GUIDE BOOK

JINNAH MEDICAL AND DENTAL COLLEGE

DEPARTMENT OF PROSTHODONTICS

ACADEMIC YEAR: 2022-2023

AUTHORED

BY

DR. MUHAMMAD WAQAS

CONTENTS

VISION 3
MISSION 3
VALUES 3
PROGRAM LEARNING OUTCOMES -7 STAR DOCTORS – (PMDC) 4
INTRODUCTION TO PROSTHODONTIC DEPARTMENT: 5
BRIEF OVERVIEW 5
HIERARCHY OF THE DEPARTMENT 7
PATIENT FLOW CHART 8
LEARNING OUTCOMES FOR BDS PROSTHODONTICS 9
SECOND YEAR 9
THIRD YEAR 10
FINAL YEAR 11
TEACHING AND LEARNING STRATEGIES 13
Lab tutorials (large group teachings) 13
SKILL DEVLOPMENT SESSION 13
ASSESSMENT TOOLS TO EVALUATE STUDENT LEARNING 14
INTERNAL EVALUATION / CONTINOUOUS ASSESSMENT POLICY 16
CIRRICULUM OF PROSTHODONTICS 17
SECOND YEAR 17
THIRD YEAR 21
PRE-CLINICAL AND CLINICAL ROTATIONS 61
PROSTHODONTICS ROTATION OF SECOND YEAR BDS 61
PROSTHODONTICS ROTATION OF THIRD YEAR BDS 62
DETAILS OF CLINICAL ROTATION FINAL YEAR BDS 64
ORIENTATION SESSION: 64
PROSTHODONTICS POSTING FOR FINAL YEAR 64
SAMPLE WEEK # 1 SCHEDULE- FINAL YEAR BDS CLINICAL ROTATION 66
RECOMMENDED BOOKS (Latest Edition) 67
THREE MONTHS ROTATION OF HOUSE OFFICERS 68
DRESS CODE POLICY 69
A. Personal Hygiene and Hair 69
B. Jewelry 69
C. Attire 69
D. General Considerations 70

VISION

To set local and global standards for quality patient outcomes – creating a culture of excellence to promote a transformative experience for the 21st century clinicians, educators and researchers to benefit all humanity.

MISSION

We are committed to develop well rounded academics, thinkers, clinicians and researchers by strengthening a global view, broadening intellectual foundation and teaching effective communication. It is our aspiration to cultivate creative and critical thinking skills for problem solving, sensitive to cultural and ethical values and responsibilities. Our graduates will be role models and leaders for society.

VALUES

1. Equity
2. Quality
3. Compassionate behavior
4. Social accountability
5. Social Justice
6. Humanistic approach
7. Leadership
8. Innovation
9. Integrity
10. collaboration

PROGRAM LEARNING OUTCOMES -7 STAR DOCTORS – (PMDC)

A JMDC graduate should be able to:

- Demonstrate insight, imagination and curiosity, define one's unique self, one's values and one's place in the world, while incorporating the qualities of a good physician
- Answer complex questions facing physicians, including the role they should play in society, politics and promotion of social justice
- Engage in reflective practice through sound clinical decision making, critical self-assessment and commitment to lifelong learning
- Demonstrate mastery of entry level professional clinical skills used to provide services based on best available evidence
- Display enlightenment and moral virtues to prepare themselves for life and work in a problematic, changing and diverse world
- Be responsible leaders for the good of themselves, their family, community and country
- Be humane and socially equipped individuals, in tune with rights of patients and vulnerable groups
- Show expertise in critical situational analysis
- Respect diversity
- Display effective communication
- Be able to address population health and health system issues based on demography, statistics, epidemiology and cultural nuances

INTRODUCTION TO PROSTHODONTIC DEPARTMENT:

BRIEF OVERVIEW

Prosthodontics, also known as **dental prosthetics** or **prosthetic dentistry**, is the area of dentistry that focuses on dental prostheses. The ADA defines it as:

"The dental specialty pertaining to the diagnosis, treatment planning, rehabilitation and maintenance of the oral function, comfort, appearance and health of patients with clinical conditions associated with missing or deficient teeth or oral and maxillofacial tissues using biocompatible substitutes."

Dental prostheory was pioneered by French surgeon Pierre Fauchard during the late 17th and early 18th century. Despite the limitations of the primitive surgical instruments, Fauchard discovered many methods to replace lost teeth using substitutes made from carved blocks of ivory or bone. He also introduced dental braces to correct the position of teeth using gold wires and silk threads.

A **Prosthodontist** is a dentist who:

- Specializes in the **aesthetic (cosmetic) restoration and replacement of teeth.**
- Receives three to four years of additional training after dental school
- **Restores optimal appearance and function to your smile**. The planning, surgical placement (sub-crestal prosthodontics) and **restoration of implants** and **rehabilitation of occlusion with prostheses** all fall under the field of prosthodontics.

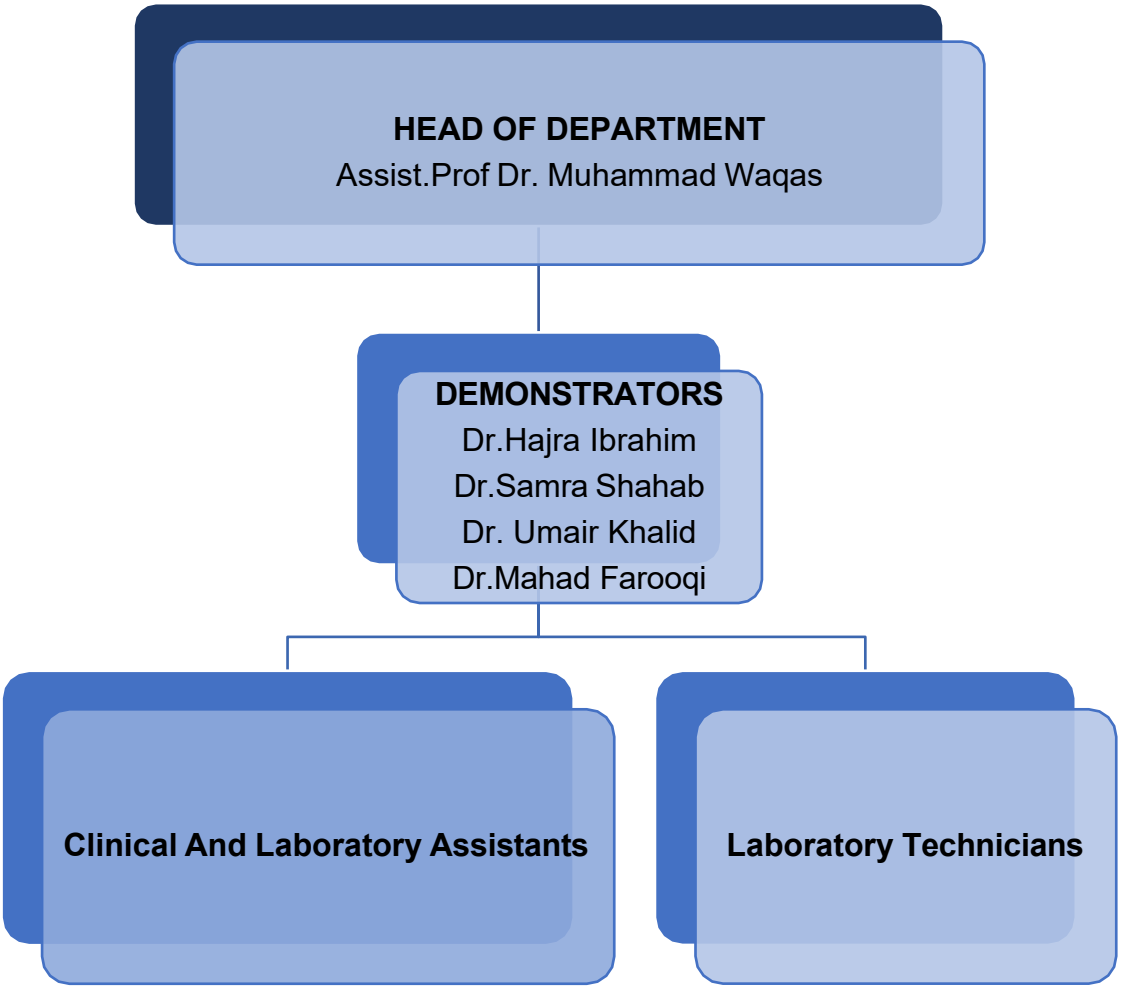
Prosthodontics Department deals with replacement of missing teeth and tissues of the stomatognathic system by **removable or fixed restorations** to rehabilitate the patient's **aesthetics, speech and masticatory function.** The patients here are treated with utmost care and empathy with standard protocols following cross-infection control and quality treatments. we have equipped the department with the most advanced technology and highly skilled doctors to give patient the best and advanced treatment options for their problems.

At the under-graduate level, we teach our students regarding the basic material handling, patient management, team-work and help them to develop clinical and laboratory skills in removable prosthodontics.

The house officers and post-graduates are also facilitated in our department for their clinical rotation. We provide them with optimal environment in order to help them develop their clinical skills through clinical group discussions, patient management, patient handling, crow preparations and different clinical steps of removable prosthodontics.

