

PROSTHODONTICS, CROWN & BRIDGE

SYLLABUS

DISTRIBUTION OF HOURS

I YEAR M.D.S.

- Theoretical exposure of all applied sciences of study
- Clinical and non-clinical exercises involved in Prosthodontics therapy for assessment and acquiring higher competence
- Commencement of Library Assignment within six months.
- Short epidemiological study relevant to Prosthodontics.
- Acquaintance with books, journals and referrals to acquire knowledge of published books, journals and website for the purpose of gaining knowledge and reference – in the fields of Prosthodontics including Crown & bridge and implantology
- Acquire knowledge of instruments, equipment, and research tools in Prosthodontics.
- To acquire knowledge of Dental Material Science – Biological and biomechanical & bio-esthetics, knowledge of using material in laboratory and clinics including testing methods for dental materials.
- Participation and presentation in seminars, didactic lectures
- Evaluation – Internal Assessment examinations on Applied subjects

II YEAR M.D.S.

- Acquiring confidence in obtaining various phases and techniques for providing Prosthodontic therapy.
- Acquiring confidence by clinical practice with sufficient numbers of patients requiring tooth and tooth surface restorations.
- Fabrication of Adequate number of complete denture prosthesis following, higher clinical approach by utilizing semi-adjustable articulators, face bow and graphic tracing.
- Understanding the use of the dental surveyor and its application in diagnosis and treatment plan in R.P.D.
- Adequate numbers of R.P.D. covering all partially edentulous situation
- Adequate number of Crowns, Inlays, laminates F.P.D. covering all clinical situation.
- Selection of cases and principles in treatment of partially or complete edentulous patients by implant supported prosthesis.
- Treating single edentulous arch situation by implant supported prosthesis.
- Diagnosis and treatment planning for implant prosthesis.
- Ist stage and IInd stage implant surgery
- Understanding the maxillofacial Prosthodontics
- Treating craniofacial defects
- Management of orofacial defects
- Prosthetic management of TMJ syndrome
- Occlusal rehabilitation
- Management of failed restoration
- Prosthodontics Management of patient with psychogenic disorder.
- Practice of child and geriatric prosthodontics
- Participation and presentation in seminars, didactics lectures
- Evaluation – Internal Assessment examinations

III YEAR M.D.S

- Clinical and laboratory practice continued from IIInd year 16
- Occlusion equilibration procedures – fabrication of stabilizing splint for parafunctional disorders, occlusal disorders and TMJ functions.
- Practice of dental, oral and facial esthetics
- The clinical practice of all aspects of Prosthodontic therapy for elderly patients.
- Implants Prosthodontics – Rehabilitation of Partial Edentulous, Complete edentulism and for craniofacial rehabilitation
- Failures in all aspects of Prosthodontics and its management and after care
- Team management for esthetics, TMJ syndrome and Maxillofacial and Craniofacial Prosthodontics
- Management of Prosthodontics emergencies, resuscitation.
- Candidate should complete the course by attending by large number and variety of patients to master the prosthodontic therapy. This includes the practice management, examinations, treatment planning, communication with patients, clinical and laboratory techniques materials and instrumentation requiring different aspects of prosthodontic therapy, Tooth and Tooth surface restoration, Restoration of root treated teeth, splints for periodontal rehabilitations and fractured jaws, complete dentures, R.P.D. FPD. Immediate dentures over dentures implant supported prosthesis, maxillofacial and body prosthesis, occlusal rehabilitation.
- Prosthetic management of TMJ syndrome
- Management of failed restorations
- Complete and submit Library Assignment 6 months prior to examination.
- Candidates should acquire complete theoretical and clinical knowledge through seminars, symposium, workshops and reading.
- Participation and presentation in seminars, didactic lectures
- Evaluation – Internal Assessment examinations three months before University examinations

Prosthodontics

Aims

To train dental graduates so as to ensure higher competence in both general and special area of Prosthodontics and prepare a candidate for teaching, research and clinical abilities-including prevention and after care in prosthodontics including crown and bridge and implantology

General Objectives of the Course:

1. Training programme in Prosthodontics dentistry including Crown & Bridge & implantology is structure to achieve knowledge and skill in theoretical and clinical laboratory, attitude, communicative skills and ability to research with understanding of social, cultural, education and environmental background of the society
2. To have acquired adequate knowledge and understanding of applied basic and systemic medical science knowledge in general and particular to head and neck
3. The postgraduates will be able to provide Prosthodontic therapy for patients with competence and working knowledge with understanding of applied medical behavioral and clinical science that are beyond the treatment skills of the general BDS graduate and MDS graduate of other specialities to demonstrate evaluative and judgment skills in making appropriate decisions regarding prevention, treatment after care and referral to deliver comprehensive care to patients

Knowledge

The candidate should possess knowledge applied basic and systemic medical sciences

1. On human anatomy, embryology, histology, applied in general and particular head and neck, Physiology & Biochemistry, Pathology and microbiology, virology, Health and diseases of various systems of the body (systemic) principles in surgery and medicine, Pharmacology, Nutrition, behavioral Science, Age changes, genetics, Immunology, Congenital defects and syndrome and Anthropology, Bioengineering, Bio-medical and Biological Principle and application, Dental material science.

2. Ability to diagnose and planned treatment for patients requiring a Prosthodontic therapy
3. Ability to read and interpret a radiograph and other investigations for the purpose of diagnoses treatment plan.
4. Tooth and tooth surface restorations, Complete denture prosthodontics, removable, partial dentures, Prosthodontics, fixed prosthodontics and maxillofacial and Craniofacial Prosthodontics, implants supported Prosthodontics, T.M.J and occlusion, craniofacial esthetic and biomaterials, Craniofacial disorders, problems of psychogenic origin
 1. Age changes and Prosthodontics Therapy for aged
 2. Ability to diagnose failed restoration and provide Prosthodontic therapy and after care
 3. Should have essential knowledge on ethics, laws and jurisprudence and forensic odontology in Prosthodontics
 4. General health conditions and emergency as related to prosthodontics treatment
 5. Identify social, cultural, economic, environmental, educational and emotional determinants of the patients and consider them in planning the treatment
 6. Identify cases which are outside the area of hi specialty, competence and refer them to appropriate specialists
 7. Advice regarding case management involving surgical, interim treatment etc.
 8. Competent specialization – a team management of craniofacial design
 9. Should attend continuing education programs, seminars and conferences related to prosthodontics in thus updating himself
 10. Teach and guide his/her team, colleagues and other students
 11. Should be able to use information technology tools and carry out research both basic and clinical, with the aims of publishing his/her work and presenting his/her work at various scientific forum
 12. Should have essential knowledge of personal hygiene, infection control, prevention of cross infection and safe disposal of waste, keeping in view the risks of transmission of Hepatitis & HIV
 13. Should have an ability to plan to establish Prosthodontic, clinic/hospital teaching department and practice management
 14. Should have a sound knowledge for the application of pharmacology, Effects of drugs on oral tissue and systems of a body and for medically compromised patients.

