.	CAPPILARY HEMANGIOMA
38.	NEROFIBROMA
39.	OSTEOSARCOMA
40.	CENTRAL GIANT CELL GRANULOMA
41.	PERIPHERAL GIANT CELL GRANULOMA
42.	PYOGENIC GRANULOMA

S.NO	SPOTTERS
1.	MESIODENS
2.	PARAPREMOLAR
3.	PARAMOLAR
4.	TOTAL ANODONTIA
5.	PARTIAL ANODONTIA
6.	ROTATION
7.	TRANSPOSITION
8.	SUBMERGED TEETH
9.	FUSION
10.	DILACERATION
11.	DENS EVAGINATUS
12.	TORUS PALATINUS

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Department of Oral Pathology and Microbiology

Clinical Skills Lab & Simulation Centres

Exercise: Dental Histology Practical

Histological slides of oro-facial tissues

Target students:

First BDS students

Purpose:

Dental histology involves teaching of microscopic features and various properties of oral facial tissues. Histological slides develop a basic understanding of normal structure of oral & para oral tissues. This information is basic to understand the histological changes arising from pathological alterations in the oral cavity, as well as the histological basis of wound healing & repair.

Learning objectives:

I. The purpose is to teach functional and microscopic organization of normal oro-facial tissues & development of the face & oral cavity.

II. Course emphasizes the formation & microscopic structures of oral cavity, teeth & supporting structures.

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20.	DEAD TRACTS
21.	HISTOLOGY OF PULP
22.	PULP STONES
23.	CELLULAR CEMENTUM
24.	ACELLULAR CEMENTUM
25.	CEJ- GAP TYPE
26.	CEJ- SHARP TYPE
27.	CEJ- OVERLAP TYPE
28.	PRINCIPAL FIBERS OF PDL
29.	GINGIVAL GROUP OF FIBERS
30.	MAXILLARY SINUS
31.	BUCCAL MUCOSA
32.	GINGIVA
33.	ANTEROLATERAL REGION OF PALATE
34.	POSTEROLATERAL REGION OF PALATE
35.	VERMILION ZONE OF LIP
36.	FILIFORM PAPILLA
37.	FUNGIFORM PAPILLA
38.	CIRCUMVALLATE PAPILLA
39.	SEROUS SALIVARY GLAND
40.	MUCOUS SALIVARY GLAND
41.	MIXED SALIVARY GLAND

Signature of HOD
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Department of Oral Pathology and Microbiology

Clinical Skills Lab & Simulation Centres

Exercise: Dental Anatomy Practical

Carving of permanent maxillary and mandibular teeth using wax block, identifying casts & tooth specimens

Target students:

First BDS students

Purpose:

Dental anatomy involves teaching anatomic differences between deciduous and permanent teeth, chronology of tooth eruption in deciduous and permanent teeth and anatomy of the roots of the teeth. The role of tooth carving is to develop a basic understanding of the anatomic landmarks of the tooth which help in assessing the disease progression with the help of such landmarks and planning treatment measures accordingly.

Learning objectives:

I. The construction of basic shapes to develop appropriate motor skills is taught before teaching the actual tooth carving.

II. Crown anatomy is taught beginning from the buccal, lingual, mesial & distal reduction of the wax block according to the shape. Later, occlusal aspect in case of posterior teeth and lingual aspects in case of anterior teeth are taken into consideration.

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SPOTTERS	
S.NO	**CASTS**
1.	Maxillary Deciduous Dentition
2.	Mandibular Deciduous Dentition
3.	Maxillary Mixed Dentition
4.	Mandibular Mixed Dentition
5.	Maxillary Permanent Dentition
6.	Mandibular Permanent Dentition
	TOOTH SPECIMEN
7.	Permanent Maxillary Central & Lateral Incisors (Right & Left)
8.	Permanent Mandibular Central & Lateral Incisors (Right & Left)
9.	Permanent Maxillary Canine (Right & Left)
10.	Permanent Mandibular Canine (Right & Left)
11.	Permanent Maxillary First & Second Premolar (Right & Left)
12.	Permanent Mandibular First & Second Premolar (Right & Left)
13.	Permanent Maxillary First & Second Molar (Right & Left)
14.	Permanent Mandibular First & Second Molar (Right & Left)

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Department of Oral and Maxillofacial Surgery

Clinical skill lab and Simulation Centers

Exercise:

Suturing for Minor Oral Surgery.

