



YENEPOYA UNIVERSITY
Deralakatte, Mangaluru -575018

REGULATIONS AND CURRICULUM GOVERNING
POSTGRADUATE PROGRAM (MDS) IN
PROSTHODONTICS AND CROWN & BRIDGE

(REVISED CURRICULUM – AMENDED UP TO 2017)

ATTESTED


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Ref. No.YU/REG/ACA/ACM-30/2017

Date: 04.11.2017

NOTIFICATION

Sub: Implementation of DCI Regulations 2017 – MDS reg.:-

Ref: (i) Proceedings of the 30th Academic Council meeting held on 20.10.2017
(ii) Gazette Notification Govt. of India dated 5th September 2017 on DCI Regulations 2017

With reference and Subject cited above, Yenepoya University based on the Academic Council proceedings is pleased to implement the DCI regulation 2017 for all the 9 MDS Programs offered with effect from 2018-19 academic year onwards.

B.T. N. [Signature]
REGISTRAR
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GOALS:

To train the dental graduates so as to ensure higher level of competence in both general and specialty areas of Prosthodontics and prepare candidates with teaching, research and clinical abilities including prevention and after care in Prosthodontics – removable dental prosthodontics, fixed dental prosthodontics (Crown & Bridge), implantology, maxillofacial prosthodontics and esthetic dentistry.

OBJECTIVES:

At the end of 3 years of training the candidate should be able to acquire adequate knowledge of the discipline.

Training program for the dental graduates in Prosthetic dentistry– removable dental prosthodontics, fixed dental Prosthodontics (Crown & Bridge), implantology, maxillofacial prosthodontics and esthetic dentistry and Crown & Bridge including Implantology is structured to achieve knowledge and skill in theoretical and clinical laboratory, attitude, communicative skills and ability to perform research with a good understanding of social, cultural, educational and environmental background of the society.

- To have adequate acquired knowledge and understanding of applied basic and systemic medical sciences, both in general and in particularly of head and neck region.
- The postgraduates should 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 graduates and MDS graduates of other specialties.
- To demonstrate evaluative and judgment skills in making appropriate decisions regarding prevention, treatment, after care and referrals to deliver comprehensive care to patients.

1. KNOWLEDGE:

The candidate should possess knowledge of applied basic and systemic medical sciences, knowledge to diagnose and plan treatment for patients requiring Prosthodontic therapy, ability to read and interpret a radiograph and other investigations for the purpose of diagnosis and treatment plan. Candidates should

have theoretical, clinical and practical knowledge regarding tooth and tooth surface restorations, complete denture Prosthodontics, removable partial denture Prosthodontics, fixed Prosthodontics, maxillofacial and craniofacial Prosthodontics, implants and implant supported Prosthodontics, T.M.J and occlusion, craniofacial esthetic, and biomaterials, craniofacial disorders, problems of psychogenic origin.

2. SKILLS: Following important skills need to be imparted.

Diagnostic skill to examine the patients requiring Prosthodontic therapy, investigate the patient systemically, analyze the investigation results, radiography, diagnose the ailment, plan a treatment, communicate it with the patient and execute it.

Clinical and practical skills to demonstrate the clinical competence necessary to carry out appropriate treatment at higher level of knowledge, training and practice skills currently available in their specialty area. 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. Perform clinical and laboratory procedures with understanding of biomaterials, tissue conditions related to prosthesis and have competent dexterity and skills for performing clinical and laboratory procedures in fixed, removable, implant, maxillofacial, TMJ and esthetics Prosthodontics.

Laboratory technique management based on skills and knowledge of dental materials and dental equipment and instrument management. Research skills in handling scientific problems pertaining to diagnosis and treatment in Prosthodontic therapy. Clinical and didactic skills in encouraging younger doctors to attain learning objectives.

3. ATTITUDES:

The positive mental attitude and the persistence of continued learning need to be inculcated.

To adopt ethical principles in Prosthodontic practice, Professional honesty, credibility and integrity are to be fostered. Treatment to be delivered irrespective of social status, caste, creed or religion of patient.

- Should be willing to share the knowledge and clinical experience with professional colleagues.
- Should develop an attitude towards quality, excellence, non-compromising in treatment.

- Should be able to self-evaluate, reflect and improve on their own.
- Should pursue research in a goal to contribute significant, relevant and useful information, concept or methodology to the scientific fraternity.
- Should be able to demonstrate evidence-based practice while handling cases.
- Should be willing to adopt new methods and techniques in prosthodontics from time to time based on scientific research, which are in patient's best interest.
- Should respect patient's rights and privileges, including patient's right to information and right to seek second opinion.

4. COMMUNICATIVE ABILITIES:

To develop communication skills, in particular and to explain treatment options available in the management.

- To provide leadership and get the best out of his / her group in a congenial working atmosphere.
- Should be able to communicate in simple understandable language with the patient and explain the principles of Prosthodontics to the patient. He/She should be able to guide and counsel the patient with regard to various treatment modalities available.
- To develop the ability to communicate with professional colleagues through various media like Internet, e-mails, videoconferences etc. to render the best possible treatment.

Should demonstrate good explanatory and demonstrating ability as a teacher in order to facilitate learning among students.

COURSE CONTENTS:

The course content has been identified and categorized as essential knowledge given below.

ESSENTIAL KNOWLEDGE:

The topics to be considered are Applied Basic Sciences, Oral and Maxillofacial Prosthodontics and Implantology.

PART-I

Paper I: APPLIED BASIC SCIENCES

Applied Anatomy of head and neck:

1. General Human Anatomy: Gross anatomy, anatomy of head and neck in detail:
 - a. Cranial and facial bones
 - b. Anatomy of TMJ, movement of TMJ and myofascial pain dysfunction syndrome c. Muscles of Facial Expression and Muscles of Mastication
 - d. Muscles of neck and back
 - e. Muscles of deglutition and tongue
 - f. Arterial supply and venous drainage of head and neck
 - g. Anatomy of paranasal sinus in relation to V cranial nerve h. Salivary glands, pharynx, larynx, trachea and esophagus
 - i. General considerations of the structure and function of the brain
 - j. Brief considerations of V, VII, XI, XII cranial nerves and autonomic nervous system of head and neck.
2. Functional anatomy of mastication, deglutition, speech, respiration and circulation.
3. Teeth eruption, morphology, occlusion and function.