Skills

1. The candidate should be able to examine the patients requiring Prosthodontic therapy, investigate the patient sysrenically, analyse the investigation results, radiography, diagnose the ailment, plan a treatment, communicate it with the patient and execute it.
2. Understand the prevalence and prevention of diseases of craniomandibular system related to Prosthetic dentistry
3. The candidate should be able to restore lost functions of stomatognathic system namely mastication, speech, appearance and psychological comforts. By understanding biological, biomedical, bioengineering principles and systemic condition of the patient to provide a quality health-care of the craniofacial region
4. The candidate should be able to interact with other speciality including medical speciality for a planned team management of patients for a craniofacial and oral acquired and congenital defects, Temporomandibular joint syndromes, esthetics, implant supported Prosthesis and problems of Psychogenic origin.
5. Should be able to demonstrate the clinical competence necessary to carry out appropriate treatment at higher level of knowledge, training and practice skills currently available in their speciality area
6. Identify target diseases and awareness amongst the population for Prosthodontic therapy.
7. Perform clinical and laboratory procedure with understanding of biomaterials, tissue conditions related to prosthesis and have competent dexterity and skill for performing clinical and laboratory procedures in fixed, removable, implant and maxillofacial TMJ, esthetics Prosthodontics

8. Laboratory technique management based on skills and knowledge of Dental Materials and dental equipment and instruments, management
9. To understand demographic distribution and target diseases of Cranio mandibular region related to Prosthodontic including crown & bridge and implantology.

Attitude

1. Adopt ethical principles in all Prosthodontic practice, Professional honesty and integrity are to be fostered. Treatment to be delivered irrespective of social status, caste, creed or religion of patient
2. Willing to share the knowledge and clinical experience with professional colleagues
3. Willing to adopt new methods and techniques in prosthodontics from time to time based on scientific research, which is in patient's best interest
4. Respect patient's rights and privileges including patient's right to information and right to seek second opinion

Communication Abilities

1. Develop communication skills, in particular, to explain treatment option available in management.
2. Provide leadership and get the best out of his group in a congenial working atmosphere.
3. Should be able to communicate in simple understandable language with the patient and explain the principles of prosthodontics to the patient. He should be able to guide and counsel the patient with regard to various treatment modalities available.
4. Develop the ability to communicate with professional colleagues through various media like Internet, e-mail, videoconference, etc. to render the best possible treatment.

3.6.2 SYLLABUS

I APPLIED ANATOMY AND HISTOLOGY

- Muscles of Mastication
- Temporo Mandibular Joint
- Salivary glands
- Muscles of Facial expression
- Tongue
- Hard and Soft palate

EMBRYOLOGY

- Face
- Palate
- Maxilla
- Mandible
- Tooth Development

APPLIED ORAL ANATOMY

- Structure and relations of the alveolar process and edentulous mouth
- Anatomy of local anesthesia
- Propagation of dental infections
- Development and Growth of Jaw bones
- Development of Teeth and Supporting structures

ORAL HISTOLOGY

- Oral Mucous membrane in health and disease
- Eruption of teeth

BONE

- Tongue
- Salivary glands

II APPLIED GENERAL AND ORAL PHYSIOLOGY AND BIOCHEMISTRY

- Mastication and deglutition
- Saliva
- Food and nutrition
- Metabolism of carbohydrates.
- Fatty acids & amino acids
- Vitamins and Minerals
- Blood Clotting mechanism, Hemorrhage
- Pulse and blood pressure
- Thyroid
- Parathyroid
- Pituitary
- Oral tissues

III. APPLIED PHARMACOLOGY

- Definition, scope and relation to other branches of Medicine.

Recent facts pertaining to General pharmacology viz. Mode of action, bio-assay, standardization etc.

Chemo therapy of Bacterial Infections

- a) Sulfonamides
- b) Antibiotics

Anesthetics:

- a) Local
- b) General

Analgesics and anti-inflammatory drugs.

Hypnotic, Tranquilizers and antipyretics

Important Hormones:

- a) ACTH
- b) Cortisone
- c) Insulin and other Oral antidiabetics.

Drug addiction and tolerance

Important pharmacological agents in connection with

Autonomic nervous system viz:

- a) Adrenaline
- b) Noradrenaline
- c) Atropine

Immune = suppressive drugs

Brief mention of hypertensive and hypotensive drugs.

Emergency drugs in dental practice

Latest drugs.

IV APPLIED GENERAL AND ORAL PATHOLOGY AND MICROBIOLOGY

Inflammation and repair

APPLIED ORAL PATHOLOGY

- Developmental disturbances of oral and dental structures
- Oral tumors and tumor – like conditions Red and White lesions
- Oral manifestations of nutritional and metabolic diseases
- Diseases of blood and blood forming organs
- Cysts – Clinico pathological aspects
- Neoplasms and non-neoplastic diseases of salivary glands

MICROBIOLOGY

- Elementary knowledge of bacterial
- Staphylococci, Streptococci, Actinomycocis
- M. Tuberculosis, Treponema palladium, Bacteriods
- Viruses – Herpes, AIDS, Hepatitis
- Fungi – Candida
- Defense Mechanisms
- Oral flora
- Vaccines

R. In addition to the above subjects, there will be subjects as follows for internal assessment to be completed two months before part I University Examination:

1. Principles of Bio-Statistics
2. Principles of Research Methodology
- I. Syllabus of Principles of Biostatics
 - 1 Introduction
 - 2 Collection, classification and presentation
 - 3 Averages (Mean, Median ,Mode)
 - 4 Dispersion, Skewness and Kurtosis
 - 5 Correlation
 - 6 Regression
 - 7 Binomial, Polsson and Normal Distributions
 8. Tests of significance (Large samples)
 9. X (T & F test)
10. Measures of morbidity, fertility, morality and survival
- 11 Clinical trials

2 PRINCIPLES OF RESEARCH METHODOLOGY

Core curriculum

1. What is research
2. What is research methodology
3. Types of research
 - a. Basic of fundamental Research
 - b. Applied
 - c. Clinical
 - d. Experimental
- 4 How does one select a subject for research
 - a. Intuition
 - b. Intuition based on experience
 - c. Knowledge of subject and questions that one asked of oneself
 - d. Areas of unknown aspects that have not been explored questions those are unanswered
 - e. Survey of relevant literature using library
- 5 How does one set about a research problem?
 - a) List the aims and objectives
 - b) What is there in the relevant literature that has been done is being done and remains to be undone?
 - i) Retrospective research
 - ii) Prospective Research
 - iii) Advantages & disadvantages of each, what will therefore be the best in the circumstances?
 - iv) Develop a protocol to give answers so as to give the necessary data in the light of the hypothesis
 - v) Evolve a hypothesis
 - vi) Advantages and disadvantages of experimental model

- vii) Develop a model especially designed to test hypothesis and may confirm the data
 - viii) Develop a model especially designed to test hypothesis and may confirm the data
 - ix) How does the data from the experimental model fit the hypothesis, are the conclusions comparable? Are there any other conclusions possible?
 - 6 Objectivity in research methodology
 - a. Open trials? Bias and safeguard against it.
 - b. Retrospective research
 - c. Double blind triple blind studies
 - d. Cross over methods
 - 7 Quantification in research methodology
 - a. Instrumental quantification rationales and fallacies
 - b. Reproducibility
 - c. Scoring methods especially to lend objectivity to subjective observation safeguards against subjective bias
 - 8 Records, protocols and analysis
- The logic of Research
- Examples of special areas of research
- 1. Clinical
 - 2. Experimental
 - 3. Histological and Morphological
 - 4. Histochemical
 - 5. Genetic and
 - 6. Epidemiologic studies
 - 9 Working knowledge of computers