Target students:

Final BDS Students, Interns and Post graduate students.

Purpose:

Suturing is an essential part of minor oral surgery and its practical aspects are applicable to various maxillofacial procedures involving closure and other surgical dental procedures like mucogingival surgeries and Endodontic surgeries. For suturing to be implemented into routine dentistry a simulation based training on silicone sheets is deemed necessary for the better understanding and hands on experience for the dental students.

Learning objectives:

a. To understand basic principles of incision and flap design.
b. To understand basic principles of tissue handling.
c. To understand objectives of wound closure.

Basic Life Support (BLS)

Exercise:

Basic Life support (BLS).

Target students:

Interns& Post Graduate students and Faculty

Purpose:

BLS is an essential emergency life saving measure which needs to be know n by all health care providers. An essential part ot health care education is providing basic treatment in emergency situations. BLS is an Simulation skill training which is conducted in Skills lab centre. It trains the participants to promptly recognize several life threatening emergencies. give high quality chest compressions, deliver appropriate ventilation and provide early use ot' anAED

Learning objectives:

a. To understand basic principles Emergency care.
b. To be able to provide high quality CPR for adults Children and Infants.
c. Etfective ventilation using a barrier device.
d. Relief o1 foreign body airway obstruction.
e. Early use of An Automated External Dcfibrillator.

Outcome assessment:

- A tier demonstration by Instructors, participants perform the BLS module on Mannequins.
- The exercise is carefully evaluated by *the* instructor.
- A student u ho has successfully demonstrated all the techniques is awarded certificateo1 completion as record of the training received.

Wiring techniques to be performed

Sr. No.	Exercise
1	Arch bar
2	Ivy eyelet wiring
3	Risdon's wiring
4	Gilmmer's wiring

Outcome Assessment:

Sr. No.	Particulars	Marks allotted
1.	Grasping the wire twister Correctly	2
2.	Passing wire perpendicular to surface	2
3.	Adequate stability	2

Head of the Department

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MNR DENTAL COLLEGE & HOSPITAL

Department of Orthodontics

Exercise: Wire bending Exercise

Target **students:** Third years, Final BDS Students, Interns & Post graduate students.

Purpose:

Wire bending stands as a pivotal and indispensable facet of orthodontics, exerting a profound influence on both removable and fixed orthodontic appliances. Within the realm of orthodontics, these appliances are instrumental in correcting misaligned teeth and achieving optimal dental alignment. It is imperative for students to grasp the intricacies of wire bending and the construction of orthodontic appliances to develop a comprehensive understanding of their functional mechanisms and clinical applications.

Importance of Wire Bending in Orthodontics:

Orthodontics, as a specialized branch of dentistry, focuses on the alignment and positioning of teeth and jaws to enhance both oral health and aesthetics. Wire bending assumes a position of paramount importance within this discipline for several reasons:

Customization and Precision: The process of wire bending allows orthodontists to tailor orthodontic appliances to the unique needs of each patient. Customization ensures that the applied forces and movements are precise, addressing specific malocclusions effectively.

Controlled Force Application: Orthodontic wires, when correctly bent and employed, enable the controlled application of forces on teeth. This controlled force application is essential for the gradual and safe movement of teeth into their desired positions, preventing damage or discomfort.

Versatility: Wire bending techniques extend across a spectrum of orthodontic appliances, encompassing both removable and fixed devices. From traditional braces to modern aligners, wire bending is a fundamental skill for orthodontic practitioners to adapt and innovate in treatment planning.