EMBRYOLOGY:

1. Development of face, palate, tongue, jaws, TMJ, Para nasal sinus, pharynx, larynx, trachea, esophagus, salivary glands.
2. Development of oral and Para oral tissue including detailed aspects of tooth and dental hard tissue formation.
3. Pharyngeal apparatus in detail including the floor of the primitive pharynx.
4. Congenital anomalies of face must be dealt in detail.

GROWTH AND DEVELOPMENT:

1. Facial form, Facial growth and development, overview of dento facial growth process and physiology from fetal period to maturity and old age, comprehensive study of craniofacial biology.
2. General physical growth, functional and anatomical aspects of the head, changes in craniofacial skeletal relationship between development of the dentition and facial growth.

DENTAL ANATOMY:

1. Anatomy of primary and secondary dentition
2. Concept of occlusion, mechanism of articulation, and masticatory function.
3. Detailed structural and functional study of the oral, dental and para oral tissues.
4. Normal occlusion, development of occlusion in deciduous, mixed and permanent dentitions, root length, root configuration, tooth-numbering system.

HISTOLOGY:

1. Histology of enamel, dentin, cementum, periodontal ligament and alveolar bone, pulpal anatomy, histology and biological consideration.
2. Salivary glands and histology of epithelial tissues including the glands

3. Histology of general and specific connective tissue including bone, hematopoietic system, lymphoid system
4. Study of epithelium of oral cavity and the respiratory tract
5. Muscular tissue
6. Nervous tissue
7. Blood vessels
8. Cartilage
9. Tongue
10. Salivary glands
11. Tonsil, thymus, lymph nodes

ANTHROPOLOGY AND EVOLUTION:

1. Comparative study of tooth, joints, jaws, muscles of mastication and facial expression, tongue, palate, facial profile and facial skeletal system.
2. Comparative anatomy of skull, bone, brain, musculo - skeletal system, neuromuscular coordination, posture and gait .

APPLIED GENETICS AND HEREDITARY:

1. Principles of orofacial genetics, molecular basis of genetics, genetic risks, counseling, bioethics.
2. Dentofacial anomalies, anatomical, psychological and pathological characteristic of major groups of developmental defects of the orofacial structures.

CELL BIOLOGY:

1. Detailed study of the structure and function of the mammalian cell with special emphasis on ultra structural features and molecular aspects.
2. Detailed consideration of Inter cellular junctions, cell cycle and division, cell to cell and cell- extra cellular matrix interactions.

PHYSIOLOGY:

Mastication, deglutition, digestion and assimilation

Homeostasis, fluid and electrolyte balance.

Blood composition, volume, function, blood groups and hemorrhage, blood transfusion, circulation, heart, pulse, blood pressure, capillary and lymphatic circulation.

Shock, respiration control, anoxia, hypoxia, asphyxia, artificial respiration.

Role of calcium and Vitamin D in growth and development of teeth, bone and jaws.

Role of Vitamin A, C and B complex in oral mucosal and periodontal health. Physiology and function of the masticatory system.

Speech mechanism, mastication, swallowing and deglutition mechanism, salivary glands and saliva

General principles of endocrine activity and disorders relating to pituitary, thyroid, pancreas, parathyroid, adrenals, gonads, including pregnancy and lactation.

Physiology of saliva, urine formation, normal and abnormal constituents.

Physiology of pain, sympathetic and parasympathetic nervous system. Neuromuscular coordination of the stomatognathic system.

Laboratory determinations: Blood groups, blood matching, R.B.C and W.B.C. count, bleeding and clotting time

APPLIED NUTRITION:

General principles, balanced diet, effect of dietary deficiencies and starvation.

Diet, digestion, absorption, transportation and utilization, diet for elderly patients.

BIOCHEMISTRY:

General principles governing the various biological activities of the body, such as osmotic pressure, electrolytic dissociation, oxidation-reduction, intermediary metabolism.

Carbohydrates, proteins, lipids and their metabolism.

Enzymes, Vitamins and minerals, Hormones, Blood and other body fluids, Metabolism of inorganic elements, Detoxification in the body, Anti metabolites.

PATHOLOGY:

Inflammation, repair and degeneration. Necrosis and gangrene.

Circulatory disturbances, Ischemia, hyperemia, chronic venous congestion, edema, thrombosis, embolism and infarction, infection and infective granulomas. Allergy and hypersensitive reaction.

Neoplasm; Classification of tumors. Carcinogenesis, characteristics of benign and malignant tumors, spread of tumors.

Applied histopathology and clinical pathology.

Applied Oral Pathology:

Developmental disturbances of oral and Para oral structures, Regressive changes of teeth. Bacterial, viral and mycotic infections of oral cavity, dental caries, diseases of pulp and periapical tissues.

Physical and chemical injuries of the oral cavity

Oral manifestations of metabolic and endocrine disturbances.

Diseases of the blood in relation to the oral cavity, Periodontal diseases. Diseases of the skin, nerves and muscles in relation to the Oral cavity.

MICROBIOLOGY:

Immunity

Knowledge of organisms commonly associated with diseases of the oral cavity (morphology cultural characteristics etc) of streptococcus, staphylococcus, pneumococcus, gonococcus and meningococci, Clostridia group of organisms, Spirochetes, organisms of tuberculosis, leprosy, diphtheria, actinomycosis and moniliasis etc.

Virology

Cross infection control, sterilization and hospital waste management

Laboratory determinations: Smear and cultures - urine analysis and cultu

PHARMACOLOGY:

Definition of terminologies used - dosage and mode of administration of drugs. Action and fate of drugs in the body.

Drug addiction, tolerance and hypersensitive reactions.

Drugs acting on the central nervous system, general anesthetics, hypnotics. Analeptics and tranquilizers, Local anesthetics.