MDS PART-1

BASIC SCIENCES SYLLABUS

A. APPLIED ANATOMY

- 1. Muscles of facial expression and muscles of mastication
- 2. Temporo mandibular joint
- 3. Salivary glands
- 4. Biology and anatomy of dental tissues (enamel, dentin, cementum, pulp and periodontium)
- 5. Oral Cavity and vestibule
- 6. Tongue
- 7. Palate
- 8. Mandible and maxilla

B. EMBRYOLOGY

- 1. Development of face, palate, mandible and maxilla
- 2. Development of tooth

C. HISTOLOGY

- 1. Study of epithelium of oral cavity
- 2. Bone and tooth
- 3. Tongue
- 4. Salivary glands

PHYSIOLOGY

- 1. Physiology and function of the masticatory system
- 2. Blood coagulation mechanisms
- 3. Blood groups
- 4. RBC and haemoglobin
- 5. WBC Function and classification
- 6. Cardiac cycle

7. Regulation of blood pressure
8. Shock, hypertension, cardiac failure
9. Composition function and regulation of saliva
10. Mastication and deglutition
11. Endocrine system
 - a) Pituitary hormone
 - b) Thyroid hormone
 - c) Parathyroid hormone
12. Gerodontics
 - A. Nutrition in geriatric patients
 - B. Consequences and management of age changes

BIOCHEMISTRY

1. Carbohydrates
 - a) Digestion of starch and absorption of glucose
 - b) Metabolism of glucose, specifically glycolysis, TCA
 - c) Blood sugar regulation
2. Lipids – Essential and non-essential fatty acids
3. Proteins – Essential and non-essential amino acids
4. Minerals
 - a) Calcium and Phosphorous metabolism
 - b) Iron Metabolism
 - c) Trace elements in nutrition
5. Vitamins – Vitamin A,B (All types) C,D & E

PATHOLOGY

1. Inflammation
 - a) Repair and regeneration, necrosis and gangrene
 - b) Roll of complement system in acute inflammation
 - c) Roll of Arachidonic acid and its metabolites in acute inflammation
 - d) Pulpitis and periodontitis
2. Shock
 - a) Pathogenesis of hemorrhagic, neurogenic, septic, cardiogenic shock
 - b) Circulatory disturbances.
 - c) Ischaemic hyperemia
 - d) Venous congestion
 - e) Edema
 - f) Infarction
3. Hypersensitivity
 - a) Anaphylaxis.
 - b) Type 2 hypersensitivity,
 - c) Type 3 hypersensitivity
 - d) Cell mediated reaction and its clinical importance.
 - e) System lupus erythematosus
 - f) Infection and infective granulomas
4. Neoplasia
 - a) Classification of tumors
 - b) Carcinogenesis and carcinogen – chemical, viral and microbial
 - c) Grading and staging of cancers, tumor, Angiogenesis, Paraneoplastic syndrome.
 - d) Spread of tumors
 - e) Characteristics of benign and malignant tumors

5. Others
 - a) AIDS
 - b) Hepatitis B
6. CYSTS- Classification, types (esp. Dental, dentigerous)
7. Pathology of oral soft and hard tissues
8. Dental plaque
9. Dental caries
10. Attrition, Abrasion and erosion of teeth
11. Oral Manifestations of systemic diseases

MICROBIOLOGY

1. Applied General Microbiology
 - a) Gram positive bacteria
 - b) Gram negative bacteria
 - c) Aerobes and anaerobes
 - d) Microbiology of tuberculosis
2. Oral Microbiology – normal oral flora
3. Sterilization and disinfection
4. Microbiology of pulpal and periodontal diseases

PHARMACOLOGY

1. General and local anesthetics, hypnotics, anti-epileptics and tranquilizers
2. Chemotherapeutics and antibiotics
3. Analgesics, antipyretics and NSAID
4. Antiseptics, sialogogues and anti sialogogues
5. Haematinics
6. Anti-diabetics
7. Vitamins A, B complex, C,D,E,K and trace elements
8. Steroids
9. Dentifrices
10. Desensitizing agents
11. Fluorides

MDS Part-1

Syllabus Of Basic Sciences

Dental Material Science

Sl. No. TOPIC

1. Overview of materials for dental applications with special reference to standards for dental materials
2. Biocompatibility of Dental Materials
3. Structure of matter and principles of adhesion
4. Physical properties of Dental Materials
5. Mechanical Properties of Dental materials
6. Solidification and microstructure of Metals
7. Equilibrium phases in cast alloys
8. Dental Polymers
9. Impression Material
10. Gypsum Products
11. Dental Waxes
12. Casting Investments and procedures
13. Finishing and Polishing materials with special reference to bur design

14. Bonding for direct restorative materials
15. Restorative resins
16. Dental cements
17. Dental Casting and soldering alloys
18. Wrought alloys except orthodontic wires and brackets
19. Dental Ceramics
20. Denture base resins
21. Dental Implants
22. Materials for maxillofacial prosthetics
23. Materials for post and core

5. Adaptability to new methods and techniques in Prosthodontics.
6. Working always in patient's best interest.
7. Due respect for Patient's rights and privileges including patient's right to seek information and second opinion.
 - Communication abilities
 1. Good communication skills in order to explain treatment plan to patient and relatives
 2. Ability to communicate various treatment options in the language that patient understands
 3. Leadership quality and ability to create cohesive working atmosphere
 4. Ability to guide and counsel the patient and relatives in all stages of diagnosis, treatment and follow-up
 5. Effective communication with professional colleagues on personal level as well as various communication media, eg. Internet, Email, Video-conferencing etc.

I. Theory

1. REMOVABLE PROSTHODONTICS
 - (a) Complete Denture Prosthodontics
 - (b) Removable Partial Denture Prosthodontics
2. FIXED PARTIAL PROSTHODONTICS
3. IMPLANT SUPPORTED PROSTHODONTICS
4. MAXILLOFACIAL PROSTHODONTICS
5. MISCELLANEOUS
 - (a) Full mount rehabilitation
 - (b) Over dentures
 - (i) Tooth supported over dentures
 - (ii) Implant supported over dentures
 - (c) Immediate dentures
 - (d) Single complete denture
 - (e) Pre-prosthetic surgery

II. TEACHING AND LEARNING ACTIVITIES

III. CLINICAL PROGRAM

IV. DISSERTATION

- (a) Library Dissertation
- (b) Final Dissertation (as per norms of the University)

a. REMOVABLE PROSTHODONTICS

- (a) Complete Denture Prosthodontics – Prosthodontic treatment for completely edentulous patient

- Definitions, Terms and Terminologist
- Aim and scope of complete denture Prosthodontics
- Applied anatomy and physiology of Stomatognathic system including TMJ
- Infection control and cross infection barriers
- Biomechanics of edentulous state
- Biological considerations
- Functional and para-functional considerations
- Behavioural and adaptive changes
- Effect of ageing on edentulous patient
- Sequelae of wearing complete dentures
- Bio-behavioural modalities
- Nutritional considerations in denture wearing patients
- Diagnosis and treatment planning for edentulous/ partially edentulous patients, case history in details, medical and dental