Clinical Decision-Making: A profound understanding of wire properties and bending techniques empowers students with the knowledge required to make informed decisions in appliance selection. This involves considering factors such as the patient's age, the severity of malocclusion, and the treatment goals.

Learning Objectives:

a. Develop a comprehensive understanding of the fundamental principles underlying Orthodontic appliances, appreciating their pivotal role in dental correction.

b. Acquire in-depth knowledge of the inherent properties of orthodontic wires, including their material composition, flexibility, and tensile strength.

c. Equip students with the capacity to make judicious choices when selecting orthodontic appliances tailored to the unique requirements of each patient.

Outcome Assessment:

- Following instructional demonstrations and guidance from experienced supervisors, students engage in hands-on wire bending exercises using plaster models. This practical experience allows them to apply theoretical knowledge in a clinical context.

- Each student's wire bending technique is rigorously evaluated, with a letter grading assessment. This grading system ensures that students receive constructive feedback to enhance their skills progressively.

- All assessment results are meticulously recorded in the student's journal, serving as a valuable reference for ongoing professional development and growth.

In summary, wire bending serves as the linchpin of orthodontics, providing the means to customize treatment approaches, exert controlled forces, and achieve precise dental corrections. Its mastery is a fundamental skill for orthodontic practitioners, ensuring the delivery of effective and patient-centered care.

Wire bending to be performed.

Third year:

S No.	Exercise
1	Straight wires
2	Triangle
3	Rectangle
4	Square
5	Circles
6	U-loops(3)
7	V-loops(4)
8	C-Clasp
9	J-Clasp

Outcome Assessment:

S No.	Particulars	Grades given
1.	Straightening of the wire	A - D
2.	Correct measurements	A - D
3.	Sharp and accurate placement of bends	A - D

Final years:

S No.	Exercise
1	Adams clasp
2	Labial bow
3	Springs
4	Canine retractors

Outcome Assessment:

S No.	Particulars	Grades
1.	Straightening of the wire	A - D
2.	Correct measurements	A - D
3.	Sharp and accurate placement of bends	A - D

Interns:

S No.	Exercise
1	Removable orthodontic appliances

Outcome Assessment:

S No.	Particulars	Grades
1.	Straightening of the wire	A - D
2.	Correct measurements	A - D
3.	Sharp and accurate placement of bends	A – D
4.	Acrylization	A – D
5.	Finishing and polishing	A - D

Post graduates:

S No.	Exercise
1	Straight wires
2	Triangle
3	Rectangle
4	Square
5	Circles
6	U-loops(3)
7	V-loops(4)
8	C-Clasp
9	J-Clasp
10	Adams clasp
11	Labial bow
12	Springs
13	Canine retractors

Outcome Assessment:

S No.	Particulars	Grades
1.	Straightening of the wire	A - D
2.	Correct measurements	A - D
3.	Sharp and accurate placement of bends	A – D
4.	Acrylization	A – D
5.	Finishing and polishing	A - D
6.	Delivery of appliance and instructions to patient	A – D

Signature of HOD

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Department of Conservative Dentistry and Endodontics

Report on Training Programme in UG Conservative Clinical Skill Lab

The Under graduate Pre-clinical conservative lab is located on the 2nd floor. The 2nd BDS students attend conservative dental material and preclinical conservative practical in the lab. A total of 100 hours of dental material and 200 hours of preclinical conservative practical are conducted. Plaster Models demonstration of cavity preparations for class I, II, V and exercises are given at the beginning of the academic year followed by its practice by students. Manipulation of dental cements such as zinc phosphate, zinc polycarboxylate, glass ionomer cements and liners and varnishes are taught to the students. They individually manipulate each cement in different consistencies under the guidance of faculty. The students are trained to prepare caries dictated and conservative cavity preparations on extracted and ivorine teeth. The students are trained to place silver amalgam restorations over adequate pulp protection and base application as deemed necessary.