Chemotherapeutics and antibiotics.

Antitubercular and anti syphilitic drugs. Analgesics and antipyretics, Antiseptics, styptics. Sialogogues and antisialogogues. Haematinics, Cortisone, ACTH, insulin and other anti diabetics Vitamins: A, D, B - complex group, C and K Chemotherapy and Radiotherapy

BIOSTATISTICS

Study of Biostatistics as applied to dentistry and research.

Definition, aim ,characteristics and limitations of statistics, planning of statistical experiments, sampling, collection, classification and presentation of data (Tables, graphs, pictograms etc) Analysis of data.

INTRODUCTION TO BIOSTATISTICS

Scope and need for statistical application to biological data.

Definition of selected terms - scale of measurements related to statistics. Methods of collecting data, presentation of the statistical diagrams and graphs.

Frequency curves, mean, mode and median, Standard deviation and co-efficient of variation. Correlation - Co-efficient and its significance.

Binominal distributions, normal distribution and Poisson distribution.

Tests of significance

RESEARCH METHODOLOGY

Understanding and evaluating dental research, scientific method

Measurement and Errors of measurement, Presentation of results, Reliability, Sensitivity and Specificity diagnosis test and measurement, Research Strategies, Observation, Correlation, Experimentation and Experimental design.

Logic of statistical interference, clinical vs scientific judgement, problem with clinical judgement, forming scientific judgements, the problem of contradictory evidence, citation analysis as a means of literature evaluation, influencing judgement

APPLIED RADIOLOGY

Introduction, radiation, background of radiation, sources, radiation biology, somatic damage genetic damage, protection from primary and secondary radiation, Principles of X-ray production Applied principles of radio therapy and after care.

ROENTGENOGRAPHIC TECHNIQUES

Intra oral, extra oral roentgenography

Methods of localization, digital radiology and ultra sound

Normal anatomical landmarks of teeth and jaws in radiograms Temporomandibular joint radiograms

Neck radiograms.

APPLIED MEDICINE

Systemic diseases and its influence on general health and oral and dental health.

Medical emergencies in the dental offices - Prevention, preparation, medico legal consideration, unconsciousness, respiratory distress, altered consciousness, seizures, drug related emergencies, chest pain, cardiac arrest, premedication, and management of ambulatory patients, resuscitation, applied psychiatry, child, adult and senior citizens.

Assessment of case, premaliation, inhibition, monitoring, extubalin, complication, assist in O.T. for anesthesia.

APPLIED SURGERY & ANESTHESIA

General principles of surgery, wound healing, incision wound care, hospital care, control of hemorrhage, electrolyte balance.

Common bandages, sutures, splints, shifting of critically ill patients, prophylactic therapy, bone surgeries, grafts, etc, surgical techniques, nursing assistance, anesthetic assistance.

Principles in speech therapy, surgical and radiological craniofacial oncology, applied surgical ENT and ophthalmology

PLASTIC SURGERY

Applied understanding and assistance in programmes of plastic surgery for prosthodontics therapy.

APPLIED DENTAL MATERIAL

- All materials used for treatment of craniofacial disorders - Clinical, treatment, and laboratory materials, Associated materials, Technical consideration, shelf life, storage, manipulations, sterilization, and waste management.
- Students shall acquire knowledge and practice of history taking, examination of systemic and oral and craniofacial region and diagnosis and treatment plan and prognosis record maintaining. A comprehensive rehabilitation concept with pre prosthetic treatment plan including surgical reevaluation and Prosthodontic treatment plan, impressions, jaw relations, utility of face bow and articulators, selection and positioning of teeth for retention, stability, esthetics, phonation and psychological comfort. Fit and insertion and instruction for patients after care and preventive Prosthodontic, management of failed restorations.

TMJ syndromes, occlusion rehabilitation and craniofacial esthetics. State of the art clinical methods and materials for implants supported extra oral and intra oral prosthesis.

- Knowledge of testing biological, mechanical and other physical property of all material used for the clinical and laboratory procedures in Prosthodontic therapy.

PART II

REMOVABLE PROSTHODONTICS AND IMPLANT SUPPORTED PROSTHESIS (IMPLANTOLOGY), GERIATRIC DENTISTRY AND CRANIO FACIAL PROSTHODONTICS

Study includes Seminars / lectures / Demonstrations

Removable Prosthodontics and implants:

a. Prosthodontic treatment for completely edentulous patients - Complete denture, immediate complete denture, single complete denture, tooth supported complete denture, Implant supported Prosthesis for completely edentulous patients

b. Prosthodontic treatment for partially edentulous patients: Clasp-retained partial dentures, intra coronal and extra coronal precision attachments retained partial dentures, maxillofacial prosthesis\

Prosthodontic treatment for edentulous patients - Complete Dentures and Implant supported Prosthesis.

Complete Denture Prosthesis –

Definitions, terminology (G.P.T., Boucher's clinical dental terminology)

Scope of Prosthodontic - The Cranio Mandibular system and its functions, the reasons for loss of teeth and methods of restorations

Infection control, cross infection barrier - clinical and laboratory and hospital and lab waste management

a. Edentulous Predicament, Biomechanics of the edentulous state, Support mechanism for the natural dentition and complete dentures.

Biological considerations, Functional and Para functional considerations, Esthetic, Behavioural and adaptive responses, Temporomandibular joints changes.

b. Effects of aging, distribution of edentulism in old age, impact of age on edentulous mouth - Mucosa, Bone, saliva, jaw movements in old age, taste and smell, nutrition, aging, skin and teeth, concern for personal appearance in old age.

c. Sequelae caused by wearing complete denture - the denture in the oral environment - mucosal reactions, altered taste perception, burning mouth syndrome, gagging, residual ridge resorption, denture stomatitis, flabby ridge, denture irritation hyperplasia, traumatic ulcers, oral cancer in denture wearers, nutritional deficiencies, masticatory ability and performance, nutritional status and masticatory functions.

d. Temporomandibular disorders in edentulous patients - Epidemiology, etiology and management, Pharmacotherapy, Physical modalities, and Bio-behavioral modalities.

e. Nutrition Care for the denture wearing patient - Impact of dental status on food intake, gastrointestinal functions, nutritional needs and status of older adults, Calcium and bone health, vitamin and nutritional

supplementation, dietary counselling and risk factor for malnutrition in patients with dentures and when teeth are extracted.

f. Complete denture patients –

Diagnosis and treatment planning for edentulous and partially edentulous patients - problem identification, prognosis and treatment planning - contributing history - patient's history, social information, medical status - systemic status with special reference to debilitating diseases, diseases of the joint, cardiovascular, disease of the skin, neurological disorders, oral malignancies, use of drugs, mental health - mental attitude, psychological changes, adaptability, geriatric changes - physiologic, pathological and intra oral changes.