1. Developing rapport with the patient and effective communication
2. Dental Materials prescribed in the management of edentulous patients –
 - Denture base material
 - General requirement of biomaterials for edentulous patients
 - Requirement of an ideal denture base
 - Chemical composition of denture base resins
 - Materials used for fabrication of Prosthetic denture teeth
 - Requirement of prosthetic denture teeth
 - Denture lining materials and tissue conditioners
 - Cast metal alloys as denture bases – base metal alloys
3. Articulators
 - Classification
 - Selection
 - Limitations
 - Precision
 - Accuracy, sensitivity and functional activities of lower member of the articulator and uses
4. Fabrication of complete dentures
 - Complete denture impressions
 - Muscles of facial expressions and anatomical landmarks
 - Support
 - Retention
 - Stability
 - Aims & Objectives
 - Preservation support
 - Aesthetics and retention
 - Impression materials and techniques
 - Need of two impressions
 - Preliminary impression and final impressions
5. Maxilla – anatomy of supporting structures
 - Mucous membrane
 - Hard palate
 - Residual ridge
 - Shape of the supporting structure and factors that influence the form and size of the supporting bones
 - Incisive

- Foramen
 - Maxillary tuberosity
 - Sharp bony spicules
 - Torus palatines
 - Anatomy of peripheral or limiting structures
 - Labial vestibule
 - Buccal vestibule
 - Vibrating line
 - 6. Mandible – Anatomy of supporting structure
 - Crest of the residual ridge
 - The buccal shelf
 - Shape of supporting structure
 - Mylohyoid ridge
 - Mental foramen
 - Genial tubercles
 - Torus Mandibulars
 - Anatomy of peripheral or limiting structure
 - Labial vestibule
 - Buccal vestibule
 - Lingual flange
 - Mylohyoid muscle
 - Retromylohyoid fossa
 - Sublingual gland region
 - Alveolingual sulcus
 - 7. Preliminary and final impressions
 - Impression making
 - Custom tray and refining the custom tray
 - Preparing the tray to secure the final impression
 - Establishment of posterior palatal seal
 - Making the final impression
 - Boxing impression and making the casts
 - 8. Mandibular Movements-
Maxillo mandibular relation and concepts of occlusion
 - Gnathology
 - Identification of shape and location of arch form-mandibular and maxillary
 - Occlusion rim
 - Adjusting level of occlusal plane on trial denture base
 - Tests to determine vertical dimensions of occlusion
 - Centric relation record
 - Biological and clinical considerations in making jaw relation records from the patients and transferring them to the articulator
 - Recording of mandibular movements
 - Influence of opposing tooth contacts
 - Temporomandibular joint
 - Muscular involvements
 - Neuromuscular regulation of mandibular motion
 - The envelope of motion
 - Rest position
 - Maxillo-mandibular relations-The centric & Eccentric Physiological rest position
 - Vertical dimensions of Occlusion and Rest
- Recording methods-Mechanical & Physiological

- Determining the horizontal jaw relation

Functional graphics

Tactile or inter occlusal check record method

Orientation/sagittal relation records

Arbitrary/Hinge axis and face bow record

Significance and requirement

Principles and Biological considerations and securing on articulators

9. Selecting and arranging artificial teeth and occlusion for the edentulous patients

- Anterior tooth selection
- Posterior tooth selection
- Principles in arrangement of teeth
- Factors governing position of teeth
- The inclinations and arrangement of teeth for aesthetics
- Phonetics and Mechanics
- Concepts of occlusion

10. Try-in

- Verifying vertical dimension
- Centric relation
- Creating a facial and functional harmony with anterior teeth
- Harmony of individual tooth position
- Harmony with sex personality and age of the patient

11. Speech considerations of complete dentures

- Speech production structural and functional demands
- Neuropsychological background
- Speech production and the role of teeth and other oral structures

Bilabial sounds

Labiodental sounds

Linguodental sounds

Linguoalveolar sound

- Linguopalatal and linguoalveolar sounds
- Speech analysis and prosthetic considerations

12. Waxing contouring of trial dentures

- Flasking and processing
- Laboratory remount procedures and selective occlusal grinding
- Finishing and polishing
- Evaluating the finished prosthesis

Doctors evaluation

Patients evaluation

Friends evaluation

- Evaluation of basal surface errors
- Errors in occlusion

13. Interocclusal records for remounting procedures-

Verifying centric relations

Eliminating occlusal errors

- Special Instructions to the patients

Appearance with new denture

Mastication with new dentures

Speaking with new dentures

Oral hygiene with dentures

Preserving of residual ridges and educational materials for patients

- Maintaining the comfort and health of the oral cavity of the rehabilitated edentulous patients

- Follow-up after twenty four hours for oral examination and prosthesis adjustments
- Recall for oral examination 3 to 4 months intervals and yearly intervals

5.(e) Pre-prosthetic Surgery- Improving the patient's denture bearing areas and ridge relations

- Non surgical methods
- Rest for the denture supporting tissues
- Occlusal correction of the old prosthesis
- Good nutrition
- Conditioning of the patient's musculature
- Surgical methods
- Correction of conditions that preclude optimal prosthetic function
- Hyperplastic ridge
- Epulis fissuratum and papillomatosis
- Frenular attachments and pendulous maxillary tuberosities
- Ridge augmentation
- Maxillary and mandibular oral implants
- Corrections of congenital deformities
- Discrepancies in jaw size
- Relief of pressure on the mental foreman
- Enlargement of dental wearing areas
- Vestibuloplasty
- Ridge augmentation
- Replacement of tooth roots with Osseo integration denture implants

14. Developing rapport with the patients and effective communication

15. Dental Materials prescribed in the management of edentulous patients –

- Denture base material
- General requirement of biomaterial for edentulous patients
- Requirement of an ideal denture base
- Chemical composition of denture base resins
- Materials used for fabrication of prosthetic denture teeth
- Requirement of prosthetic denture teeth
- Denture lining materials and tissue conditioners
- Cast metal alloys as denture bases – metal alloys

16. Articulators

- Classification
- Selection
- Limitations
- Precision
- Accuracy, sensitivity and functional activities of lower member of the articulator and uses

17. Fabrication of complete dentures

- Muscles of facial expressions and anatomical landmarks
- Support
- Retention
- Stability
- Aims & Objectives
- Preservation support

- Stability
 - Aesthetics and retention
 - Impression materials and techniques
 - Need of two impressions
 - Preliminary impression and final impressions
18. Maxilla – anatomy of supporting structures
- Mucous membrane
 - Hard palate
 - Residual ridge
 - Shape of the supporting structure and factors that influence the form and size of the supporting bones
 - Incisive
 - Foramen
 - Maxillary tuberosity
 - Sharp shiny process
 - Torus palatines
 - Anatomy of peripheral or limiting structures
 - Labial vestibule
 - Buccal vestibule
 - Vibrating line
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 - Shape of supporting structure
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 - Torus Mandibulars
 - Anatomy of peripheral or limiting structure
 - Labial vestibule
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 - Sublingual gland region
 - Alveolingual sulcus
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 - Custom tray and refining the custom tray
 - Preparing the tray to secure the final impression
 - Making the final impression
 - Boxing impression and making the casts
21. Mandibular Movements – Maxillo mandibular relation and concepts of occlusion
- Gnathology
 - Identification of shape and location of arch form-mandibular and maxillary
 - Occlusion rim
 - Level of occlusal plane and recording of trial denture base

- Tests to determine vertical dimensions of occlusion
- Inter occlusion
- Centric relation record
- Biological and clinical considerations in making jaw relation records from the patients to the articulator
- Recording of mandibular movements
- Influence of opposing tooth contacts
- Temporomandibular joint
- Muscular involvements
- Neuromuscular regulation of mandibular motion
- The envelope of motion
- Rest position
- Maxillo-mandibular relations-