We also have acrylic and casting lab equipped with advanced technology for in house fabrication of acrylic partial dentures, fixed partial dentures and cast restorations to provide the quality and cost-effective care to our patients.

HIERARCHY OF THE DEPARTMENT



PATIENT FLOW CHART → RECEPTION DESK

↓

Patient is asked about the **fixed** or **Removable** prosthesis

↙ ↘

CROWN AND BRIDGE DEPARTMENT

↓

DIAGNOSIS

(House Officer, Demonstrator)

↓

TREAMENT

(Demonstrator)

REMOVABLE PARTIAL DENTURE DEPARTMENT

↓

DIAGNOSIS

(House Officer, Demonstrator)

↓

TREATMENT

(House Officer, Demonstrator)

UNDER SUPERVISION OF SENIOR FACULTY

LEARNING OUTCOMES FOR BDS PROSTHODONTICS

SECOND YEAR

By the end of second year in Prosthodontics Department , the student should be able to :

1. Describe? Basic anatomy and landmarks of maxilla and mandible

2. Demonstrate or explain???Laboratory technique management based on knowledge and skills of dental materials, dental equipment and instrument management including:

    A) Model pouring.

    B) Wax pattern for custom tray.

    C) Dewaxing.

    D) Curing.

    E) Finishing and polishing of custom tray.

    F) Fabrication of occlusal rim.

    G) Teeth setup.

3. Demonstrate the following:

    A. Discipline

    B. Record keeping.

    C. Team work.

    D. Respect for senior and junior colleagues, peers, dental assistants and other staff members.

    E. Respect for privacy and confidentiality etc.

    F. Compliance with sterilization and cross infection control protocols.

    G. Compliance with rules and regulation of the department and institution.

    H. Professionalism

THIRD YEAR

By the end of third year in Prosthodontics Department , the student should be able to :

1. Instruments and lab protocol
2. Removable Partial Denture lab fabrication steps overview
3. Maxilla and Mandible model pouring (ideal molds)
4. Marking of models for Kennedy class-I, II, III & IV
5. Wax-up for base plate formation
6. Fabrication of Maxillary and Mandibular wax occlusal rims
7. Articulation and mounting of the Maxillary and Mandibular occlusal rims
8. Selection of anterior and posterior teeth
9. Arrangement of anterior and posterior teeth
10. Final finishing (correction of denture base & tooth position)
11. Carving and festooning
12. Investment of the wax up in the flasks
13. De-waxing and packing with heat cure acrylic polymer
14. Finishing and polishing

Demonstrate the following:

A. Discipline

B. Record keeping.

C. Team work.

D. Respect for senior and junior colleagues, peers, dental assistants and other staff members.

E. Respect for privacy and confidentiality etc.

F. Compliance with sterilization and cross infection control protocols.

G. Compliance with rules and regulation of the department and institution.

H. Professionalism

FINAL YEAR

By the end of Final year in Prosthodontics Department, the student should be able to :

1. Take an informed consent from the patient
2. Diagnostic skill to examine the patients requiring Prosthodontics therapy, investigate the patient systemically, analyse the investigation results, radiography, diagnose the ailment, plan a treatment, communicate it with the patient and execute it.
3. Perform clinical and laboratory procedures with understanding of biomaterials, tissue conditions related to prosthesis.
    A) Impression material mixing
    B) Primary and secondary Impression taking.
    C) Jaw relation.
    D) Try-in.
    E) Insertion.
4. Laboratory technique management based on skills and knowledge of dental materials and dental equipment and instrument management.
    A) Model pouring.
    B) Wax pattern for custom tray.
    C) Dewaxing.
    D) Curing.
    E) Finishing and polishing of custom tray.
    F) Fabrication of occlusal rim.
    G) Teeth setup.
5. Prosthodontics treatment for completely edentulous patients - Complete denture, immediate complete denture, single complete denture, tooth supported complete denture, Implant supported Prosthesis for completely edentulous patients
6. Prosthodontics treatment for partially edentulous patients: Clasp- retained partial dentures, intra coronal and extra coronal precision attachments retained partial dentures

7. Apply theory to practice, while treating patients (and other procedural skills)
8. Identify the need to refer.
9. Demonstrate the following:

    A. Effective communication skills including counselling.

    B. Record keeping.

    C. Team work.

    D. Respect for senior and junior colleagues, peers, dental assistants and other staff members.

    E. Respect for privacy and confidentiality etc.

    F. Compliance with sterilization and cross infection control protocols.

    G. Compliance with rules and regulation of the department and institution.

    H. Professionalism.

TEACHING AND LEARNING STRATEGIES:

Lab tutorials (large group teachings)

Third year BDS, the students have their clinical rotation three days a week in which they are taught about the clinical and laboratory aspects of removable partial dentures through tutorials and lab demonstration. They are taught in regular classes once a week for 50mins.

Final year BDS, interactive lectures for large group predominates. The prosthodontics lectures are held twice every week total of 100mins.

For student's engagement and active participation to its fullest, following are employed:

Quizzes
Active learning strategies
Mini-student presentations

SKILL DEVLOPMENT SESSION:

The skills teaching begins on ideal mold's in the laboratory. Both the second year and third year learn the basic steps of removable partial dentures fabrication and their clinical significance. The learned skills are then employed in the final year on patients. Most of the clinical learning occurs in the out-patient department from which patients are allotted to each student to carry out clinical and laboratory steps under supervision of faculty. The final year students are engaged through:

Learning laboratory steps on ideal molds
History and treatment planning for removable restorations
On-patient demonstration of clinical and procedural skills.
Communication skills and counselling tips
Discussion for critical thinking, decision making and ethical issues.

ASSESSMENT TOOLS TO EVALUATE STUDENT LEARNING:

In-Class Assessment:

Attendance.
Quizzes.
Presentations.
Assignments.

Ward Assessment:

A test is conducted in mid and end of the clinical rotation to assess the learning of students. It is to ensure that the students develop the required proficiencies under a supervised environment.

Examination Assessment:

Mid Term examinations:

These are conducted in the mid of the academic year. It comprises of the following components;

Component	Marks
BCQs	100
OSCE	50
VIVA	50
TOTAL	200

Pre-Professional examinations:

These are conducted in the end of the academic year before the final professional examination. It comprises of the following components;

Component	Marks
BCQs	100
OSCE	75
VIVA	75
TOTAL	250

Professional Examinations:

At the end of each academic year, JSMU conducts the examination. After the final professional examination JSMU will award the students with the Bachelors in Dental Surgery (BDS) degree.

Component	Marks
BCQs	100
OSCE	75
VIVA	75
TOTAL	250

INTERNAL EVALUATION / CONTINOUOUS ASSESSMENT POLICY

Continuous Assessment

1	Assignments / class tests / ward tests	25%
2	Mid-term	35%
3	Pre-prof	35%
4	Extra effort	5%

Assignments / Tests / Mid-term / Pre-prof		
1	Present and Fail	25%
2	Pass	Actual percentage
3	Absent	Zero

Professional annual examination:
Professional annual examination are conducted by the University (JSMU) and comprise theory examinations and OSPE/OSCE.

Eligibility for sitting in the Professional Annual Examinations will be as follows:

1. Minimum of **40% aggregate** marks in all the Internal Examinations (Mid-term, Pre-prof, Assignments and Tests).

2. Students with less then **75% overall class attendance** will not be allowed to sit in the Annual Professional Examinations.

3. Clinical attendance will be maintained separately. Attendance in any clinical rotation which falls below **75%** must be made up by the students.

4. Students must obtain **passing marks in the clinical ward tests**. Failing to do so, students will have to sit for a re-take ward test (only one retake is allowed).

The students must pass the theory and OSPE exam in annual professional examination

If any component of the professional exam is failed the students must appear in the supplementary examination in that specific component.

CIRRICULUM OF PROSTHODONTICS

SECOND YEAR

TOPICS	LEARNING OBJECTIVES By the end of second year BDS, the student should be able to:	MODE OF TEACHING	ASSESSMENT METHOD The students will be assessed during, mid and end of rotation
1.Preclinical Prosthodontics and its scope	At the end of this unit, students will b able to: • Summarize the scope of Preclinical Prosthodontics • Name the various instruments and equipment to be used in the labs	IL SGD Laboratory Demonstrations DOPs	Lab performance Completing the designated tasks
2. Wire bending and wrought wire clasp	At the end of this unit, students will be able to: • Identify the type of pliers • Demonstrate the correct grip of pliers • Perform straightening of a given wire piece • Perform bending of wires into given shapes and alphabets • Construct well adapted clasps on canines, premolars and molars without acute bends and proper tag at the end	IL SGD Laboratory Demonstrations DOPs	Lab performance Completing the designated tasks
3. Gypsum	At the end of this unit, students will be able to: • Differentiate between hard and soft plaster • Dispense appropriate amount of plaster for required work • Manipulate with water • Achieve a desired consistency of the mixture	IL SGD Laboratory Demonstrations DOPs	Lab performance Completing the designated tasks