Intra oral health - mucose membrane, alveolar ridges, palate and vestibular sulcus and dental health.

Data collection and recording, visual observation, radiography, palpation, measurement- sulci or fossae, extra oral measurement, the vertical dimension of occlusion, diagnostic casts.

Specific observations - existing dentures, soft tissue health, hard tissue health - teeth, bone

Biomechanical considerations - jaw relations, border tissues, saliva, and muscular development - muscle tone, neuromuscular co-ordination, tongue, cheek and lips.

Interpreting diagnostic findings and treatment planning

g. Pre prosthetic surgery - Improving the patients 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 patients 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 foramen, enlargement of denture bearing areas, vestibuloplasty, ridge augmentation, replacement of tooth roots with Osseo integrated denture implants.

. h. Immediate Denture - Advantages, disadvantages, contra indication, diagnosis treatment plan and prognosis, Explanation to the patient, Oral examinations, examination of existing prosthesis, tooth modification, prognosis, referrals/adjunctive care, oral prophylaxis and other treatment needs.

First extraction / surgical visit, preliminary impressions and diagnostic casts, management of loose teeth, custom trays, final impressions and final casts two tray or sectional custom impression tray, location of posterior limit and jaw relation records, setting the denture teeth / verifying jaw relations and the try in, laboratory phase, setting of anterior teeth, Wax contouring, flasking and dewaxing, processing and finishing, surgical templates, surgery and immediate denture insertion, post operative care and patient instructions, subsequent service for the patient on the immediate denture, over denture tooth attachments, implants or implant attachments.

i. Over dentures (tooth supported complete dentures) - indications and treatment planning, "advantages and disadvantages, selection of abutment teeth, lose of abutment teeth, tooth supported complete dentures. Non-coping abutments, abutment with copings, abutments with attachments, submerged vital roots, preparations of the retained teeth.

j. Single Dentures: Single Mandibular denture to oppose natural maxillary teeth, single complete maxillary denture to oppose natural Mandibular teeth, to oppose a partially edentulous Mandibular arch with fixed prosthesis, partially edentulous Mandibular arch with removable partial dentures. Opposing existing complete dentures, preservation of the residual alveolar ridge, necessity for retaining maxillary teeth and mental trauma,

k. Art of communication in the management of the edentulous predicament - Communication - scope, a model of communication, why communication important, what are the elements of effective communications, special significance of doctor / patient communication, doctor behavior, The iatrosedative (doctor & act of making calm) recognizing and acknowledging the problem, exploring and identifying the problem, interpreting and explaining the problem, offering a solution to the problem for mobilize their resources to operate most efficient way, recognizing and acknowledging the problem, interpreting and explaining the problem, offering a solution to the problem.

l. Materials prescribed in the management of edentulous patients - Denture base materials, General requirements of biomaterials for edentulous patients, requirement of an ideal denture base, chemical composition of denture base resins, materials used in the 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

j. Articulators - Classification, selection, limitations, precision, accuracy and sensitivity, and Functional activities of the lower member of the articulator and uses.

n. Fabrications of complete dentures –

Complete denture impressions - muscles of facial expressions and anatomical landmarks, support, retention, stability, aims and objectives - preservation, support, stability, aesthetics, and retention.

Impression materials and techniques - the preliminary impression and final impression

,Developing an analogue / substitute for the maxillary denture bearing area - 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 spiny process, torus palatinus, Anatomy of peripheral or limiting structures, labial vestibule, Buccal vestibule, vibrating line. Preliminary and final impressions, 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.

Developing an analogue / substitute for the Mandibular denture bearing area-Mandible - anatomy of supporting structure, crest of the residual ridge, the buccal shelf, shape of supporting structure, mylohyoid ridge, mental foramen, genial tubercles, torus mandibularis, anatomy of peripheral or limiting structure - labial vestibule, buccal vestibule, lingual border, mylohyoid muscle, retromylohyoid fossa, sublingual gland region, alveolingual sulcus.

Mandibular impressions - preliminary impressions, custom tray, refining, preparing the tray, final impressions.

o. 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 trail denture base, tests to determine vertical dimension of occlusion, interocclusal and centric relation records. Biological and clinical considerations in making jaw relation records and transferring 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, physiologic rest position, vertical dimension, occlusion,

recording methods - mechanical, physiological.

Determining the horizontal jaw relation - Functional graphics, tactile or interocclusal 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.

p. Selecting and arranging artificial teeth and occlusion for the edentulous patient -anterior tooth selection, posterior tooth selection, and principles in arrangement of teeth, -and factors governing position of teeth - horizontal, vertical. The inclinations and arrangement of teeth for aesthetics, phonetics and mechanics - to concept of occlusion.

q. 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.

r. Speech considerations with complete dentures - speech production - structural and functional demands, neuropsychological background, speech production and the role of teeth and other oral structures - bilabial sounds, labiodentals sounds, linguodental sounds, linguoalveolar sound, articulatoric characteristics, acoustic characteristics, auditory characteristics, linguopalatal and linguoalveolar sounds, speech analysis and prosthetic considerations.

s. Waxing, contouring and processing the dentures their fit and Insertion and after care .

Laboratory procedure - wax contouring, flasking and processing, laboratory remount procedures and selective, finishing and polishing.