They are taught to make Class I cavity preparations .Class I buccal extension/compound and Class II cavity preparations on extracted tooth as well as ivorine teeth and matrix retainer placement after base application for silver amalgam restoration. Class I inlay cavity preparation and wax pattern fabrication for indirect restoration is taught. Demonstration of use of hand instruments and working with micro motor, contra angle hand piece and airotor handpiece are given. The students are trained to work with micro motor and airotor to accomplish various steps of cavity preparation. Posture, operator and patient position, indirect vision, use of mouth, guard, finger rest and grasps

Structured Training Programme in Conservative Clinical Skill Lab

Total No. Of Hours - 110

LOCATION: -The Pre-clinical conservative lab is located on the 2nd floor and PG preclinical lab casting and ceramic laboratory located on the 2nd floor.

LABORATORIES- There are 3labs in the Department of conservative dentistry and endodontics

a) Pre-clinical conservative laboratory for undergraduates
b) Pre-clinical conservative laboratory for postgraduates
c) Casting and ceramic laboratory

AREA-

- Pre-clinical conservative laboratory for undergraduates -2500sqft
- Pre-clinical conservative laboratory for postgraduates -41sqft
- Casting laboratory - 84sqft
- ceramic laboratory-45sqft

a) UG PRECLINICAL LABORATORY

TOTAL CAPACITY OF STUDENTS	TOTAL NO. OF MANIQUINNS	TOTAL NO. OF PHANTOM HEADS
50	50	50

b) PG PRECLINICAL LABORATORY

TOTAL CAPACITY OF STUDENTS		TOTAL NO. OF TYPHODONTS		TOTAL NO. OF PHANTOM HEADS
04	+	04	+	04

II ND BDS PRE-CLINICAL CONSERVATIVE DENTISTRY EXERCISES

A) Demo- Micromotor, Contra angle H.P. Assembling,
Bur attachment (Working with the same assembly on Extracted tooth)
Demonstration of class I cavity preparation on extracted for restoration with silver amalgam.

Extracted teeth exercises: -

EXCERISE
a Class I cavity on a mandibular molar
b. Class I Mesial and Distal Pit cavities on Maxillary molar.
C Class I compound cavity (Buccal Extension) on mandibular molar.

B) Demo for Class II Cavity Preparation, Base, Matrix, Wedge, Restoration with silver amalgam Extracted teeth exercises: -

Exercise
a. Class II cavity on Premolar (maxillary or mandibular) Cavity preparation principles to be followed according to the tooth mounted.
b. Class II cavity preparation on Molar (maxillary or mandibular) Cavity preparation principles to be followed according to the tooth mounted.

Detailed report of activities to learning resources

Pre-Clinical Conservative Dentistry

Pre-clinical conservative laboratory give lesson to 2nd BDS and Post graduate students of conservative dentistry and endodontics on plaster models, extracted teeth and typhodonts, prepares them for real world clinical practice.

Exercises on Plaster Model rro be completed within one month

Sr. No.	Exercise
1	Demonstration of Class I on Plaster Model
2	36Class I Cavity Preparation Mandibular on Molar
3	I 6Class I Cavity on Maxillary Molar (Conservative) Mesia] Pit and distal pit cavity.
4	Demo Class I Compound on Mandibular Molar
5	36Class I Compound on Mandibular Molar (Buccal extension)
6	16 Maxillary Molar Distal Pit With Palatal Extension
7	Demo of Class II Cavity Preparation
8	36Class II Cavity Preparation on Mandibular Molar - MO
9	J 6Class ll Cavity Preparation on Maxillary Molar- MO (Conservative Maxillary) (do this exercise on the tooth where the compound cavity is done)
10	15 Class II MO Cavity preparation on Maxillary premolar
11	Demo of Restoration with Modeling Wax
I2	Restoration with Modeling Wax and Completion of Backlog work
13	Submission