	• Fabricate a plaster slab of given dimensions • Trim the slab up to required size • Perform pouring of ideal moulds for complete dentures. • Fabricate the ideal casts without bubbles • Fabricate the base with soft plaster • Evaluate the amount of time for setting • Conduct trimming of the cast on the model trimmer		
4.Removable partial denture exercise	At the end of this unit, students will be able to: • Identify various parts of an RPD • State the uses of RPDs • Classify the given casts according to Kennedy's classification • Identify different parts of dental surveyor • Perform surveying on ideal partially dentate casts • Prepare a wax pattern of uniform thickness on the given cast • Fabricate the bite rims • Construct well adapted clasps without any acute bends and proper tags • Arrange artificial teeth in the edentulous segments at occlusal level • Identify the heat-cured acrylic resin powder and its liquid monomer • Dispense and manipulate heat cured acrylic resin • Perform packing of acrylic dough • Execute trial closure on bench press • Execute final closure on bench press • Outline and execute the curing procedure • Conduct devesting of flasks • Perform finishing and polishing of the processed denture	IL SGD Laboratory Demonstrations DOPs	Lab performance Completing the designated tasks

5. Impression Making	At the end of this unit, students will be able to • Name and identify different impression materials • Identify different types of impression trays • Select an appropriate impression tray for a given case • Perform material dispensing and mixing according to manufacturers' instructions • Demonstrate proper loading of the impression tray • Carry the loaded tray in the mouth • Perform border molding where required • Identify the set material • Demonstrate tray removal • Identify and inspect for any faults • Fabricate the hard plaster cast without bubbles • Fabricate the soft plaster base • Retrieve the cast from the impression • Conduct trimming of the cast on the model trimmer	IL SGD Laboratory Demonstrations DOPs	Lab performance Completing the designated tasks
6. Complete Denture	At the end of this unit, students will be able to • Name the parts and surfaces of a complete denture • Fabricate the casts from ideal moulds • Outline the steps of complete denture fabrication • Identify the types of articulators • Enumerate the various parts of an articulator • Identify the self-cured acrylic resin and its liquid monomer • Construct a well-adapted record base with self cured acrylic resin • Prepare occlusal rims according to the ideal dimensions • Perform mounting of record bases on hinge type articulators Perform anterior tooth setup of upper arch	IL SGD Laboratory Demonstrations DOPs	Lab performance Completing the designated tasks

	according to ideal parameters • Perform posterior tooth setup of upper arch according to ideal parameters • Perform tooth setup of lower arch in occlusion with the upper arch • Carry out final wax up and festooning		

THIRD YEAR

S. NO.	TOPIC	LEARNING OBJECTIVES By the end of third year BDS, the student should be able to:	MODE OF TEACHING	ASSESSMENT METHOD The students will be assessed during, mid and end of rotation
1.	Introduction to removable partial dentures	• Define the term "Removable partial denture" • Discuss the benefits of partial dentures • Enumerate the basic component parts of a partial denture • Differentiate between acrylic and cast partial dentures	lecture	MCQs OSCE
2.	Tooth loss and aging	• Understand the demands of patients after tooth loss • Understand the consequences of tooth loss • Explain the benefits of restoration of the missing teeth	lecture	MCQs OSCE
3.	Classification of partially edentulous arches	• Recall the requirements of a universally acceptable classification system • Enlist a few classification systems in use • Summarize the salient features of Kennedy's classification • Enlist the Applegate rules (in correct order) • Identify the given casts according to Kennedy's classification	lecture	MCQs, OSCE

4.	Major connectors 1	• Define the term “Major connector” • Describe the guidelines for designing the major connectors • Enlist the mandibular major connectors • Describe the features of different mandibular major connectors	Lecture	MCQs, OSCE
5.	Major connectors 2	• Enlist the maxillary major connectors • Describe the features of different maxillary major connectors	Lecture	MCQs, OSCE
6.	Major connectors 3	• Describe the designing of mandibular major connectors • Describe a systematic approach for designing the maxillary major connectors	Lecture	MCQs, OSCE
7.	Minor connectors	• Define the term “Minor connector” • Recall the functions of a minor connector • Describe the form and location of minor connectors • Discuss the role of tissue stops • Locate the finishing lines	lecture	MCQs, SAQs, OSCE

8.	Rests and rest seats	• Define the terms “Rest” and “Rest seat” • Enlist the functions of a rest • Recall the form of an occlusal rest and rest seat • Explain the concept of an extended occlusal rest • Discuss the features of the interproximal rest seats • Describe the application of intracoronal rests • Recall the support for occlusal rests • Comprehend the application of lingual rests on anterior teeth • Comprehend the application of incisal rests	Lecture	MCQs, OSCE
9.	Direct retainers 1	• Define the term “Direct retainer” • Summarize the role of direct retainer in prosthesis movement control • Classify the direct retainers used in partial dentures	Lecture	MCQs, , OSCE
10.	Direct retainers 2	• Carry out analysis of tooth contours for retentive clasps • Discuss the factors affecting the amount of retention of clasps	Lab demonstations	MCQs, OSCE
11.	Direct retainers 3	• Recall the main types of clasp assemblies	lectures	MCQs, , OSCE
12.	Direct retainers 4	• Outline the criteria for selecting a given classp • Recall the basic principles of clasp design	lectures	MCQs, OSCE
13.	Direct retainers 5	• Recall the basic principles of clasp design (Continued)	lecture	MCQs, OSCE

14.	Indirect retainers	• Define the term “Indirect retainer” • Recall the functions of an indirect retainer • Recall the factors affecting the effectiveness of indirect retainers • Classify the forms of indirect retainers	Lecture	MCQs, OSCE
15.	Denture base considerations	• Recall the functions of denture bases • Enumerate the methods of attaching the denture bases to framework • Describe the ideal denture base material • Discuss the advantages of metal bases	Lecture	MCQs, OSCE
16.	Principles of partial denture design 1	• Describe the design principles of Kennedy’s Class I, II and III situations • Outline the strategies for controlling the amount of stress transmitted to the abutment teeth • Outline the essential steps in designing the partial denture □	Lecture	MCQs, OSCE
17.	Principles of partial denture design 2	• Explain the components of partial denture design • Perform designing of partial dentures (exercise)	Lecture	MCQs, OSCE
18.	Surveying 1	• Define the terms: Surveying, Surveyor, Path of placement • Describe the parts of a dental cast surveyor • Outline the purposes of surveyors	Lecture	MCQs, OSCE

19.	Surveying 2	• Remember the factors that determine the path of placement and removal • Illustrate the step by step procedure of surveying the diagnostic cast • Perform the Tripoding • Carry out the surveying of the master cast (exercise)	Lecture	MCQs, OSCE
20.	Diagnosis and treatment planning 1	• Define the terms “Diagnosis” and “Treatment planning” • Understand the uniqueness of treatment for a patient • Perform a detailed history taking • Perform a detailed clinical examination • Order and interpret appropriate radiographs	Lecture	MCQs, OSCE
21.	Diagnosis and treatment planning 2	• Explain the role of diagnostic casts in treatment planning	Lecture	MCQs, OSCE
22.	Diagnosis and treatment planning 3	• Formulate a list of differential diagnosis • Formulate a treatment plan for a given case	Lecture	MCQs, OSCE
23.	Preparation of the mouth for removable partial dentures	• Identify the mouth preparations required for a given case • Order the oral surgical preparation • Implement procedures to manage/condition abused and irritated soft tissues • Understand the need for periodontal preparation • Understand the need for abutment teeth preparation	Lecture	MCQs, OSCE

24.	Preparation of the abutment teeth	• Classify the abutment teeth according to need of modifications • Understand the sequence of abutment preparations • Plan the abutment preparations on sound enamel or existing restorations • Plan the abutment preparations using conservative restorations • Plan the abutment preparations using complete coverage crowns • Identify the need for splinting abutment teeth • Plan using isolated teeth as abutments	Lecture	MCQs, OSCE
25.	Impression materials and procedures for removable partial dentures	• Summarize the properties of available impression materials • Understand the precautions to be observed in handling hydrocolloid impressions • Perform the step-by-step procedure for making hydrocolloid impressions • Perform the step-by-step procedure for making a stone cast • Explain the possible causes of an inaccurate or weak cast • Fabricate individual impression trays from acrylic resin	Lecture	MCQs, OSCE

26.	Support for the distal extension denture base	• Understand the requirements of support for the distal extension denture base • Outline the factors that influence the support of a distal extension denture base • Plan for recording the anatomic form impression • Plan for recording the functional form impression	Lecture	MCQs, OSCE
27.	Occlusal relationships for removable partial dentures	• Describe the desirable occlusal contact relationships • Enumerate the methods of establishing occlusal relationships • Select appropriate materials for posterior teeth • Understand the jaw relations for a mandibular removable partial denture opposing a maxillary complete denture	Lecture	MCQs, OSCE
28.	Initial placement, adjustment and servicing of the removable partial denture	• Identify any adjustments to the bearing surfaces of denture bases • Identify any interference from denture framework • Adjust the occlusion in harmony with natural and artificial dentition • Cite necessary instructions to the patients	Lecture	MCQs, OSCE