Critiquing the finished prosthesis -doctors evaluation, patients evaluation, friends evaluation, elimination of basal surface errors, errors in occlusion, interocclusal records for remounting procedures - verifying: centric relation, eliminating occlusal errors, special instructions to the patient -appearance with new denture, mastication with new dentures, speaking with new dentures, oral hygiene with dentures, preserving of residual ridges and educational material for patients, maintaining the comfort and health of the oral cavity in the rehabilitated edentulous patients.

24hrs oral examination and treatment and Prosthodontic - periodontic recall for oral examination 3 to 4 months intervals and yearly intervals.

t. Implant supported Prosthesis for partially edentulous patients - Science of osseointegration and clinical protocol for treatment with implant supported over dentures, managing problems and complications, implant Prosthodontics for edentulous patients – current and future directions.

Implant supported prosthesis for partially edentulous patients – clinical and laboratory protocol: Implant supported prosthesis, managing problems and complications

- Introduction and historical Review
- Biological, clinical and surgical aspects of oral implant
- Diagnosis and treatment planning
- Radiological interpretation for selection of fixtures
- Splints for guidance for surgical placement of fixtures
- Intra oral plastic surgery
- Guided bone and Tissue generation consideration for implants fixture.
- Implants supported prosthesis for complete edentulism and partial edentulism
- Occlusion for implants support prosthesis.
- Peri implant tissue and Management
- Peri - implant and management
- Maintenance and after care
- Management of failed restoration
- Work authorization for Implant supported prosthesis - definitive instructions, legal aspects, delineation of responsibility.

Prosthodontic treatment for partially edentulous patients - Removable partial

Prosthodontics

a. Scope, definition and terminology, classification of partially edentulous arches - requirements of acceptable methods of classification. Kennedy's classification, Apple gates rules

b. Components of RPD –

Major connector - mandibular and maxillary, minor connectors: design, functions, form, and location of major and minor connectors, tissue stops, finishing lines, reaction of tissue to metallic coverage

Rest and rest seats - from of the Occlusal rest and rest seat, interproximal Occlusal rest seats, internal Occlusal rests, possible movements of partial dentures, support for rests, lingual rests on canines and incisor teeth, incisal rest and rest seat.

Direct retainer- Internal attachment. Extra coronal direct retainer, relative uniformity of retention, flexibility of clasp arms, stabilizing reciprocal clasp, criteria for selecting a given clasp design, the basic principles of clasp design, circumferential clasp, bar clasp, combination clasp and other type of retainers.

Indirect Retainer - denture rotation about an axis, factors influencing effectiveness of indirect retainers, forms of indirect retainers, auxiliary Occlusal rest, canine extensions from Occlusal rests, canine rests, continuous bar retainers and linguoplasts, modification areas, rugae support, direct - indirect retention

Principles of removable partial Denture design - bio mechanical considerations, and the factors influencing it. Mouth preparations - Occlusal relationship of remaining teeth, orientation of Occlusal plane, available space for restoration, arch integrity, tooth morphology, response of oral structure to previous stress, periodontal conditions, abutment support, tooth supported and tooth and tissue supported, need for indirect retention, clasp design, need for rebasing, secondary impressions, need for abutment tooth modification, type of major connector, type of teeth selection, patients past experience, method of replacing single teeth or missing anterior teeth.

a. Difference between tooth supported and tissue supported partial dentures, essential of partial denture design, components of partial denture design, tooth support, ridge support, stabilizing components, guiding planes, use of splint bar for denture support, internal clip attachments, overlay abutment as support for a denture base, use of a component partial to gain support.

b. Education of patient

c. Diagnosis and treatment planning

d. Design, treatment sequencing and mouth preparation

e. Surveying - Description of dental surveyor, purposes of surveying, Aims and objectives in surveying of diagnostic cast and master cast, final path of placement, factors that determine path of placement and removal.

f. Recording relation of cast to surveyor, measuring retention, Blocking of master cast - paralleled blockout, shaped blockout, arbitrary blockout and relief.

g. Diagnosis and treatment planning – infection control and cross infection barriers – clinical and laboratory and hospital waste management,.

Objectives of prosthodontic treatment, records, systemic evaluation, Oral examination, preparation of diagnostic cast, interpretation of examination data, radiographic interpretation, periodontal considerations, caries activity, prospective surgical preparation, endodontic treatment, analysis of occlusal factors, fixed restorations, orthodontic treatment, need for determining the design of components, impression procedures and occlusion, need for reshaping remaining teeth, reduction of unfavorable tooth contours, differential diagnosis : fixed or removable partial dentures, choice between complete denture and removable partial dentures, choice of materials.

h. Preparation of Mouth for removable partial dentures - Oral surgical preparation, conditioning of abused and irritated tissues, periodontal preparation - objectives at periodontal therapy, periodontal diagnosis, control therapy, periodontal surgery.

i. Preparation of Abutment teeth - Classification of abutment teeth, sequence of abutment preparations on sound enamel or existing restorations, conservative restoration using crowns, splinting abutment teeth, utilization, temporary crowns to be used as abutment.

j. Impression Materials and Procedures for Removable Partial Dentures — Rigid materials, thermoplastic materials, Elastic materials, Impressions of the partially edentulous arch, Tooth supported, tooth tissue supported, Individual impression trays.

k. Support for the Distal Extension Denture Base - Distal extension removable partial denture, Factors influencing the support of distal extension base, Methods for obtaining functional support for the distal extension base.

l. Laboratory Procedures - Duplicating a stone cast, Waxing the partial denture framework, Anatomic replica patterns, Spruing, investing, burnout, casting and finishing of the partial denture framework, making record bases, occlusion rims, making a stone occlusal template from a functional

occlusal record, arranging posterior teeth to an opposing cast or template, types of anterior teeth, waxing and investing the partial denture before processing acrylic resin bases, processing the denture, remounting and occlusal correction to an occlusal template, polishing the denture.

m. Initial placement, adjustment and servicing of the removable partial denture - adjustments to bearing surfaces of denture framework, adjustment of occlusion in harmony with natural and artificial dentition, instructions to the patient, follow - up services.