The centric

Eccentric

- Physiological rest position
- Vertical dimensions

Occlusion

Recording methods-

Mechanical

Physiological

- Determining the horizontal jaw relation
- Functional graphics
- Tactile or inter occlusal check record method
- Orientation/sagittal relation records
- Arbitrary/Hinge axis and face bow record
- Significance and requirement
- Principles and Biological considerations and securing on articulators

22. Selecting and arranging artificial teeth and occlusion for the edentulous patients

- Anterior tooth selection
- Posterior tooth selection
- Principles in arrangement of teeth
- Factors governing position of teeth

Horizontal

Vertical

- The inclinations and arrangement of teeth for aesthetics
- Phonetics and Mechanics
- The Concept of occlusion

23. The Try-in

- Verifying vertical dimension
- Centric relation
- Establishment of posterior palatal seal
- Creating a facial and functional harmony with anterior teeth
- Harmony of spaces of individual teeth position
- Harmony with sex

Personality and age of the patient

Co-relating aesthetics and incisal guidance

24. Speech considerations of complete dentures

- Speech production structural and functional demands
- Neuropsychological background

- Speech production and the roll of teeth and other oral structures
- Bilabial sounds
- Labiodental sounds
- Linguodental sounds
- Linguoalveolar sound
- Articulator characteristics
- Acoustic characteristics
- Auditory characteristics
- Linguopalatal and Linguoalveolar sounds
- Speech analysis and prosthetic considerations
- 25. Waxing contouring and processing the dentures and aftercare laboratory procedures
- Wax contouring
- Flasking and processing
- Laboratory remount procedures and selective
- Finishing and polishing

- Critiquing the finished prosthesis
- Doctors evaluation
- Patients evaluation
- Friends evaluation
- 26. Evaluation of basal surface errors
- 27. Errors in occlusion
- 28. Interocclusal records for remounting procedures-
- Verifying centric relations
- Eliminating occlusal errors
- Special Instructions to the patients
- Appearance with new denture
- Mastication with new dentures
- Speaking with new dentures
- Oral hygiene with dentures
- Preserving of residual ridges and educational materials for patients
- Maintaining the comfort and health of the oral cavity of the rehabilitated edentulous patients
- Twenty four hours oral examination and treatment and preventive prosthodontics
- Recall for oral examination 3 to 4 months intervals and yearly intervals
- b) **REMOVABLE PARTIAL DENTURE PROSTHODONTICS**
- Scope, definition and terminologies of removable partial denture prosthodontics
- Requirements of an acceptable method of classification of partially edentulous arches
- Review of classification of partially edentulous arches
- Kennedy's classification
- Applegate's rules for applying Kennedy's classification
- Education of patient
- Diagnosis and treatment planning
- Phase wise treatment execution
- Mouth preparation
- i. Conditioning of abused tissues
- ii. Oral surgical procedures
- iii. Periodontal treatment
- iv. Preventive & prophylactic procedures
- v. Restorative treatment for the teeth
- vi. Preparation of abutment teeth
- Surveying

- i. Definition and concept
- ii. Types of Dental surveyors
- iii. Purpose of surveying procedures
- iv. Surveying of diagnostic cast and master cast
- v. Path of placement & factors determining the same
- vi. Blocking out undercuts on the master cast & providing relief
- Components of removable partial denture
 - i. Major connectors (maxillary and mandibular)
 - ii. Minor connectors
 - iii. Direct retainers
 - iv. Rest and rest seats
 - v. Indirect retainers
 - vi. Denture base
 - vii. Artificial teeth
 - viii. Precision attachments
 - ix. Stress breakers
- Principles of removable partial denture design
 - i. Bio-mechanical considerations
 - ii. Occlusal relationship
 - iii. Orientation of occlusal plane
 - iv. Integrity of partially edentulous arches
 - v. Abutment tooth morphology
 - vi. Response of Oral structure to various stress factors
 - vii. Periodontal considerations
 - viii. Need for guide plane preparations
 - ix. Support obtained for RPD.
 - a) Tooth supported-RPD
 - b) Tooth & tissue supported – RPD (distal extension base)
 - x. Need for indirect retention
 - xi. Direct retainer design
 - xii. Functional impression
 - xiii. Need for relining & rebasing
- Difference between tooth supported and tissue supported partial dentures
 1. Support obtained
 2. Impression procedures
 3. Indirect retentions
 4. Tooth support
 5. Ridge support
 6. Need for stress breakers
 7. RPI system
- Occlusion in removable partial dentures
- Impression materials and procedures for various RPD situations
- Laboratory procedures
 - i. Duplication of casts
 - ii. Preparation of wax pattern for partial denture framework
 - iii. Spruing, investing, burnout, casting & finishing of the partial denture framework
 - iv. Making record bases occlusal rims & occlusal template from a functional occlusal record
 - v. Arranging anterior and posterior teeth in relation to the opposing cast
 - vi. Anterior & Posterior try-in
 - vii. Processing the RPD
 - viii. Remounting & Occlusal corrections

- ix. Finishing & Polishing of Denture
 - Initial placement and adjustments
 - Instructions to patient regarding removable partial denture usage & hygiene
 - Adjustments in partial denture framework
 - Occlusal Adjustments
 - Routine follow up services
 - Relining & rebasing for removable partial denture
 - Repairs and additions to removable partial denture
 - Management of failed restorations

2) FIXED PARTIAL PROSTHODNTICS

- Aims Scope & Objectives of FPD
- Definitions & Terminologies
- Classification
- Diagnosis and treatment planning
- i. Patient's case history
- ii. Patient's needs & expectations
- iii. Patient's physiological and psychological status
- iv. Patients oral & systemic health
- v. Detailed clinical examination
 - a) Oral
 - b) General
 - vi. Occlusal considerations
 - vii. Periodontal health
 - viii. Health status of remaining teeth
 - ix. Radiological examination
 - x. Abutment selection
 - a) Restorative considerations
 - b) Bone support
 - c) Root form
 - d) Tipping and inclination
 - xi. TMJ & muscles of mastication
 - Caries management of remaining teeth
 - Periodontal treatment
 - Bio-mechanical principles of tooth preparation
 - Individual tooth preparation
 - i. Full crowns (Metal, metal ceramic and all ceramic)
 - ii. Partial veneer crowns
 - iii. Telescopic crowns
 - iv. Pin ledge preparations
 - v. Laminates
 - vi. Resin bonded prostheses preparations
 - vii. Various gingival margin preparations
 - Tissue management, isolation and fluid control
 - Impressions materials and techniques
 - Provisional restorations – Materials and techniques
 - Inter occlusal records
 - Laboratory procedures for fixed PROSTHODONTICs
 - Occlusion in fixed PROSTHODONTICs
 - Articulators
 - Recording and transferring of occlusal relations

- Cementing of restorations
- Various luting agents used in FPD
- Restorations of Endodontically treated teeth
- Management of failed restorations

3) IMPLANT SUPPORTED FIXED PROSTHODONTICS

- Aims, objectives and scope of implantology
- Definitions and terminology
- Implant materials
- Various implant systems
- Science of Osseo integration
- Clinical protocol, diagnosis and phase-wise treatment planning
- Implant supported over dentures
- Implant supported fixed PROSTHODONTICS
- Implant supported removable partial PROSTHODONTICS
- Implants in maxillofacial prosthodontics
- Laboratory procedures & techniques
- Management of problems & complications
- Recent advances in implantology