29.	Repairs and additions to removable partial dentures	• Manage a case with broken clasp arms • Manage a case with fractured occlusal rests • Manage a case with distortion or breakage of other components—major and minor connectors • Manage a case with loss of a tooth or teeth not involved in the support or retention of the restoration • Manage a case with loss of an abutment tooth necessitating its replacement and making a new direct retainer	Lecture	MCQs, OSCE
30.	Temporary removable partial dentures	• Outline the scope of temporary dentures • Discuss different designs of temporary partial dentures • Recall the effects on appearance, space maintenance and occlusal relationships • Implement procedures to condition the patient for wearing a partial denture • Understand the procedure for placement of temporary dentures	Lecture	MCQs, OSCE

FINAL YEAR BDS

S. NO.	TOPIC	LEARNING OBJECTIVES By the end of final year BDS, the student should be able to:	MODE OF TEACHING	ASSESSMENT METHOD The students will be assessed during, mid and end of rotation
01	Introduction to Removable partial denture; Partially edentulous patient's epidemiology, physiology & terminology.	● Define the following • Removable partial denture • Cast partial denture • Abutment • Retainer • extra coronal partial denture • tooth supported RPD • tooth tissue supported RPD • temporary RPD • Interim denture • Transitional denture • Treatment denture • Centric relation • Centric occlusion • Eccentric relation • Support • Retention • Reciprocation • Bracing • Appliance • Saddle area • Stability ● Discuss the reasons and sequelae of partial tooth loss in detail Describe the benefits of an RPD ● Describe the tissue damages associated with RPDs ● Explain the need and demand of removable partial denture treatment.	I.L. S.G.D	Class Test MCQs

2	Applied anatomy and physiology of oral cavity Classification of partially edentulous arches.	● Discuss the Clinical application of anatomy of oral cavity ● Idenify the various maxillary and mandibular landmarks ● Describe the requirements of an acceptable method of classification of RPDs ● Describe classification system based on Support ● Describe Bailyn, Skinner and Cummer classification ● Identify different Kennedy's classifications along with modifications ● Elaborate Applegate's rules for applying the Kennedy's classification	I.L. S.G.D Clinical Demo Study Casts	Class Test MCQs
03	Oral manifestations of local and systemic diseases	● Discuss the following: - Problem related to xerostomia - Problem related to poor healing - Problem related to osteoporosis - Problem related to osteopenia - Problem related to autoimmune diseases	I.L. S.G.D Clinical Demo	ClassTest MCQ
04	History, Examination, Diagnosis and treatment planning	● Outline introduction to history taking ● Construct medical and dental history taking: ● Define the significance of medical history taking ● Explain extra oral examination of a prosthodontic patient in detail ● Explain intra oral examination of a prosthodontic patient in details: (especially in terms of Saliva, Existing teeth,	I.L S.G.D Clinical Demo	Class Test MCQs OSCE

		Occlusion, midline, occlusal stops, periodontal Condition, Tooth surface loss) ● Describe radiographic examination with respect to the following: Crown to root ratio periapical pathology retained residual roots thickness of mucosa bone support and quality root configuration of abutment teeth ● Define Diagnostic cast, its procedure and purpose along with the diagnostic findings. ● Explain differential diagnosis with indications for fixed partial denture and removable partial denture in detail. ● Explain on the basis of diagnostic findings, how to choose between complete denture and removable partial denture		
05	Biomechanics of removable partial dentures	● Describe the bio mechanical consideration and design solutions for an RPD ● Describe possible movements of an RPD ● Discuss the concept of ● Lever 1 ● Lever 2 ● Lever 3 ● Discuss the concept of differential support ● Describe the role of periodontal ligaments in removable partial denture.	I.L S.G.D	Class Test MCQs OSCE

06	Connectors (major and minor connectors)	● Identify the components of a removable partial denture. ● Define Major connector. ● Enlist maxillary major connectors. ● Enlist mandibular major connectors. ● List the location and ideal requirements for each major connector. ● Discuss the indications and contraindications of each major connector. ● Explain design considerations for major connectors. ● Define Minor connectors. ● Enlist the types of minor connectors. ● Describe the function, form and locations of different minor connectors. ● Define tissue stops and finishing index tissue stops ● Discuss finishing lines	I.L S.G.D Clinical Demo Study Casts	Class Test MCQs OSCE
07	Rests and Rest Seats	● Define rest and rest seat. ● Name the types of rests and rest seats. ● Describe the form of occlusal rest and rest seat in detail. ● Discuss the following types of rest wrt the form, indications, and justifications of their use in detail -Canine rest -Incisal rest -Internal rest	I.L S.G.D Clinical Demo Study Casts	Class Test MCQs OSCE
08	Direct retainers	● Define direct retainer. ● Explain the means of achieving direct and indirect retention in removable partial dentures. ● Discuss the role of direct retainer in prosthesis movement control ● Classify direct retainers.	I.L S.G.D Clinical Demo Study Casts	Class Test MCQs OSCE

		● Differentiate between Extracoronal and Intracoronal retainers. ● Discuss the types, Indications, Contraindications, Advantages and disadvantages of Intracoronal retainers ● Discuss the types, Indications, Contraindications, Advantages and disadvantages of Extracoronal retainers ● Analyze tooth contours for retentive clasps ● Describe functional requirements of clasp ● Discuss the criteria for selecting a given clasp design. ● Discuss the reciprocal arm function ● List the types and basic parts of clasp assemblies. ● Explain basic principles of clasp design		
09	Indirect retainers	● Define Indirect Retainer. ● Describe factors influencing effectiveness of indirect retainer. ● Discuss the forces acting on the denture ● Explain the concept of Fulcrum line. ● Discuss the auxiliary functions of indirect retainers ● Describe the different types of indirect retainers: Auxiliaryocclusal rests. Canine rests. Canine extension from occlusal rests. Cingulumbars(continuous bars)and linguoplates. Modification areas.	I.L S.G.D Clinical Demo Study Casts	Class Test MCQs OSCE

		Rugae support.		
10	Denture base considerations.	● Define Denture base. ● Discuss the ideal materials and requirements of denture base ● Explain the functions of denture bases in terms of: Tooth supported partial denture base Distal extension partial denture base ● Discuss the methods of attaching denture bases. ● Enumerate the advantages and disadvantages of metal and acrylic denture bases. ● Describe the methods of attaching artificial teeth: ● Define Relining and discuss the need for relining a RPD ● Explain “Stress breakers”	I.L S.G.D	Class Test MCQs
11	Principles of removable partial denture design.	● Identify difference in prosthesis support and the influence on design ● Differentiate between two main types of removable partial denture, in terms of support, impression registration and clasp design. ● Elaborate the essentials of partial denture design. ● Explain the following components of partial denture design ○ Tooth support ○ Ridge support. ○ Major and minor connectors. ○ Direct retainer for tooth supported partial denture ○ Direct retainer for distal extension partial denture. ○ Stabilizing components ○ Guiding plane. ○ Indirect retainers.	I.L. Tutorial S.G.D Clinical Demo Study Casts	Class Test MCQs OSCE

		● Describe the various systemic approaches to partial denture design: ○ Class I removable partial denture. ○ Kennedy class II removable partial denture ○ Kennedy class III removable partial denture ○ Kennedy class IV partial denture		
12	Dental Surveying	● Define a Surveyor ● Describe the purposes of Dental surveyor. ● Discuss and compare the different types of dental surveyor ● List the parts of dental surveyor. ● Illustrate the types of survey lines. ● Discuss the factors that determine path of placement and removal ● Discuss the Guide planes, their types and functions ● Explain the procedure of surveying a diagnostic cast (all steps) in detail. ● Explain the procedure of surveying a master cast (all steps) in detail ● Explain block out in detail	I.L. S.G.D Study Casts Lab teaching	MCQs OSCE
13	Preparation of mouth and abutment for removable partial dentures	● Discuss the oral surgical procedures may be required for removable partial dentures? ● Discuss the management of abused and irritated tissue ● Explain the use of tissue conditioning materials. ● Enlist the periodontal preparations required for removable partial dentures ● Classify the abutment teeth.	I.L. S.G.D Study Casts Clinical Demo	Class Test MCQs

		● Explain the sequence of abutment preparation on sound teeth and existing restorations ● Define guide planes ● Discuss the preparation of guide planes. ● Outline the preparation of rest seats. ● Explain the technique to create an undercut. ● Elaborate abutment preparation using crowns. ● Elaborate abutment preparation using conservative restoration. ● Explain splinting of abutment teeth.		
14	Impression techniques and modification	● Classify impression materials. ● Enlist the Impression materials used for RPD. ● Describe Anatomic or functional form of impression ● Discuss indication of functional impression. ● Identify the different types of impression trays. ● Explain the impression procedure for an RPD in detail. ● Explain the following Impression techniques: Mclean's physiologic impression technique Functional relining method Selective pressure impression Altered cast technique Modifications of altered cast technique.	I.L. S.G.D Clinical Demo	Class Test MCQs OSCE