n. Relining and Rebasement of the removable partial denture - Relining tooth supported dentures bases, relining distal extension denture bases, methods of reestablishing occlusion on a relined partial denture.

o. Repairs and additions to removable partial dentures - Broken clasp arms, fractured occlusal rests, distortion or breakage of other components — major and minor connectors, loss of a tooth or teeth not involved in the support or retention of the restoration, loss of an abutment tooth necessitating its replacement and making a new direct retainer, Other types of repairs. Repair by soldering.

p. Removable partial denture considerations in maxillofacial prosthetics – Maxillofacial prosthetics, intra oral prosthesis, design considerations, maxillary prosthesis, Obturators, speech aids, palatal lifts, palatal augmentations, mandibular prosthesis, treatment planning, framework design, class I resection. Class II resection, mandibular flange prosthesis, jaw relation record

q. Management of failed restorations and work authorization

III) MAXILLOFACIAL REHABILITATION

Scope, terminology, definitions, cross infection control and hospital waste management, work authorization.

Behavioral and psychological issues in head and neck cancer, Psychodynamic interactions - clinician and patient Cancer Chemotherapy: Oral Manifestations, Complications, and management, Radiation therapy of head and neck tumors: Oral effects, Dental manifestations and dental treatment; Etiology, treatment and rehabilitation (restoration) - Acquired defects of the mandible, acquired defects of hard palate, soft palate, clinical management of edentulous and partially edentulous maxillectomy patients, Facial defects, Restoration of speech, Velopharyngeal function, cleft lip and palate, cranial implants, maxillofacial trauma, Lip and cheek support prosthesis, Laryngectomy aids, Obstructive sleep apnoea, Tongue prosthesis, Esophageal prosthesis. Vaginal radiation carrier. Burn stents, Nasal stents, Auditory inserts, trismus appliances, mouth controlled devices for assisting the handicapped, custom prosthesis for

lagophthalmos of the eye. Osseo integrated supported facial and maxillofacial prosthesis. Resin bonding for maxillofacial prosthesis, Implant rehabilitation of the mandible compromise by radiotherapy, Craniofacial Osseo Integration, Prosthodontic treatment, Material and laboratory procedures for maxillofacial prosthesis.

Geriatric dentistry and cranio facial prosthodontics

FIXED PROSTHODONTICS, OCCLUSION, TMJ AND ESTHETIC

Study includes seminars / lectures / discussion

Fixed Prosthodontics

Scope, definitions and terminology, classification and principles, design, mechanical and biological considerations of components: retainers, connectors, pontics, work authorization

- Diagnosis and treatment planning –

Patient's history and interview, patient's desires and expectations and needs, systemic and emotional health

Clinical examinations - head and neck, oral - teeth, occlusal and periodontal, Preparation of diagnostic cast, radiographic interpretation, Aesthetics, endodontics consideration, abutment selection - bone support, root proximities and inclinations, selection of abutments, for cantilever, pier abutments, splinting, available tooth structures and crown morphology TMJ and muscles mastication and comprehensive planning and prognosis

- Management of Carious teeth - caries in aged, caries control, removal carious, protection of pulp, reconstruction measure for compromising teeth - retentive pins, horizontal slots, retention grooves, prevention of caries, diet, prevention of root caries and vaccine for caries.

Periodontal considerations - attachment units, ligaments, gingivitis, periodontitis
Microbiological aspect of periodontal diseases, marginal lesion, occlusal trauma, periodontal pockets, attached gingiva, interdental papilla, gingival embrasures, gingival/periodontal prosthesis, radiographic interpretations of Periodontal, intraoral, periodontal splinting – Fixed prosthodontics with periodontally compromised dentitions, placement of margin restorations.

- Biomechanical principle of tooth preparations - individual tooth preparations. Complete metal Crowns - P.F.C., All porcelain - Cere store crowns, dicor crowns, incerem etc., porcelain jacket crowns partial 3/4,

fronional half, radicular 7/8, telescopic, pin-ledge,; laminates, inlays, onlays and preparations for restoration of teeth-amalgam, glass ionomer and composite resins, Resin Bond retainers, Gingival marginal preparations - Design, material selection, and biological and mechanical considerations - intracoronar retainer and precision attachments - custom made and ready made

- Isolation and fluid control - Rubber dam applications, tissue dilation - soft tissue management for cast restoration, impression materials and techniques, provisional restoration, interocclusal records, laboratory support for fixed Prosthodontics, Occlusion, Occlusal equilibration, articulators, recording and transferring of occlusal relations, cementing of restorations.
- Resins, Gold and gold alloys, glass ionomer, restorations
- Restorations of endodontically treated teeth, Stomatognathic Dysfunction and management
- Management of failed restorations.

OCCLUSION:

EVALUATION, DIAGNOSIS AND TREATMENT OF OCCLUSAL PROBLEMS:

Scope, definition, terminology, optimum oral health, anatomic harmony, functional harmony, occlusal stability, causes of deterioration of dental and oral health, Anatomical, physiological, neuro - muscular, psychological considerations of teeth, muscles of mastication, temporomandibular joint, intra oral and extra oral and facial musculatures, the functions of Cranio mandibular system.

Occlusal therapy, the stomatognathic system, centric relation, vertical dimension, the neutral zone, the occlusal plane, differential diagnosis of temporomandibular disorders, Understanding and diagnosing intra articular problems, relating treatment to diagnosis of internal derangements of TMJ, Occlusal splints, selecting instruments for occlusal diagnosis and treatment, mounting casts, Pankey – mann - schuyler philosophy of complete occlusal rehabilitation, long centric, anterior guidance, restoring lower anterior teeth, restoring upper anterior teeth, determining the type of posterior occlusal contours, methods for determining the plane of occlusion, restoring lower posterior teeth, restoring upper posterior teeth, functionally generated path techniques for recording border movements intra orally, occlusal equilibration, Bruxism, Procedural steps in restoring occlusion a, requirements for occlusal stability, solving occlusal problems through programmed treatment planning, splinting, solving - occlusal wear problems, deep overbite problems, anterior overjet problems, anterior open bite problems. Treating - end to end occlusion, splayed anterior teeth, cross bite patient, Crowded, irregular, or interlocking

anterior bite, using Cephalometric for occlusal analysis, solving severe arch malrelationship problems, transcranial radiography, postoperative care of occlusal therapy.