4) MAXILLOFACIAL PROSTHODONTICS

- Aims, objectives and scope of maxillofacial prosthodontics
- Definitions and terminologies
- Materials for maxillofacial prosthodontics
- Psychological and social aspects
- Counseling of patients and relatives
- Interaction of clinician and patient
- Multi-disciplinary approach for treatment of patients with maxillofacial prosthodontics
- Cleft lip and palate patients rehabilitation
- Rehabilitation of cancer patients
- Prosthesis for facial defects
- Ear, nose and eye prosthesis
- Acquired defects of the mandible
- Acquired defects of the maxilla
- Acquired defects of hard and soft palate
- Prosthesis for radiation therapy
- Maxillofacial implants
- Laboratory procedures & techniques
- Patient education regarding maxillofacial prosthesis
- Maintenance of the prosthesis
- Recall visits

5) MISCELLANEOUS

- a) Full mouth rehabilitation
 - Diagnosis and phase wise treatment planning
 - Diagnostic casts evaluation
 - Multidisciplinary approach & Integrated Prosthodontics
 - Patients detailed case history
 - General medical examination
 - Detailed oral examination
 - Oral Surgery treatment

- Periodontal treatment
 - Conservative & Endodontic treatment
 - Prosthodontics treatment
 - Provisional Restorations
 - Jaw relation records
 - Occlusion- Recording & transferring to the articulator]
 - Laboratory Procedures
 - Final Prosthesis
 - Recall visits & maintenance
 - Repairs & modifications
- b) Over dentures
- i. Tooth supported overdentures
 - ii. Implant supported overdentures
 - Indications & treatment planning
 - Advantages & Disadvantages
 - Selection of abutment teeth
 - Tooth supported complete dentures
 - Abutment without copings
 - Abutment with copings
 - Abutment with attachments
 - Preparations of retained teeth
 - Laboratory procedures
 - Clinical procedure
 - Recall visits & maintenance
- c) Immediate dentures
- Advantages & Disadvantages
 - Indications and contra-indications
 - Diagnosis treatment planning and prognosis
 - Patient education
 - Oral & general examination
 - Examination of existing prostheses
 - Fabrication of immediate dentures
- i) Impression procedure
 - ii) Jaw relation record
 - iii) Try-in stage
 - iv) Processing & finishing of prostheses
 - Planned extractions
 - Delivery of prostheses
 - Recall and maintenance
 - Schedule for permanent prostheses
- d) Single complete denture
- Single mandibular denture to oppose natural maxillary teeth
 - Single maxillary denture to oppose natural mandibular teeth
 - Opposing existing complete denture
 - Preservation of residual alveolar ridge
 - Necessity of retaining teeth
 - Psycho-social aspects related to patients
 - Clinical procedure

- Laboratory procedure
- Patient education
- Delivery of prostheses
- Recall and maintenance
- e) Pre-prosthetic surgery
 - Improving the patients denture bearing areas and ridge relations
 - Non-surgical methods
 - i. Rest for the denture supporting tissues
 - ii. Occlusal correction of the old prostheses
 - iii. Improvement in nutrition & hygiene
 - iv. Conditioning of the patients musculature
 - Surgical Methods
 - i. Correction of conditions that preclude optimal prosthetic function
 - ii. Hyper-plastic ridges
 - iii. Epulis Fissuratum and Papillomatosis
 - iv. Frenal attachments
 - v. Pedunculated maxillary tuberosity
 - vi. Ridge augmentation
 - vii. Oral implants
 - viii. Correction of congenital deformities
 - ix. Correction of discrepancies in jaw size
 - x. Relief of pressure on the mental foramen
 - xi. Enlargement of denture bearing areas
 - xii. Vestibuloplasty
 - xiii. Removal of tori

II) TEACHING & LEARNING ACTIVITIES

- Lectures in Prosthodontics, Dental Material Science & Basic Medical subjects (as per the norms of Dr.D.Y. Patil University)
- Journal club: The journal review meetings shall be held once in a week. All PGs are expected to actively participate and make at least five presentations of selected articles
- Seminars: The seminars shall be held at least twice a week in the department. All the PGs and their Post graduate teachers are expected to participate actively. Each PG shall make at least 5 seminars in each year.
- Attending conferences & workshops; The PGs shall be encouraged to attend conferences and workshops concerned with the subject from time to time. All PGs are expected to present posters and papers in conferences as per the norms stated by the University.
- Teaching skills: The PG students are expected to take at least one Dental Material science/Prosthodontics lecture for Undergraduate students under the guidance of their teachers.
- Evaluation skills: PGs shall be encouraged to take part in evaluation of day-to-day pre-clinical laboratory work of Undergraduate students
- Attending Continuing Dental Education Programme: All PGs shall be encouraged to upgrade their knowledge by attending continuing dental education programmes.

III) CLINICAL PROGRAMME

- Attending Departmental OPD
- Maintaining Departmental clinical record
- Attending and treating cases assigned for CD, RPD & FPD
- Attending and treating special cases
- Participating in community dental programmes

IV) DISSERTATION

- a) Library Dissetation
 - b) Final dissertation
- (As per norms of the University)

M.D.S. Part II Clinical Programme
Clinical Requirement During Training

1.	Complete Dentures		
a)	Reutine Cases	:	30
b)	Balanced Occlusion	:	05
2.	Removable Partial Dentures		
A.	Cast Partial Dentures	:	02
B.	Interim Partial Dentures	:	10
C.	Transitioal Partial Denture	:	05
D.	Immediate Dentures	:	05
3.	Crowns		
A.	Posterior full metal crown	:	20
B.	Posterior full metal ceramic crown	:	10
C.	Anterior metal ceramic crowns	:	10
D.	All ceramic crowns	:	05
4.	Fixed Partial Dentures (Bridges):		15
5.	Maxillofacial Prosthesis	:	05
6	Implant Prosthesis	:	02
7	Full mouth rehabilitation	:	02
3.	ASSESSMENT:		
	A Periodic Tests		

During the course of three years, the departments will conduct three tests, two of them by annual tests, one at the end of first year and the other in the second year. The third test may be held three months before the final examination. The tests may include written papers, Practical and viva voce. Records and mark obtained in such tests will be maintained by the Head of the department and sent to the university, when called for.

Evaluation – Internal Assessment Examinations

III Year M.D.S.

- Clinical and laboratory practice continued from IInd Year
- Occlusion equilibration procedures – fabrication of stabilizing splint for parafunctional disorders, occlusal disorders TMJ functions
- Practice of dental, oral and facial aesthetics
- The clinical practice of all aspects of Prosthodontic therapy for elderly patients
- Implants prosthodontics- Rehabilitation of Partial Edentulous, complete edentulism and craniofacial rehabilitation
- Failures in all aspects of prostodontics and its management and after care
- Team management for aesthetics, TMJ syndrome and Maxillofacial and Craniofacial Prostodontics
- Management of Prostodontic emergencies, Resuscitation
- Candidate should complete the course by attending large number and variety of patients to master prostodontic therapy. This includes the practice management, examination, treatment planning, communication with patient, clinical and laboratory techniques, materials and instrumentation requiring different aspects of prostodontic therapy. Tooth and Tooth surface restoration, Restoration root treated teeth, splints for periodontal rehabilitations and fractured jaws, complete dentures, R.P.D, FPD.