15	Support for the Distal Extension Denture Base	● Discuss the factors influencing the support of a Distal Extension Denture Base	I.L. S.G.D	Class Test MCQs
16	Trial of metal framework	● Describe the protocol for an RPD framework try in and adjustment. ● Explain fitting of frame work to teeth and supporting structures. ● Explain fitting of framework to opposite occlusion. ● Explain how discrepancies will be corrected in a metal framework ● Discuss the framework finishing.	I.L. S.G.D Clinical Demo	Class Test MCQs
17	Occlusal relations for removable partial denture. (Maxillo-mandibular relations)	● Explain desirable occlusal contact relationship for removable partial denture. ● Discuss methods for establishing occlusal relationship ● Demonstrate the use of facebow. ● Elaborate the use of articulators. ● Explain articulation techniques and discuss splint cast technique in detail. ● Establish jaw relations for mandibular removable partial denture opposing a maxillary complete denture	I.L. S.G.D Clinical Demo Lab teaching	Class Test MCQs OSCE
18	Selection of teeth	● Determine the size, form and color of anterior teeth ● Determine the size and form of posterior teeth	I.L S.G.D Clinical Demo	Class Test MCQs

19	Laboratory procedures. 1.Waxup and Casting	- Describe the procedure of stone cast duplication - Explain the procedure of construction of wax pattern and casting procedures - Discuss the Spruing, investing, burnout, casting,	I.L. S.G.D Clinical Demo	Class Test MCQs
	2. Arrangement of teeth. 3.Processing and finishing denture.	removing the casting from investment and finishing. - Demonstrate the fabrication of record bases. - Demonstrate anterior teeth arrangement. - Demonstrate posterior teeth arrangement. - Demonstrate Characterization of teeth - Discuss the arrangement of teeth to an occluding surface. - Demonstrate the process of waxing and flasking of removable partial denture before processing acrylic resin bases. - Explain remounting of denture for occlusal corrections. - Demonstrate denture polishing.	Lab teaching	
20	Insertion and post insertion instructions and recall.	● Explain the adjustment to denture bearing area. ● Describe the occlusal interferences from denture framework ● Evaluate occlusal interferences ● And adjustment of occlusion in harmony with natural and artificial dentition. ● Communicate post-insertion instructions to the patient ● Discuss the patient's follow up services required after insertion visit.	I.L. S.G.D Clinical Demo	Class Test MCQs OSCE

21	Relining, Rebasing and Repair	● Define Relining and rebasing ● Discuss the indications of relining of tooth supported partial denture ● Discuss the procedure of relining of tooth supported partial denture ● Discuss the indications of relining of tooth tissue supported partial denture ● Discuss the different procedures of relining of tooth tissue supported partial denture ● Describe the methods of restabilising occlusion on a relined removable partial denture ● Discuss the repair of denture wrt: Broken Clasp arms Fractured occlusal rest Distortion or breakage of Major/ minor connector Loss of tooth/ teeth	I.L. S.G.D Clinical Demo	Class Test MCQs OSCE
22	Types of partial denture	● Define Interim partial denture. ● Explain Interim partial denture indications, impression, laboratorial procedure, insertion and follow up. ● Define Every denture. ● Explain Every denture indication, impression, laboratorial procedure, insertion and follow up. ● Define Spoon denture. ● Explain Spoon denture indications, impression, laboratorial procedure, insertion and follow up. ● Define Swing lock partial denture. ● Explain Swing lock partial denture indications, impression, laboratorial	I.L. S.G.D Clinical Demo	Class Test MCQs

		procedure, insertion and follow up.		

01	Introduction to Prosthodontics	● Define Prosthodontics ● Discuss the divisions in Prosthetic dentistry ● Discuss the objectives of prosthetic dentistry ● Define o Conventional complete denture o Overdenture o Single complete denture o Immediate complete dentures o Implant supported complete dentures o Retention o Stability o Support	I.L. S.G.D	Class Test (MCQs)
02	Applied anatomy and physiology of complete denture	● Discuss the anatomy and physiology of extraoral landmarks of prosthodontics importance - Inter-pupillary line - Ala-tragus line - Canthus-tragus line - Nasolabial sulcus - Vermillion border - Philtrum - Modiolous - Angle of the mouth	I.L. S.G.D Study casts Clinical Demo	Class Test MCQs OSCE

		● Describe anatomical landmarks common to both maxillary and mandibular arches (intraoral) o **In Maxilla:** - Residual ridge - Maxillary tuberosity - Palate - Mid-palatine raphae - Incisive papilla - Palatine rugae - Torus palatinus - Fovea palatinae - Post palatal seal - Hamular notch - Cuspid eminence - Zygomatic process o **In Mandible:** - Residual ridge - External oblique ridge - Buccal shelf area - Mental foramen - Retromolar pad area - Mylohyoid ridge - Torus mandibularis - Internal oblique ridge - Genial tubercle ● Identify various anatomic landmarks located in maxilla ● Identify various anatomic landmarks located in mandible ● Define and enlist primary and secondary denture stress bearing areas ● Discuss the relief areas o Describe the border structures that limit the periphery of the denture		
		- Describe the border structures that limit the periphery of the denture **MAXILLA** o Labial frenum o Labial vestibule o Buccal frenum		

		○ Buccal vestibule ○ Hamular notch ○ Posterior palatal seal ○ Muccogingival fold ○ Fovea palatinae **MANDIBLE** ○ Labilafrenum ○ Labial vestibule ○ Buccalfrenum ○ Buccal vestibule ○ Lingual frenum ○ Alveololingual sulcus ○ Retromolar pad ○ Pterygomandibularraphae		
03	Classifications of various anatomical structures	● Classify frontal face form (House classification) and lateral face form (Angle) ● Classify Residual ridge according to contour (atwood) and morphology (mc garry et al) ● Classify lip according to Length, thickness, mobility, support ● Classification of the tongue according to size and position ● Classify frenal and border muscle attachments ● Classify hard and soft palate	I.L. S.G.D Clinical Demo	Class Test MCQs OSCE
04	Identification and evaluation of patients	● Record brief patient's history ● Examine the Patient clinically wrt: **Extraoral examination:** i. Symmetry ii. Face form iii. Deviation/ deflection iv. Lip v. Smile line (low, avg, high) vi. Wrinkles vii. Lateral face form viii. Mouth opening ix. Rest vertical dimension x. TMJ (palpation, movements, sounds) xi. Muscles of mastication	I.L. S.G.D Study casts Clinical Demo	Class Test MCQs, OSCE

		xii. Lymph nodes **ntraoral Examination** xiii. Oral aperture xiv. Oral mucosa examination xv. Tongue xvi. Saliva xvii. Maxillary arch (Shape/ form, Contour/ cross section, Frenal and border muscle attachment, Palatal vault, Soft palate (classification), Tuberosity, Median palatine raphe and tori) xviii. 0Mandibular arch (Shape/ form, Contour/ cross section, Frenal and border muscle attachment, retromylohyoid fossa, floor of the mouth and tori) **Others** xix. Inter-arch space xx. Bony prominences xxi. Gag reflex xxii. Undercuts xxiii. Ridge relationships xxiv. ● Outline the Treatment Plan ● Adjunctive care ● Prosthodontic phase		
05	Gerodontology	● Discuss the Impact of edentulism in old age (Mucosa, Bone, Saliva, Jaw movement, Taste and smell sensations, Nutrition) ● Describe the consequences of bone loss in edentulous patients (anatomical, soft tissue, esthetics, psychological) ● Discuss various effects of medication ● Discuss various medical conditions having oral manifestation ● Explain the Principles of prosthodontics procedures in geriatric patients	I.L. S.G.D	Class Test MCQs

06	Systemic health aspects and nutritional considerations for edentulous patients	● Describe oral-systemic considerations that may influence an adaptive prosthodontic experience ○ Mucosal conditions esiculoerosive, Systemic lupus erythematosus, Burning mouth syndrome) ○ Oral movement disorders ○ Salivary dysfunction (Hyposalivation, Hypersalivation) ○ Xerostomia ○ Sjogren's syndrome ○ Diabetes ● Discuss the Nutrition Guidelines for Patients Undergoing Removable Prosthodontic Treatment ● Describe the Risk Factors for Malnutrition in Patients with Dentures	I.L. S.G.D Clinical Demo	Class Test MCQs OSCE
07	Role of saliva in completely edentulous patients	● Discuss the following a. Salivary flow b. Viscosity c. Medical conditions affecting the salivary flow and viscosity d. Xerostomia ● Describe the role of saliva in completely edentulous patients ● Explain the Management of altered salivary flow (xerostomia)	I.L. S.G.D Clinical Demo	Class Test MCQs
08	Biomechanics of complete denture prosthodontics	● Discuss the Factors that affect the successful denture fabrication? ● Define Retention ● Explain the factors by which retention can be achieved in complete dentures (anatomic, physical, physiological, mechanical, muscular, dislodging forces) ● Define stability ● Discuss the factors affecting the stability of complete dentures ● Define support	I.L. S.G.D	Class Test MCQs,

		● Discuss the factors affecting the support of complete dentures		
09	Sequalae caused by wearing complete denture	● What are the Direct Sequelae Caused by Wearing Removable Prostheses (Complete and partial denture)? (Mucosal reactions, Oral galvanic currents, altered taste perception, burning mouth syndrome, Gagging, Residual ridge reduction, Periodontal disease (abutments), Caries (abutments), Denture induced stomatitis, Flabby ridge, Traumatic ulcer, Epulisfissuratrum, Angular cheilitis, Candidiasis) ● Define Denture irritation hyperplasia, its causes, mechanism and management ● Enlist the etiological factors causing cheek biting and Discuss its management ● Enlist the etiological factors causing traumatic ulcers ● Discuss the management of traumatic ulcers ● Define Denture irritation hyperplasia, its cause mechanism and management ● Define Denture stomatitis. ○ Describe the etiological factors causing DS ○ Discuss the Factors predisposing to candida associated DS ○ Explain the management and preventive measures ● Describe Kelly's Syndrome. Discuss its features ● Describe the Indirect Sequelae Caused by Wearing Removable Prostheses: (Complete or Partial Dentures) ● Control the sequelae caused by the use of Complete Dentures -	I.L. S.G.D Clinical Demo	Class Test MCQs, OSCE