EXTRACTED TEETH WORK

EXERCISE Air rotor extension	TOOTH
Class-I cavity preparation (4)	Mandibular molar Maxillary molar Mandibular pre molar Maxillary pre molar
Class-II cavity preparation	Mandibular Molar Maxillary Molar Mandibular premolar Maxillary premolar
Class-I extension (buccal / palatal) (2)	Buccal extension or Mandibular Molar Palatal extension OR Maxillary Molar
Submission	
Class-I Inlay Cavity	Mandibular Molar (05)
Deep caries excavation	(05)
Class V GIC	Anterior teeth (2)
Class-I Composite restoration	Molar Premolar

EXERCISES ON IVORINE TEETH

CAVITY DESIGN	TOOTH NO.
Class- I	36,45,14 16 (Including oblique ridge) 27 (oblique ridge not included)
Class- I (Compound)	47 - Buccal extension 26 – Palatal extension Backlog
Class – II MO/DO	36 - MO 46 - MO 36 - DO 35 - DO 44 - MO I6 - MO (Conservative) 26 - DO 15 - DO 17 – MO 18 – DO Backlog 25
Class – II MOD	47 Backlog
Class – I INLAY	Mandibular molar 36/37/46/47 – 10 teeth
Class V (2) Amalgam	37,47
Class V GIC	11,22,33,44
Class 3 GIC	13,23,33,43

List of Demonstration

I) List of Instruments

2) Plaster Models distribution &demonstration of cavity preparation for class I, 11, V for restoration with silver amalgam.

3) Class I Cavity preparation on Extracted Tooth with Base and Restoration with silver amalgam.

4) Class I Buccal extension/compound cavity preparation, base & matrix application, restoration

5) Class II Cavity preparation on Extracted Tooth with Base, matrix and Restoration with silver amalgam.

6) Demonstration of working with Micromotor, Contra angle Hand Piece

2) Extracted Teeth

I. Parts of equipment used for cavity preparation - Control Box
Foot Control
Micro motor
Hand Piece

2. How to attach Hand piece to Micro motor, Micro motor to control box etc.
3. Talk a little on parts of a bur, diamond point and how to attach/fit a Diamond point on the hand piece, how to remove it.
4. About grasps, rest (how to hold hand piece)
5. About natural extracted tooth how to identify enamel, dentin - Tactile
   - Color
   - Consistency
6. How to prepare a cavity in extracted tooth - Pressure application
   - Direction of diamond point etc.

b) Demonstration of Working on Typhodont teeth (refer text sturdevant)

a. Posture, Operator and Patient

b. Indirect Vision

c. Use of Mouth - Mirror as guard

d. Guard, finger rest

e. Use of finger and thumb to support mandible while condensing silver amalgam in mandibular teeth

3) Inlay Cavity preparation - Class I cavity on Extracted Tooth /Typhodont tooth with preparation of wax pattern and Sprue former attachment. (Include a little on the Sprue former as to the length, material, position etc.)

4) Modification of Class II cavity preparation, e.g., Slot, box only etc.

I 0) Adjacent Class 11 cavity preparation, e.g., Slot, box only etc.

11) Excavation of caries, management of deep caries, on extracted teeth.

12) Casting procedure.

13) Restoration of fractured anterior teeth with composite resin.

14) Opening of root canal for anterior/ posterior teeth.

Sr no.	Modules	Learning Objectives
1	Instrument demonstration	•To identify the hand instruments •To be able to learn and use proper grasp with instrument •To be able to use the hand instruments appropriately in the cavity preparations.
2	Rotary instruments	•To identify and distinguish low and high-speed handpieces. •To be able to recognize the difference between dental burs and diamond points.