Osseo integrated supported fixed Prosthodontics - Osseo integrated supported and tooth supported fixed Prosthodontics

TMJ - Temporomandibular joint dysfunction Scope, definitions, terminology

Temporomandibular joint and its function, Orofacial pain, and pain from the temporomandibular joint region, temporomandibular joint dysfunction, temporomandibular joint sounds, temporomandibular joint disorders

Anatomy related, trauma, disc displacement, Osteoarthrosis/Osteoarthritis, Hyper mobility and dislocation, infectious arthritis, inflammatory diseases, Eagle's syndrome (Styloid - stylohyoid syndrome), Synovial chondromatosis, Osteochondrosis disease, Osteonecrosis, Nerve entrapment process, Growth changes, Tumors, Radiographic imaging

- Etiology, diagnosis and cranio mandibular pain, differential diagnosis and management of orofacial pain - pain from teeth, pulp, dentin, muscle pain, TMJ pain -psychologic, physiologic - endogenous control, acupuncture analgesia, Placebo effects on analgesia, Trigeminal neuralgia, Temporal (arteritis)
- Occlusal splint therapy - construction and fitting of occlusal splints, management of occlusal splints, therapeutic effects of occlusal splints, occlusal splints and general muscles performance, TMJ joint unloading and anterior repositioning appliances, use and care of occlusal splints.
- Occlusal adjustment procedures - Reversible - occlusal stabilization splints and physical therapies, jaw exercises, jaw manipulation and other physiotherapy or irreversible therapy, occlusal repositioning appliances, orthodontic treatment, Orthognathic surgery, fixed and removable prosthodontic treatment and occlusal adjustment, removable prosthodontic treatment and occlusal adjustment, Indication for occlusal adjustment, special nature at orofacial pain, Indication for occlusal adjustment, special nature of orofacial pain.
- Psychopathological considerations, occlusal adjustment philosophies, mandibular position excursive guidance,, occlusal contact scheme, goals of occlusal adjustment, significance of a slide in centric, Preclinical procedures, clinical procedures for occlusal adjustment.

AESTHETIC: SCOPE AND DEFINITIONS:

Morpho psychology and esthetics, structural esthetic rules - facial components, dental components, gingival components and physical components.

Esthetics and its relationship to function - Crown morphology, physiology of occlusion, mastication, occlusal loading and clinical aspect in bio esthetic aspects. Physical and physiologic characteristic and muscular activities of facial muscle, perioral anatomy and muscle retaining exercises.

Smile - classification and smile components, smile design, esthetic restoration of smile.

Esthetic management of the dentogingival unit, intraoral materials for management of gingival contours, and ridge contours, Periodontal esthetics, Restorations - Tooth colored restorative materials, the clinical and laboratory aspects, marginal fit, anatomy, inclinations, form, size, shape, color, embrasures, contact point.

TEACHING/LEARNING ACTIVITIES AND MONITORING LEARNING PROGRESS:

- The post graduate shall maintain a clinical case history record book, in the form of both manual and digital format. Cases need to be recorded and endorsed by the staff.
- The post graduate has to maintain a pre clinical record book in which all the preclinical exercises shall be recorded and completed in first six months of the course.
- The postgraduate shall maintain a log book to record the cases treated.
- The Academic record in the prescribed format has to be submitted before appearing for University examination.
- The completion of all the clinical work and pass performance in all the exams conducted by the department is mandatory for appearing University examinations with required clinical attendance as per the University guidelines.
- All the post graduates should report to the Department prior to 8.30 am and sign in the attendance register on all working days.
- All the post graduate students should enter the movement register and counter signed by the staff or HOD before moving out of the Department for all purposes during working hours. All the post graduate

students should report to their respective units regarding the previous day work (clinical as well as laboratory) and the cases to be treated on that particular day at 8.30 am every working day.

- All the post graduate students should leave the department by 3.30 pm and compulsorily punch out. To work in the lab, after 3.30pm, all the post graduate students should punch in and out at the lab entrance.
- All the postgraduates should take prior permission from the HOD and the Principal for availing any leave.

THE REGULAR INTERNAL EXAMINATION SCHEDULE IS AS FOLLOWS

- BDS exit level bridge course theory examination (for I M. D.S)
- Examination at the end of every academic term as annual evaluation examination will be conducted.
- Preparatory theory and clinical examination will be conducted by the dental college/department prior to University examinations, appearing and passing these exams is a pre-requisite to appear/eligible for University examination.

TEACHING BY POST GRADUATES: TOPICS FOR DISCUSSION

S.No	Discussion/Demonstration	Postgraduates
1	Case history ,diagnosis, treatment planning for complete denture	First MDS
2	Impression trays, impression materials, impression techniques(primary & secondary) for complete denture	First MDS
3	Orientation jaw relation	First MDS
4	Vertical jaw relation	First MDS
5	Horizontal jaw relation	First MDS
6	Teeth selection and teeth arrangement	First MDS
7	Try in and phonetics	First MDS
8	Acrylization and lab procedure of complete dentures	First MDS
9	Denture insertion, Post insertion instructions, complaint and remedies	First MDS

All the 1st year post graduate students are posted in the Pre clinical Prosthodontics for giving demonstration and monitoring I year BDS students.

MONITORING LEARNING PROGRESS:

It is essential to monitor the learning progress of each candidate through continuous appraisal and regular assessment. It not only helps teachers to evaluate students, but also students to evaluate themselves. The monitoring to be done by the staff of the department based on participation of students in various teaching / learning activities. It may be structured and time bound with minimal requirements. Inter disciplinary seminars: Each post graduate shall present at least 1 seminar during the interdisciplinary activity of the institute

ACADEMIC ACTIVITIES:

I Year

First six months: Submission of synopsis of the dissertation/Thesis. Commencement of Library dissertation within six months.