10	Mouth preparations including pre-prosthetic surgery	● Describe in detail the nonsurgical methods to improve the patient's denture foundation ○ Rest for denture bearing area ○ Occlusal correction ○ Good nutrition ○ Conditioning of patient's musculature ● Enlist the preprosthetic surgical methods to improve the patient's denture foundation ● Discuss the Indications for maxillary tori removal ● Manage pressure on mental foramen in case of extreme residual ridge resorption ● Explain various methods used for the enlargement of the Denture bearing areas? ○ Vestibuloplasty ○ Ridge augmentation	I.L S.G.D Clinical Demo	Class Test MCQs,
11	Impressions, theories and techniques	• Define impression materials? What are the various materials suitable for recording CD impressions • Discuss the optimal qualities for prosthodontics impression material • Classify impression material on the basis of setting reaction and elasticity • Discuss impression materials used for CD in detail • Discuss the disinfection of various impression materials • Define impression tray? Describe requirements of an ideal impression tray. • Classify the impression tray used for CD impression • Discuss the requirements of custom tray • List the objectives and principles of an impression for complete dentures • Define primary impression and discuss the steps involved in recording the primary impression	I.L. S.G.D Study casts Clinical Demo Lab teaching	Class Test MCQs, OSCE

		• Define secondary impressions. • Define border molding • List the steps involved in secondary impression procedure (including border molding movements) • Describe different Impression techniques for CD ○ Based on mouth opening ○ Based on types of trays used ○ Based on theories of impression ○ Based on purpose of impression ○ Based on material used • Enlist lab steps involved after taking secondary impressions		
12	Maxillomandibu lar relations	● Define maxilla-mandibular relation. ● Discuss mandibular movements in the frontal sagittal and horizontal planes. (Posselt's Envelope of motion) ● Discuss the anatomic determinants of mandibular movements. ● Define the Centric relation, Centric occlusion, rest position, muscular position, intercuspal position, retruded contact position, Excursive movements (working, non- working) ● Define rest vertical dimension and occlusal vertical dimension. ● Define the terms record base and occlusal rim. ● Discuss the materials used for record base and occlusal rims ● Discuss construction and specifications of maxillary and mandibular occlusal rims ● Establish the following ○ Labial form of occlusal rims ○ Establishing the occlusal plane ● Define Orientation relations? How will you record it ● Define Vertical relations. What are the different Methods of determining vertical relations ● Define Horizontal relations	I.L. S.G.D Clinical Demo Lab teaching	Class Test MCQs, OSCE

		● Discuss the different Methods of determining centric relations		
13	Articulations and articulators	● Define articulators ● Discuss the Uses/ purpose of articulators ● Discuss in details various types of articulators ● Classify articulators on the basis of ○ Adjustability ○ Based on the theories of occlusion ○ Based on the stability to stimulate jaw movements ● Differentiate between arcon and non arcon type's articulators. ● List parts of semi adjustable articulators.	I.L. S.G.D Clinical Demo Lab Teaching	Class Test MCQs, OSCE
14	Dental Facebow	● Describe face bow and its uses. ● Describe various types of face bows. ● Enlist the parts of facebow ● Discuss the transfer of face bow record on to semi adjustable articulator and mounting the casts on a semi adjustable articulator.	I.L. S.G.D Clinical Demo	Class Test MCQs, OSCE
15	Selection and arrangement of teeth	• Define neutral zone. • Define over jet and overbite. • Define incisal guidance. • Explain the nine parameters of smile • Discuss factors responsible for size, shape, color, shade of teeth selection • Discuss the different materials used for denture teeth • Discuss the ten landmarks for CD teeth setup. • Discuss anterior and posterior teeth setup in detail • Discuss the significance of compensating curve in teeth setup • Discuss the setup for retrognathic and prognathic facial skeletons.	I.L. S.G.D Clinical Demo Lab teaching	Class Test MCQs, OSCE

		• Explain the advantages and disadvantages of anatomic teeth and non-anatomic teeth		
16	Concepts of Occlusion in complete dentures	● Define occlusion, centric occlusion and the balanced occlusion. ● Discuss the concepts of occlusion in CD patients (Types of occlusion) Unilateral Balanced occlusion Bilateral balanced occlusion Mono plane(non- balance) occlusion Lingualized occlusion ● Describe the Importance of balanced occlusion ● Describe the Advantages, disadvantages, indications, contraindications of different types of occlusion ● Discuss the various Factors influencing balanced occlusion ○ Condylar guidance ○ Incisor guidance ○ Occlusal plane ○ Cuspal angulation ○ Compensatory curves	I.L. S.G.D Clinical Demo	Class Test MCQs OSCE
17	Trial and insertion	● List the objectives of the try in of the trial denture. ● Evaluate the individual trial denture in mouth ● Discuss in detail the final processing of the complete dentures. ● Discuss in detail the materials used as denture base for CD ● Describe different types of curing cycles. ● Describe the role of PIP in adjustment of denture base ● Discuss the factors responsible for errors in occlusion? How will you correct them ● List post insertion instructions.	I.L. S.G.D Clinical Demo lab teaching	Class Test MCQs, OSCE

		● Discuss post insertion follow up (complaints)		
18	Speech considerations with complete dentures	● Discuss the role of teeth and other structures in speech production ● Describe the methods for speech analysis ● Discuss the Prosthetic considerations in complete edentate patient using complete dentures.	I.L. S.G.D Clinical Demo	Class Test MCQs,
19	Relining, Rebasing and repair	● ist indications and contraindication of relining and rebasing. ● Differentiate between relining and rebasing. ● Describe lab and clinical steps involved in relining and rebasing. ● Describe chairside technique of relining ● list causes of denture fracture. ● Describe different methods of denture repairing.	I.L. S.G.D Clinical Demo	Class Test MCQs, OSCE
20	Overdentures	● Define over dentures. ● List types of over dentures. ● List advantages and disadvantages of over dentures. ● List indications and contraindications of over dentures. ● Discuss the treatment planning for overdenture ● Describe clinical and laboratory procedures related to over dentures. ● Describe insertion, follow up and maintenance of over dentures.	I.L. S.G.D Study casts Clinical Demo	Class Test MCQs, OSCE

21	Immediate Dentures	● Define immediate denture. ● List types of immediate denture. ● List indications of immediate dentures. ● List contraindications of immediate denture. ● Discuss Clinical and laboratory procedures related to immediate dentures ● Discuss the preop and post op instructions given to the patients ● Discuss multi-disciplinary approach including care during surgery related to immediate denture. ● Describe insertion, follow up and maintenance of immediate dentures	I.L. S.G.D Study casts Clinical Demo	Class Test MCQs OSCE
22	Single complete dentures	● Define single complete dentures ● Discuss the problems related to the single complete denture ● Discuss the common occlusal disharmonies and ways to adjust them. ● Describe the methods to achieve balanced occlusion in single CD ● Explain the tooth modifications techniques to harmonize occlusion in single CD patient ● Enlist the Occlusal materials for single complete dentures.	I.L. S.G.D Demonstration Clinical Demo C.B.L	Class Test MCQs OSCE
23	Management of special prosthodontic conditions	● Define Combination syndrome. Enlist its etiological factors. How will you diagnose and manage the case? ● Define xerostomia. Enlist its etiological factors. What is the general and prosthodontic management of a xerostomic patient ● Discuss the various Factors affecting the resorption of residual ridge ● Manage a case with extreme residual ridge resorption	I.L. S.G.D Clinical Demo	MCQs

		● Discuss the management of an edentulous patient having diabetes. ● Discuss the management of an edentulous patient having hypertension.		