3	Plaster model exercise	•To apply the knowledge of G V Black's classification. •To be able to identify class I, extended class I, class 2, MOD's and class 5 cavities •To understand the outline form, resistance form, retention form and convenience form. •To evaluate the internal anatomy of the cavity •To practice restorations of the cavities.
4	Extracted teeth exercise	•To Understand tactile sense on natural enamel and dentin and visually distinguish between them. •To Appreciate depth of cavity. •To Understand concepts of slow n high speed tooth preparation. •To recognize the line and point angles.
5	Application of base and restoration	•To learn manipulation of base and apply appropriately. •To develop the skill for application of cavity liners and base. •To distinguish different matrix systems for amalgam, application of wedges and their application on extracted teeth. •To learn manipulation of amalgam. •To develop the skill for restoring the cavities and to evaluate the quality of the amalgam restoration and to understand the techniques of polishing the restoration.
6	Deep caries excavation	•To learn careful excavation of deep caries using high and low speed handpieces. •To learn manipulation and application of calcium hydroxide liner.
7	Typhodont exercise : Exercise on phantom head models which include cavity preparation, base and varnish application, matrix and wedge placement followed by amalgam restoration.	•To learn working on jaw set •Get familiar to work in proper chair position and understand the importance of ergonomics in dentistry.
8	GIC restoration	•To be able to prepare different designs of cavity preparations for GIC. •To learn appropriate manipulation of GJC. •To understand matrix application techniques and restoration with GIC.
9	Composite resin restoration ; demonstration of Class3 and 5 cavity preparation.	•To appreciate the basic concept of shade selection and cavity preparation for composite resin restorations •'to distinguish the difference in cavity preparation designs between amalgam and composite restorations. •To comprehend the concept of acid etching and recognize etched enamel •To understand the concept of bonding followed by restoration.

10	Cast restoration	•To understand the difference between direct and indirect restoration. •To understand and distinguish the difference in cavity preparation designs for amalgam and cast restorations. •To prepare class I and 2 cavity preparations for inlay on extracted teeth and typhodont. •To prepare the skills for preparing direct wax pattern. •To understand the different steps in casting techniques such as investing the wax pattern, burnout, casting followed by finishing and cementing the inlay on extracted tooth.
11	Endodontics	•To identify basic endodontic instruments •To be able to make coronal access cavity preparation on extracted upper central incisors •To be able to determine working length •To be able to do biomechanical preparation of root canal space of central incisor •To be able to do obturation of root canal space •To be able to do coronal post obturation restoration

PG PRECLINICAL WORK

Preclinical work on typhodont teeth

Sr. No	EXERCISES
I	Class-II amalgam cavities Conservative preparation - 03 Conventional preparation - 03
2	Inlay cavity preparation on premolars and molars MO, DO, MOD (total - 10) Wax pattern - 06
3	Casting-04
4	Onlay preparation on molars - 02
5	Casting-QI
6	Full Crown Anterior - 05 Posterior - 05 (2 each to be processed)
7	3/4 Crown premolars - 02 (I to be processed)
8	7/8 Crown - 02 (I to be processed)

PRECLINICAL WORK ON NATURAL TEETH

Sr. No	EXERCISES
I	Inlay preparation on molars and premolars MO. DO, MOD - 08 Wax pattern - 02 Casting-02
2	Amalgam cavity preparation and restoration (all types) Conventional - 02 Conservative - 02
3	Pin retained amalgam on molar teeth - 02
4	Post and core build up Anterior teeth - 10 Posterior teeth - 05
5	Casting Anterior- 04 Posterior - 02
6	Onlay on molars - 03 (I to be processed)
7	Full crown premolars and molars - 04 Full crown, anterior- 06
8	Veneers, anterior teeth (indirect method)- 02
9	Composite inlay (class-JI)- 03 (I to be processed)