Immediate dentures, over dentures implant supported prosthesis, maxillofacial and body prosthesis, occlusal rehabilitation.

- Prosthetic management of TMJ syndrome
- Management of failed restoration
- Complete and submit Library Assignment 6 months prior to examination
- Candidates should acquire complete theoretical and clinical knowledge through seminars, symposium, workshops and reading
- Participation and presentation in seminars didactic lectures
- Evaluation – Internal assessment examinations three months before University examinations

PROSTHODONTIC TREATMENT MODALITIES

1. Diagnosis and Treatment plan in prosthodontics
2. Tooth and tooth surface restoration
 - Fillings
 - Veneers – composites and ceramics
 - Inlays – composite, ceramic and alloys
 - Onlay - composite, ceramic and alloys
 - Partial crowns – 1/4th , 4/5th, 7/8th, ½ crowns
 - Pin – ledge
 - Radicular crows
 - Full crowns

3. Tooth Replacements

	PARTIAL	COMPLETE	
• Tooth supported	Fixed partial denture		Overdenture
• Tissue supported	Interim partial denture		Complete denture
	Intermediate partial denture	Immediate denture	
		Immediate complete denture	
• Tooth & Tissue Cast partial denture			Over denture
Supported	Precision attachment		
• Implant supported	Cement retained		Bar attachment
	Screw retained	Ball attachment	
	Clip attachment		
• Tooth	Screw retained		
Supported	Cement retained		

 - Root supported Dowel and core Overdenture
 - Pin retained
 - Precision attachments
 - Intra coronal attachments
 - Extra coronal attachments
 - Bar – slide attachments
 - Joints and hinge joint attachments.
4. Tooth and tissue defects (Maxillofacial and Cranio-facial prosthesis)
 - A. Congenital Defects
 - a. Cleft lip and palate)
 - b. Pierre Robin Syndrome)
 - c. Ectodermal dysplasia) cast partial dentures
 - d. Hemifacial microsomia) Implant supported prosthesis
 - e. Anodontia) complete dentures

- f. Oligodontia) fixed partial dentures
- g. Malformed teeth)
- B. Acquired defects
 - a. Head and neck cancer patients- prosthodontic splints and stents
 - b. Restoration of facial defects
 - Auricular prosthesis
 - Nasal prosthesis
 - Orbital prosthesis
 - Craniofacial implants
 - c. Midfacial defects) cast partial denture
 - d. Restoration of maxillofacial trauma) Implant supported dentures
 - e. Hemimandibulectomy) complete dentures
 - f. Maxilloctomy)
 - g. Lip and cheek support prosthesis
 - h. Ocular prosthesis
 - i. Speech and Velopharyngeal prosthesis
 - j. Laryngectomy aids
 - k. Esophageal prosthesis
 - l. Nasal stents
 - m. Tongue prosthesis
 - n. Burn stents
 - o. Auditory inserts
 - p. Trismus appliances
- 5 T.M.J. and occlusal disturbances
 - a. Occlusal equilibrium
 - b. Splints – Diagnostic
- Repositioners/Deprogrammers
 - c. Anterior bite plate
 - d. Posterior bite plate
 - e. Bite raising appliances
 - f. Occlusal rehabilitation
- 6 Esthetic/Smile designing
 - a. Laminates/Veneers
 - b. Tooth contouring (peg laterals, malformed teeth)
 - c. Tooth replacements
 - d. Team management
- 7 Psychological therapy
 - a. Questionnaire
 - b. Charts, papers, photographs
 - c. Models
 - d. Case reports
 - e. Patient counseling
 - f. Behavioral modifications
 - g. Referrals
- 8 Geriatric Prosthodontics
 - a. Prosthodontics for the elderly
 - b. Behavioral and psychological counseling
 - c. Removable Prosthodontics
 - d. Fixed Prosthodontics
 - e. Implant supported Prosthodontics
 - f. Maxillofacial Prosthodontics

- g. Psychological and physiological considerations
- 9 Preventive measures
- a. Diet and nutrition modulation and counseling
- b. Referrals

The bench work should be completed before the clinical work starts during the first year of the MDS Course

1. Complete dentures
 - 1 Arrangements in adjustable articulator for
 - Class I
 - Class II
 - Class III
 - Various face bow transfer to adjustable articulators
 - Processing of characterized anatomical denture
- II. Removable partial denture
 1. Design for Kennedy's Classification (Survey, block out and design)
 - Class I
 - Class II
 - Class III
 - Class IV
 2. Designing of various components of RPD
 - 3 Wax pattern on refractory cast
 - Class I
 - Class II
 - Class III
 - Class IV
 - 4 Casting and finishing of metal frameworks
 - 5 Acrylisation on metal frameworks for
 - Class I
 - Class III with modification
- III Fixed Partial Denture
 - 1 Preparation in ivory teeth/natural teeth
 - PVC for metal
 - PVC for ceramic
 - Porcelain jacket crown
 - Acrylic jacket crown
 - PFM crown
 - 3/4th (canine, premolar and)
 - 7/8th posterior
 - Proximal half crown
 - Inlay – Class I, II, V
 - Onlay – Pin ledged, pinhole
 - Laminates
 - 2 Preparation of different die system
 - 3 Fabrication of wax pattern by drop wax build up technique
 - Wax in increments to produce wax coping over dies of teeth preparations on substructures
 - Wax additive technique
 - 3-unit wax pattern (maxillary and Mandibular)
 - Full mouth
 - 4 Pontic design in wax pattern
 - Ridge lap

- Sanitary
 - Modified ridge lap
 - Modified sanitary
 - Spherical or conical
- 5 Fabrication of metal framework
- Full metal bridge for posterior (3 units)
 - Coping for anterior (3 unit)
 - Full metal with acrylic facing
 - Full metal with ceramic facing
 - Adhesive bridge for anterior
 - Coping for metal margin ceramic crown
 - Pin ledge crown
- 6 Fabrication of crowns
- All ceramic crowns with characterization
 - Metal ceramic crowns with characterization
 - Full metal crown
 - Precious metal crown
 - Post and core
- 7 Laminates
- Composites with characterization
 - Ceramic with characterization
 - Acrylic
- 8 Preparation for composites
- Laminates
 - Crown
 - Inlay
 - Onlay
 - Class I
 - Class II
 - Class III
 - Class IV
 - Fractured anterior tooth
- IV. Maxillofacial prosthesis
1. Eye
 2. Ear
 3. Nose
 4. Face
 5. Body
 6. Cranial
 7. Maxillectomy
 8. Finger prosthesis
 9. Guiding flange
 10. Obturator
- V. Implant supported prosthesis
1. Step by sep procedures – laboratory phase
- VI Other exercises
1. TMJ splints – stabilization appliances, maxillary and Mandibular repositioning appliances
 2. Anterior disclusion appliances
 3. Chrome cobalt and acrylic resin stabilization appliances
 4. Modification in accommodation in irregularities in dentures
 5. Occlusal splint

6. Periodontal splint
7. Precision attachments – custom made
8. Over denture coping
9. Full mouth rehabilitation (by drop wax technique, ceramic build up)
10. TMJ appliances – stabilization appliances

ESSENTIAL SKILLS

Key

- 0 - Washes up and observes
- A - Assists a senior
- PA - Performs procedure under the direct supervision of a senior specialist
- PI - Performs independently