01	An introduction to fixed Prosthodontic s	● Define the following terms: Fixed prosthodontics ● crown and bridge ● Inlay ● Onlay ● laminated veneers ● Partial Veneer crown ● full veneer crown ● retainers ● connectors ● pontics ● abutment ● saddle area ● Enumerate indications and contraindications for crowns ● Enumerate indications and contraindications for FDPs ● Describe the different components of FDP	I.L. S.G.D	Class Test MCQs

02	History, Examination, Diagnosis and treatment planning	● Discuss how history will be recorded ● Explain and demonstrate extra and intraoral examination of patient ● Discuss the key points of radiographic examination that include: ○ Crown to root ratio ○ periapical pathology ○ thickness of mucosa ○ bone support and quality ○ root configuration teeth ● Discuss the cast examination in detail ● Explain Differential Diagnosis using Kennedy classification	I.L. S.G.D Clinical Demo	Class Test MCQs OSCE
03	Treatment planning of fixed dental prosthesis	● Describe the adjunctive care prior to fixed replacements: i. Elective endodontic procedure ii. Crown lengthening procedure iii. Restorations iv. Correction of occlusal plane v. Scaling and root planning ● Discuss the various fixed treatment options ● Discuss the Design consideration for individual conditions in FDP ● Discuss the various factors involved in the treatment planning of FDP ● Explain the criteria for the selection of retainers a. Alignment of abutment teeth and retention b. Appearance c. Condition of abutment teeth d. Cost e. Preservation of tooth structure ● Discuss the criteria for the selection of abutments? a. Location, condition and position of tooth b. Root configuration c. Crown root ratio	I.L. S.G.D Clinical Demo Study casts	Class Test MCQs OSCE

		d. Root support e. Periodontal ligament area f. Assessment of pulpal health		
		● Discuss the different types of abutment ○ Healthy/ideal abutments ○ Cantilever abutments ○ Pier abutments ○ Tilted abutments ○ Extensively damaged abutments ○ Implant abutments		

04	Classifications and types of fixed partial dentures	● Classify fixed partial dentures ● Describe FDP on the basis of abutment teeth ● Discuss FDP on the basis of design in detail ● Discuss fixed partial denture on the basis of material	I.L. S.G.D	Class Test MCQs
05	Principles of tooth preparation	● Enlist various partial and full coverage indirect restorations. ● Explain the principles tooth preparation in reference to: a. Biological consideration b. Mechanical consideration c. Esthetic consideration	I.L. S.G.D Clinical Demo	MCQs OSCE
06	Tooth preparation (partial coverage)	● Enlist various partial and full coverage indirect restorations. ● Describe the indications and contraindications for provision of: a. Inlay a. Onlay ● Describe the clinical assessment required and the steps of preparation for inlay and onlay. ● Enlist materials available for these restorations. ● Discuss indications and contraindications for veneers.	I.L. S.G.D Clinical Demo Phantom head	Class Test MCQs OSCE
		● Describe the diagnostic procedures involved in treatment planning. ● Explain the importance of quality and quantity of enamel for predictable bonding. ● Describe tooth preparation, soft tissue management and impression making for veneers.		

07	Tooth preparation (complete coverage)	● Describe the indications and contraindications for the following types: ○ Porcelain fused to metal crown ○ All metal crown ○ All ceramic crown ● Describe the advantages and disadvantages for the following types: ○ Porcelain fused to metal crown ○ All metal crown ○ All ceramic crown ● Describe the clinical assessment required and the steps of preparation for: ○ Porcelain fused to metal crown ○ All metal crown ○ All ceramic crown	I.L. S.G.D Clinical Demo Phantom head	Class Test MCQs OSCE
08	Tissue management and impression making	● Explain the prerequisites of recording impression for Fixed dental prosthesis ● Discuss the various techniques for fluid control and soft tissue management ● Discuss various methods of tissue displacement in detail ● Enlist the various impression materials used in FDP ● Compare different impression materials in fixed prosthodontics ● Describe the following Impression procedures a. Double mix technique b. Single mix technique c. Triple tray technique ● Discuss disinfection of various impression materials	I.L. S.G.D Clinical Demo	Class Test MCQs OSCE

09	Temporization and provisional restorations	● Discuss the various factors to be considered in making an interim restoration ○ Biological ○ Mechanical ○ esthetics ● List the ideal requirements of provisional restorations ● Describe different materials used to fabricate provisional restorations ● Discuss different techniques used to fabricate provisional restorations ● Differentiate between direct and indirect techniques for anterior and posterior teeth	I.L. S.G.D Clinical Demo	MCQs
10	Lab procedures involved in fabrication of FDP	● List different laboratory steps in construction of FDP ● Describe the following Lab procedures ○ Waxing ○ Spruing ○ Investing ○ Burnout ○ Casting ○ Soldering ○ Ceramic veneering ● Discuss the different die materials used for fixed dental prosthesis ● Enlist different die and casts system ● Describe fabrication of working casts and dies ● Discuss wax pattern fabrication casting and soldering	I.L. S.G.D Clinical Demo Lab Teaching	MCQs
11	Pontic design	● Define Pontic ● Classify ridge defects according to siberts ● Discuss the factors effecting pontic design a. Available space b. Contour of ridge c. Amount of occlusal load ● Discuss various biological, mechanical and esthetics considerations for successful pontic design ● Classify pontics and discuss in detail all its types	I.L. S.G.D	Class Test MCQs OSCE

12	Shade selection	● Discuss factors influencing shade selection. ● Describe guidelines for accurate shade matching. ● Discuss various methods of shade selection.	I.L. S.G.D Clinical Demo	MCQs
13	Dental cements and crown, bridge cementation	● Define and Classify different luting agents ● Describe properties of an ideal luting agent ● Describe indications of different luting agents ● Discuss different cementing materials briefly (properties, merits and demerits of materials) ● Discuss the latest innovations including CAD-CAM technology ● Discuss factors to assess at try-in stage ● Describe the clinical procedure for cementation of inlay onlay, veneer and full coverage ● Discuss the importance of Post cementation follow up ● Discuss the possible complications and management ● Explain failures in fixed partial dentures	I.L. S.G.D Clinical Demo	MCQs
14	Resin bonded fixed dental prosthesis	● Define resin bonded bridge ● Identify resin bonded bridge and its types ● Give its indications and contraindications ● Discuss the advantages and disadvantages ● Describe the types of resin	I.L. S.G.D Clinical Demo	Class Test MCQs OSCE

		bonded bridges:		
01	Introduction to implants	● Define Dental implants ● Discuss the advantages, disadvantages, indications and contraindications of dental implants. ● Discuss different types of implants ● Describe the components of dental implant ● Describe different biocompatible implant materials ● Discuss limitations of dental implants ● Identify different types of implants and its components	I.L. S.G.D	MCQs OSCE

02	Osteointegration and biocompatibility .	● Describe osteointegration and discuss Mechanism of osteointegration. ● Discuss the different stages of Stages of osteointegration. ● Discuss the Theories of bone to implant interface 1. Fibro-osseous integration 2. Osteointegration ● Describe the various Factors influencing the osteointegration (patients and surgical related) ● Discuss the Advantages, disadvantages, indications and contraindications of hydroxyapatite crystal and titanium plasma coating ● Enlist the different Methods to check osteointegration. 1. Percussion test 2. Radiographs 3. Probing depth	I.L. S.G.D	MCQs
03	Prosthodontic options	● Describe various implant supported restorations that can be used for replacement of missing teeth	I.L. S.G.D	OSCE
		● Explain briefly the clinical and laboratory procedure of implant placement: ● Describe the impression techniques used for implants ● Discuss advantages and disadvantages of screw retained and cement retained prosthesis		

01	Introduction to maxillofacial prosthodontics	● Define maxillofacial prosthodontics ● Classify and types of congenital and acquired defects ● Describe Principles governing treatment and management of patients presenting with various defects ● Define obturators. Discuss the different types of obturators ● Discuss different methods of retention of an obturator ● Discuss various cleft palate prosthesis ● Discuss different Speech aid prosthesis ● Discuss various facial prosthesis	I.L. S.G.D	OSCE
01	Theories and principles of occlusion	● Define Occlusion ● Describe optimum functional occlusion ● Discuss various Occlusal schemes I. Canine guided II. Group function II. Mutually protected ● Describe Determinants of occlusal morphology I. Posterior controlling factors (condylar guidance) II. Anterior controlling factors (anterior guidance) II. Vertical determinants of occlusal morphology	I.L. S.G.D	MCQs

		V. Horizontal determinant of occlusal morphology		
02	Concept, etiology, treatment planning and options	Discuss Etiology of TMDs. Describe Treatment options available for the management of TMDs? Discuss different Occlusal SPLINTS and its indications.	I.L. S.G.D	MCQs

PRE-CLINICAL AND CLINICAL ROTATIONS

PROSTHODONTICS ROTATION OF SECOND YEAR BDS

S.NO.	PROCEDURE SKILLS	TEACHING METHODOLOGY	ASSESSMENT TOOLS
	By the end of rotation, the 2nd year students should be able to demonstrate on ideal molds the following:	Teaching via laboratory demonstration Teaching on the ideal models poured in the agar molds	The students will be assessed mid-rotation and end-of rotation test
1.	Instruments and lab protocol		Direct observation of procedural skills Will be assessed during: 1.daily supervision 2.Mid-roation test 3.End of rotation test
2	Complete denture lab fabrication steps over-view		
3	Maxilla and Mandible model pouring (ideal molds)		
4	Wax-up for base plate formation		
5	Investment of the wax up in the flasks		
6	De-waxing and packing with heat cure acrylic polymer		
7	Fabrication of Maxillary and Mandibular wax occlusal rims		
8	Articulation and mounting of the Maxillary and Mandibular occlusal rims		
9	Selection of anterior and posterior teeth		
10	Arrangement of anterior and posterior teeth		