PG PRECLINICAL ENDODONTICS

Sr. No	EXERCISES
I	Sectioning of all maxillary and mandibular teeth
2	Sectioning of teeth - in relation to deciduous molar, 2nd primary upper and lower molar I each
3	Access cavity opening and root canal therapy in relation to maxillary and mandibular permanent teeth
4	Access cavity preparation and BMP Anterior a. Conventional prep b. Step back c. Crown down
5	Obturation - 03
6	BMP Premolar 06 (2 Inaxillary and 2 mandibular) and obturation I each of maxillary and mandibular premolar
7	BMP Molar 06 cases (3 upper - 2 first molars and 1 second molar, 2 lower - 2 first molars and I second molar) obturation 1 each
8	Post and core preparation and fabrication in relation to anterior and posterior teeth Anterior IO (casting 4)
9	Posterior 05 (casting 2
10	Removable dies 04 Nos.
11	Submission of pre-clinical work
12	Post and core preparation and fabrication in relation to anterior and posterior teeth Anterior IO (casting 4) Posterior 05 (casting 2
13	Removable dies 04 Nos.
14	Submission of pre-clinical work

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Sangareddy-502294

Department of Conservative Dentistry and Endodontics

LOCATION: -The PG Pre-clinical conservative lab, casting and ceramic laboratory is located on the 2nd floor.

AREA-

- Pre-clinical conservative laboratory for postgraduates -41sqft
- Casting laboratory & ceramic laboratory-650 sqft

- **PG PRECLINICAL LABORATORY**

TOTAL CAPACITY OF STUDENTS	TOTAL NO. OF TYPHODONTS	TOTAL NO. OF PHANTOM HEADS
04	04	04

Pre-Clinical Conservative Dentistry

Post graduate students of conservative dentistry and endodontics work on extracted teeth and typhodonts. prepares them for precision and accuracy in clinical practice.

Pre Clinical Operative work on natural teeth

Sr no	Exercises	No of teeth
1.	Wax Carving of all permanent teeth	
2.	Inlay on molars and premolars MO, DO, and MOD including wax pattern and casting	05
3.	Amalgam cavity preparation	
	a. Conventional	02
	b. Conservative	02
4.	Complex amalgam on molar teeth	02
5.	Onlay on molars including wax pattern and casting- (1 to be processed)	02
6.	Full crown premolars and molars (metal, PFM & - Ceramic)	04
7.	Full crown anterior (PFM, composite& Ceramic)	03
8.	Veneers anterior teeth	02
9.	Composite	
	Composite Filling (Class 1,II ,III & V)	05 (each)
	Inlay (Class I & II)	02
	Veneer	02
	Diastema Closure	02
	Angle Buildups	02

Preclinical Operative work on ivorine teeth

Sr no	Exercises	No of teeth
I.	Class II amalgam cavities	
	a. Conservative preparation	03
	b. Conventional preparation	03
2.	Inlay cavity preparation including wax pattern and casting on premolars and molars - MO, DO, MOD	02
3.	Onlay preparation on molars including wax pattern and casting	02
4.	Full Crown	
	a. Anterior	02
	b. Posterior (1 each to be processed)	02

Pre Clinical Endodontic work on natural teeth

Sr no	Exercise	No of teeth
I.	Sectioning of all maxillary and mandibular teeth (vertical & horizontal).	28
2.	Access cavity opening in relation to maxillary and mandibular permanent teeth.	28
3.	Access cavity preparation, BMP and Obturation a) Anterior (3 maxillary and 3 mandibular) -	06
	Conventional prep	02
	Step back	02
	Crown down	02
	Obturation	03
	b) Premolar	04
	c) Molar	06
4.	Post and core preparation and fabrication in relation to anterior and posterior teeth	
	a. Anterior (Cast Post 5 and prefabricated post 5)	10
	b. Posterior (Cast Post 2 and prefabricated post 5)	05
5.	Removable dies	04

Learning Objectives of PG Preclinical Work in Conservative Dentistry and Endodontics