PROCEDURE CATEGORY

O A PA PI

Tooth and tooth surface restoration

- a) Composites – fillings, laminates, inlay, onlay
 - b) Ceramics – laminates, inlay, onlay
 - c) Glass ionome
- 2
- 2
- 1
- 2
- 2
- 1
- 2
- 2
- 1
- 10
- 10
- 10

CROWNS

- | | | | | | | | |
|---|---|---|---|----|----|---|---|
| PVC for metal | 1 | 2 | 2 | 10 | | | |
| PVC for Ceramic | | 1 | 2 | 2 | 10 | | |
| Precious metal crown | 1 | | | 1 | 5 | | |
| Galvanoformed crown | | | | 1 | 1 | | |
| 3/4th Crowns (Premolars, canines and centrals) | 1 | | | | | 5 | |
| 7/8th Posterior Crown | 1 | | | | 5 | | |
| Proximal half crown | 1 | | | | 5 | | |
| Pin ledge and pin hole crowns | 1 | | | | | 5 | |
| Telescopic Crowns | 1 | | | | 5 | | |
| Intraradicular crowns (Central, internal canine premolar and molar) | | | | | | | 1 |
| Crown as implant supported prosthesis | 1 | | | | 1 | 5 | |

FIXED PARTIAL DENTURES

- | | | | | | | | | |
|--|---|---|---|---|----|---|---|---|
| Cast porcelain (3 units) | 1 | | | | 5 | | | |
| Cast metal – precious and non precious(3 unit posterior) | 1 | | | | | | | 5 |
| Porcelain fused metal (anterior and posterior) | 1 | 1 | 1 | 1 | 10 | | | |
| Multiple abutment – maxillary and mandibular full arch | 1 | 1 | 1 | 1 | 5 | | | |
| Incorporation of custom made and ready made precision joint or attachments | | | | | | 1 | 1 | 1 |
- 4
- | | | | | | | | | |
|--|---|--|--|--|---|----|--|--|
| Adhesive bridge for anterior / posterior | 1 | | | | 1 | 10 | | |
| Metal fused to resin anterior FPD | | | | | 1 | 5 | | |

Interim provisional restorations (crowns and FPDs)	1	1	1	10		
Immediate fixed partial dentures(interim)	1			5		
Fixed prosthesis as a retention and rehabilitation for acquired and congenital defects – maxillofacial prosthesis	1	1	1	5		
Implant supported prosthesis	1		1			
Implant – tooth supported prosthesis	1		1	1		
REMOVABLE PARTIAL DENTURE						
Provisional partial denture prosthesis	1	1	1	10		
Cast removable partial denture(Kennely's Applegate classification with modification)	1				1	1
	1	6				
Removable bridge with precision attachments and telescopic crowns for anterior and posterior	1	2	4			1
Immediate RPD1	1	1	5			
Partial denture for medically compromised and handicapped patients					1	1
					1	5
COMPLETE DENTURES						
Neurocentric occlusion & characterized prosthesis				1	5	
Anatomic characterized prosthesis (by using semi adjustable articulator)					1	25
Single dentures	1	5				
Overlay dentures		1	5			
Interim complete dentures as a treatment prosthesis for abused denture supporting tissues	1	5				
Complete denture prosthesis (for abnormal ridge relation, ridge form & ridge size)	1	5				
Complete dentures for patients with TMJ syndromes				1	5	
Complete dentures for medically compromised & handicapped patients					1	5
GERIATRIC PATIENTS						
Tooth and tooth surface restorations, crowns, fixed prosthesis, removable prosthesis	1	5				
IMPLANT SUPPORTED COMPLETE PROSTHESIS						
Implant supported complete prosthesis(Maxillary and mandibular)					1	1
MAXILOFACIAL PROSTHESIS						
Guiding flange and obturators			1	4		
Speech and palatal lift prosthesis				1	2	
Eye prosthesis	1	2				
Ear Prosthesis	1	2				
Nose Prosthesis	1	2				
Face prosthesis		1				
Maxillectomy	1	2				
Hemimadibulectomy		1	2			
Cranioplasty	1	1				
Finger / head, foot		1	2			
Body prosthesis	1	1				
Management of burns, scars				1		
TMJ SYNDROME MANAGEMENT						
Splints- periodontal, teeth, jaws				4		
TMJ supportive and treatment prosthesis				1	1	
Stabilization appliances for maxilla and mandible with freedom to move from IP to CRCP						
	1					
In IP without the freedom to move to CRCP					1	
Repositioning appliances, anterior disclusion					1	

Chrome cobalt and acrylic resin stabilization appliances for modification to accommodate for the irregularities in the dentition 2

Occlusal adjustment and occlusal equilibrium 1 4

FULL MOUTH REHABILITATION

Full mouth rehabilitation – Restoration of esthetics and function of stomatognathic system
1 4

INTER-DISCIPLINARY TREATMENT MODALITIES

Inter-disciplinary management – restoration of Oro craniofacial defects for esthetics, phonation, mastication and psychological comforts 1 2

MANAGEMENT OF FAILED RESTORATION

Tooth and tooth surface restoration 5

Removable prosthesis 10

Crowns and fixed prosthesis 5

Maxillofacial prosthesis 2

Implant supported prosthesis 1

Occlusal rehabilitation & TMJ Syndrome 2

Restoration failure of Psychogenic origin 5

Failure to age changes 2

3.6.3 SUMMATIVE EVALUATION PATTERN

1). Term end examination for Part I,II,III students. (both theory and practical)

2). Year end examination for Part I,II,III students. (both theory and practical)

(note:- university pattern for examination is observed for the departmental examinations)

3). Part I – Once in three months, last Thursday theory examination

4). Part II –Once in two months, last Thursday theory examination.

5). Part III- Every month last Thursday theory examination.

SUMMATIVE EVALUATION

THEORY

SAQ (6 OUT OF 7) x 10 = 60 MARKS

LAQ(2 out of 2) x 20 = 40 MARKS

TOTAL = 100 MARKS

PRACTICAL

Presentations Of Treated Patients And Record During 3 Yrs Training Period

A C.D. 5 Marks

B R.P.D 5 Marks

C F.P.D 10 Marks

D I.S.P 10 Marks

E Occlusal Rehabilitation 10 Marks

F Maxillofacial Prosthesis 10 Marks

Total 50 Marks

Presentation Of Actual Treated Patient.

A Treatment Plan 10 Marks

B Tentative Jaw Relation 5 Marks

C Face Bow Transfer 5 Marks

D Transferring It To Articulators 10 Marks

E Extra Oral Tracing And Securing Centric And Protrusive Record 25 Marks

F Transferring On Articulators 10 Marks

G Selection Of Teeth 5marks

H Arrangement Of Teeth 15 Marks

I Waxed Up Denture Trial 10 Marks
J Denture Insertion 5 Marks
Total 100 Marks

F.P.D

A. Case Discussion And Selection Of Patient 10 Marks
B. Abutment Preparation , Isolation And Fluid Control 50 Marks
C. Gingival Retraction And Impression 20 Marks
D. Provisionalization 20 Marks
Total 100 Marks

R.P.D

A. Surveying And Designing Of Partially Edentulous Cast 25 Marks
B. Discussion On Components And Material Selection Including Occlusion Scheme 25 Marks
Total 50 Marks

Viva-Voce

A. Viva-Voce Examination 50 Marks
B. Five Cases Presentation 30 Marks
C. Pedagogue Exercises 20 Marks
Total 100 Marks