PROSTHODONTICS ROTATION OF THIRD YEAR BDS

S.NO.	PROCEDURE SKILLS	TEACHING METHODOLOGY	ASSESSMENT TOOLS
	By the end of rotation, the 3rd year students should be able to demonstrate on the ideal molds/patient the following:	Teaching via laboratory demonstration Teaching on the ideal models poured in the agar molds	The students will be assessed mid-rotation and end-of rotation test Direct observation of procedural skills Will be assessed during: 1.daily supervision 2.Mid-roation test 3.End of rotation test
1.	Instruments and lab protocol		
2	Removable Partial Denture lab fabrication steps over-view		
3	Maxilla and Mandible model pouring (ideal molds)		
4	Marking of models for Kennedy class-I, II, III & IV		
5	Wax-up for base plate formation		
6	Fabrication of Maxillary and Mandibular wax occlusal rims		
7	Articulation and mounting of the Maxillary and Mandibular occlusal rims		
8	Selection of anterior and posterior teeth		
9	Arrangement of anterior and posterior teeth		
10	Final finishing (correction of denture base & tooth position)		
11	Carving and festooning		
12	Investment of the wax up in the flasks		
13	De-waxing and packing with heat cure acrylic polymer		
14	Finishing and polishing		

PROSTHODONTICS ROTATION OF FINAL YEAR BDS

S.NO.	PROCEDURE SKILLS	TEACHING METHODOLOGY	ASSESSMENT TOOLS
	By the end of rotation, the final year students should be able to demonstrate on the ideal mold/patient the following:	Demonstration of clinical steps on the patient Teaching via laboratory demonstration Teaching on the ideal models poured in the agar molds	The students will be assessed mid-rotation and end-of rotation test
1.	Instruments, lab protocol and chair positioning		**1.** OSCEs **2.** Chair side viva **3.** Direct observation of clinical skills **4.** Direct observation of procedural skills Will be assessed during: 1. Daily Supervision 2.Mid-Roation Test 3.End Of Rotation Test
2	History taking and examination		
3	Maxillary and mandibular impressions for removable partial dentures and complete dentures		
4	Pouring of the impressions		
5	Block outs and direct retainers		
6	Custom tray fabrication for secondary impression		
7	Partial denture and complete denture (heat cure) base plate fabrication		
8	Fabrication of wax occlusal rims		
9	Maxilla mandibular relation record and mounting on the articulator		
10	Selection of anterior and posterior teeth		
11	Arrangement of anterior and posterior teeth		
12	Clinical wax try in		
13	Final finishing (correction of denture base & tooth position		
14	Carving and festooning		
15	Investment of the wax up in the flasks		
16	De-waxing and packing with heat cure acrylic polymer		
17	Finishing and polishing		
18	Clinical insertion of the prosthesis and adjustments		
19	Post-insertion instructions and follow up visits		

DETAILS OF CLINICAL ROTATION FINAL YEAR BDS
ORIENTATION SESSION:

Introduction to Department and Laboratory

Introduction to Faculty

Standard Operating Procedures for Laboratory

Standard Operating Procedures for Clinics

Log Book Record Maintenance

PROSTHODONTICS POSTING FOR FINAL YEAR
Eight weeks of posting

DEPARTMENT	DURATION	ACTIVITY/SKILLS TO BE LEARNT
REMOVABLE	08	• Orientation • Chair positioning and history taking • Impression taking • Plaster pouring and making of cast • Fabrication and finishing of custom tray • Border molding and secondary impression • Fabrication of baseplate and occlusal rims • Jaw relation taking

		• Mounting of cast on articulator • Teeth selection and teeth setup • Try- In • Finishing and festooning of teeth setup • Investment of model • Dewaxing • Bench curing • Finishing and polishing of denture • Final insertion • Post-operative Instructions

SAMPLE WEEK # 1 SCHEDULE- FINAL YEAR BDS CLINICAL ROTATION

DAY 1:

10:30 AM to 11:30 AM (Orientation)

11:30 AM to 12:30 PM (Study Cast Demonstration and Model pouring)

12:30 PM to 01:30 PM (Diagnosis and Treatment Planning Demonstration)

DAY 2:

10:30 AM to 11:30 AM (TEST Instruments/materials used in Prosthodontics – viva based)

11:30 PM to 01:30 PM (Pre-clinical demonstration & Students Hands-on : Base plate and Bite Rims)

DAY 3:

10:30 AM to 12:00 PM (Pre-Clinical demonstration: Model Articulation and setting up teeth)

12:00 PM to 01:30 PM (Students Hands-on)

DAY 4:

10:30 AM to 11:30 AM (Pre-Clinical demonstration: Waxing and Flasking)

11:30 AM to 01:30 PM (Students Hands-on)

DAY 5:

Final Denture Finishing

RECOMMENDED BOOKS (Latest Edition):

REMOVABLE PARTIAL DENTURE:

McCRACKEN'S REMOVABLE PARTIAL PROSTHODONTICS, THIRTEENTH EDITION
Alan B. Carr

David T. Brown

FIXED PARTIAL DENTURE:

CONTEMPORARY FIXED PROSTHODONTICS, FIFTH EDITION
Stephen F. Rosenstiel
Martin F. Land Junhei
Fujimoto

COMPLETE DENTURE

PROSTHODONTIC TREATMENT FOR EDENTULOUS PATIENTS: COMPLETE DENTURES AND IMPLANT-SUPPORTED PROSTHESES

George Zarb, John A. Hobkirk, Steven E. Eckert,
and Rhonda F. Jacob

OCCLUSION AND TMD'S

MANAGEMENT OF TEMPOROMANDIBULAR DISORDERS AND OCCLUSION 7 ED

Jeffrey P. Okeson, Dmd

IMPLANTOLOGY

DENTAL IMPLANT PROSTHETICS, SECOND EDITION

Carl E. Misch

MAXILLOFACIAL PROSTHODONTICS

CLINICAL MAXILLOFACIAL PROSTHETICS

Thomas D. Taylor. DDS. MSD

THREE MONTHS ROTATION OF HOUSE OFFICERS

Department of Prosthodontics

Three months of posting

DEPARTMENT	DURATION
Informed consent, counselling Communication skills and professionalism History and examination of removable and fixed prosthodontics Diagnosis and treatment planning	4 weeks
Patient selection for removable partial dentures and complete dentures Pre-prosthetic evaluation and mouth preparation Fabrication of removable partial dentures through supervised clinical execution of steps and laboratory communication	4 weeks
Patient selection and evaluation of abutments for fixed partial dentures Tooth preparation mock ups on stone cast, phantom tooth and extracted teeth Planning of fixed partial denture bridges Supervised tooth preparation on tooth canal treated tooth Supervised Preparation of teeth for fixed partial dentures and crowns	4 weeks

Each house officer will present any clinical case or case report on fixed and removable prosthodontics

Posting of in crown and bridge department is based upon the performance on the mock up tooth preparations

DRESS CODE POLICY

All Students are responsible for maintaining clean, neat, and well-fitting clothing. Students not engaged in direct patient care but presenting in clinic, for whatever reason, must maintain infection control and safety standards and present themselves in a professional manner.

A. Personal Hygiene and Hair

1. Hair should be clean and well groomed.
2. Beards and mustaches must be clean, neatly trimmed, and well groomed.
3. Hair must be kept out of the field of operation so that it does not require handling during treatment procedures.
4. Personal cleanliness and good oral hygiene must be maintained.
5. Body hygiene is required so that offensive body odor is avoided.
6. Strong perfumes, colognes, or after-shave lotions must be avoided.
7. Hands and fingernails must be kept clean.
8. Fingernails must be kept trimmed and well-manicured.

B. Jewelry

1. All jewelry should be kept to a minimum and out of the field of operation.
2. Jewelry should not affect one's ability to wear gloves, masks or gowns.

C. Attire

Professional attire or scrubs shall be worn in all classes and laboratories. Scrubs are required in clinic. In clinic and in lab, students must ensure that their attire meets infection control regulations as outlined in the Infection Control Manual.

When representing the JMDC at community service events, students must wear their JMDC scrubs or professional attire with Lab-coat along with their nametag. Students must abide by all infection control and safety standards with regards to dress.

1. Professional Attire (examples)

a. Dress pants/slacks
b. Khakis
c. Dress shirts (e.g., oxford cloth)
d. Knit or polo shirts with collars
e. Blouses
f. Closed-toed shoes (required for clinic and lab only)

2. Scrubs specifications

a. Scrub colors are limited to Carolina Blue, surgical green, black, gray, or navy blue.
b. Scrubs should be neat and clean with a scrub top and bottom.
c. Scrub top and bottom must be a solid color, with no pattern.

d. Scrub top and bottom must be a matched set.
e. Scrubs must be worn with socks and closed-toe shoes.
f. If worn, athletic shoes must be clean.
g. A clean, plain T-shirt may be worn under scrubs.
h. If long-sleeved, the T-shirt must be plain, with no pattern or other design.

3. Unacceptable attire in class, clinic, or laboratory settings (examples)

a. Shorts, sweats, gym attire
b. Jeans
c. Bare feet
d. Halter tops, tube tops/strapless tops, tank tops with straps <2 inches
e. Low-cut tops
f. See-through clothing
g. Visible undergarments when sitting or standing
h. Head gear (excluding headbands and ties to hold back hair)

D. General Considerations

Each student is expected to keep locker areas, clinical facilities, and preclinical labs in order. All used gowns and trash should be placed in their respective receptacles. Students will be notified of any updates or changes to the JMDC Dress Code policy.

THE END