Sr no.	Modules	Learning Objectives
I	Rotary instruments	•To identify and distinguish low and high-speed handpieces. •To be able to recognize the difference between dental burs and diamond Points.
2	Extracted teeth exercise	•To Understand tactile sense on natural enamel and dentin and visually distinguish between them. •To Appreciate depth of cavity. •To Understand concepts of slow n high speed tooth preparation. •To recognize the line and point angles.
3	Application of base and restoration	•To learn manipulation of base and apply appropriately. •To develop the skill for application of cavity liners and base. •To distinguish different matrix systems for amalgam, application of wedges and their application on extracted teeth. •To learn manipulation of amalgam. •To develop the skill for restoring the cavities and to evaluate the quality of the amalgam restoration and to understand the techniques of polishing the restoration.
4	Deep caries excavation	•To learn careful excavation of deep caries using high and low speed handpieces. •To learn manipulation and application of calcium hydroxide liner.
5	Typhodont exercise : Exercise on phantom head models which include cavity preparation, base and varnish application, matrix and wedge placement followed by amalgam restoration.	•To learn working on jaw set •Get familiar to work in proper chair position and understand the importance of ergonomics in dentistry.
6	GIC restoration	•To be able to prepare different designs of cavity preparations for GIC. •To learn appropriate manipulation of GIC. •To understand matrix application techniques and restoration with GIC.
7	Composite resin restoration :	•To appreciate the basic and advanced concept of shade selection and cavity preparation for composite resin restorations •To distinguish the difference in cavity preparation designs between amalgam and composite restorations. •To comprehend the concept of acid etching and recognize etched enamel •To understand the concept of bonding followed by restoration.

8	Endodontics	•To identify basic and advanced endodontic instruments •To be able to make coronal access cavity preparation on extracted upper central incisors •To be able to determine working length •To be able to do biomechanical preparation of root canal space of central incisor •To be able to do obturation of root canal space •To be able to do coronal post obturation restoration
9	Post and core	•To be able to make proper post space preparation •To be able to make direct pattern of the canal space •To be able to do proper casting of post •To be able to do cast cementation and crown procedure
10	Crown Preparation	•To be able to make proper preparations assessing the remaining tooth structure •To be able to functional cusp reduction with bevel •To be able to take proper impression with precision and accuracy
11	Cast restoration	•To understand the difference between direct and indirect restoration. •To prepare class I and 2 cavity preparations for inlay. onlay and crowns on extracted teeth and typhodont. •To prepare the skills for preparing direct wax pattern. •To understand the different steps in casting techniques such as investing the wax pattern. burnout, casting followed by finishing and cementing the inlay on extracted tooth.

Head of the Department

Professor & Head
Dept. of Conservative Dentistry & Endodontics
M.N.R. Dental College & Hospital
SANGAREDDY

Principal

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Department of Periodontology

Basic clinical skills/simulation training models:

Preclinical Periodontology Exercises:

Exercise:

- Methods of using various scaling and surgical instruments
- Target students: III BDS and IVBDS

Instructor: Dr.Ruparani .B(Professor), Dr.Lavanya(Sr.Lecturer), Dr. Phani Yasaswini(Sr. Lecturer), Dr.Chaitanya(Sr.Lecturer)

Purpose:

To restore gingival health by complete removal of plaque, calculus and extrinsic stains and achieve smooth surface of tooth to reduce plaque accumulation.

Learning objectives:

- The student shall acquire the skill to perform dental scaling, diagnostic tests of periodontal diseases to use the instruments for periodontal therapy and maintenance of the same.
- The objective of scaling & root planning is to remove etiologic agents which cause inflammation to the gingival (gum) tissue and surrounding bone.
- The student shall develop attitude to impart the preventive measures namely, the prevention of periodontal diseases and prevention of the progress of the disease.
- The student shall also develop an attitude to perform the treatment with full aseptic precautions; shall develop an attitude to prevent iatrogenic diseases; to conserve the tooth to the maximum possible time by maintaining periodontal health and to refer the patients who require specialist's care.

Outcome assessment:

- After receiving the demonstration, students record a detailed periodontal case history, determine diagnosis, prognosis and plan treatment and perform scaling, root planning, and SPT under the guidance of the instructors. Each step is evaluated and the strong and weak points is communicated to the students. The work is graded.
- Periodic exams are conducted throughout the academic year to assess the progress of the students.