End of first year:

Theoretical exposure of all applied sciences.

To carry out short 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 and Bridge and Implantology.

To differentiate various types of articles published in and critically appraise based on standard reference guidelines.

To develop the ability to gather evidence from published articles. Participation and presentation in seminars, didactic lectures. Internal Assessment Examination

II year:

First six months: Completion and Submission of Library Dissertation

Acquiring confidence in seminars, didactic lectures

End of Second Year: Completion of Dissertation/Thesis work

Paper/Poster/Table clinic presentation at State/National level speciality and allied conferences /conventions.

Evaluation: Internal Assessment Examination

III year:

Paper/Poster/Table Clinic presentation at State/National level speciality and allied conferences /conventions.

Participation and presentation in seminars and didactic lectures

Evaluation: Internal Assessment Examination before university exam.

PROCEDURAL AND OPERATIVE SKILLS

First Year:

Acquire knowledge of instruments, equipments and research tools in Prosthodontics.

Acquire knowledge of dental material sciences, knowledge of using materials in laboratory and clinics including testing methods for dental materials.

Completion of Pre clinical exercises within 6 months

Clinical and pre clinical exercises involved in Prosthodontic therapy for assessment and acquiring higher competence.

ELIGIBILITY TO APPEAR FOR UNIVERSITY EXAMINATION

- ATTENDANCE: University mandates candidate shall have a minimum of 80 % of attendance to appear for University examination in each academic year.
- University mandates candidate shall complete and submit the Thesis/Main Dissertation, six months prior to university examination.

- University mandates candidate shall complete and submit the Library Dissertation with in eighteen months from the commencement of course.

- Candidate shall complete one publication in indexed scientific journal

- Candidate shall complete one paper, two poster, one table clinic presentations in National/State speciality and allied conferences/convention.

- INTERNAL EXAMINATIONS

- Candidates shall have pass marks in bridge course examination conducted three months after admission to the course by the Department.

- Candidates shall have pass marks in Part-I examination (basic sciences) conducted at the end of first year by the University.

- Department requirement: Candidate shall complete all their seminars, journal discussion, pre clinical bench work, clinical cases, log book, conference presentations and publications.

SCHEME OF EXAMINATION:

ACM/ 39/08/2020

EXAMINATION:

The university examination shall consist of theory, practical / clinical examination, viva-voce and Pedagogy

A. Theory:

Part-I: Shall consist of one paper.

There shall be a theory examination in the Basic Sciences at the end of 1st year. The question papers shall be set and evaluated by the concerned Department/Speciality. The candidates shall have to secure a minimum of 50% in the Basic Sciences and shall have to pass the Part-I examination at least six months prior to the final (Part-II) examination.

Part-I: Shall consist of one paper namely Paper-I

Paper-I: Applied Basic Sciences- Applied Anatomy, embryology, growth and development, genetics, immunology, anthropology, physiology, nutrition and bio chemistry, pathology and microbiology,

virology, applied pharmacology, research methodology and bio statistics, applied dental anatomy and histology, oral pathology and oral microbiology, adult and geriatric psychology, applied dental materials.

Part-II: Shall consist of three papers, namely-

Paper-I: Removable Prosthodontics and implant supported Prosthodontics (Implantology), geriatric dentistry and Cranio facial Prosthodontics.

Paper-II: Fixed Prosthodontics, occlusion, TMJ and esthetics Paper-III: Descriptive and analyzing type questions (Essays)

SCHEME OF EXAMINATION:

Theory: Part-I: Basic Sciences Paper - 100 Marks

Part-II: Paper-I, Paper-II & Paper-III - 300 Marks

(100 Marks for each Paper)

Part-I: Written examination shall consist of Basic Sciences (Part-I) of three hours duration shall be conducted at the end of First year of MDS course.

Paper I: Applied Basic Sciences: Applied Anatomy, embryology, growth and development, genetics, immunology, anthropology, physiology, nutrition and bio chemistry, pathology and microbiology, virology, applied pharmacology, research methodology and bio statistics, applied dental anatomy and histology, oral pathology and oral microbiology, adult and geriatric psychology, applied dental materials.

DISTRIBUTION OF MARKS:

(1) Part I University Examination (100 Marks):- Applied basics sciences conducted at the end of First year.

10 questions of 10 marks each

Part-II: Examination shall be conducted at the end of Third year of MDS course. Part-II Examination shall consist of Paper-I, Paper-II and Paper-III, each of three hours duration. Questions on recent advances may be asked in any or all the papers. Distribution of topics for each paper will be as follows:

Part-II: Shall consist of three papers, namely-

Paper-I: Removable prosthodontics and implant supported prosthodontics (Implantology), geriatric dentistry and Cranio facial Prosthodontics.

Paper-II: Fixed Prosthodontics, occlusion, TMJ and esthetics

Paper-III: Descriptive and analyzing type questions (Essays)

(2) Part II (3 papers of 100 Marks):- Conducted at the end of third year

(i) Paper-I, Paper –II, Paper-III shall consist of

a) Two long essay questions of 25 marks each

b) 5 short essays of 10 mark each. (Total of 100 Marks)

B. PRACTICAL/ CLINICAL EXAMINATION:

1. CLINICAL/PRACTICAL EXAMINATION:

Clinical/practical examination is designed to test the clinical skill, performance and competence of the candidate in skills such as communication, clinical examination, medical/dental procedures or prescription, exercise prescription, latest techniques, evaluation and interpretation of results so as to undertake independent work as a specialist. The affiliating university shall ensure that the candidate has been given ample opportunity to perform various clinical procedures. The practical/clinical examination in all the specialities shall be conducted for eight candidates in three days.

Practical / Clinical Examination:

200 Marks

1. Presentation of treated patients and records during their 3 years

Training period

35 Marks

- a. C.D.
- b. R. P.D.
- c. F.P.D. including single tooth and surface restoration
- d. I.S.P.
- e. Occlusal rehabilitation
- f. T.M.J.
- g. Maxillofacial Prosthesis
- h. Pre Clinic Exercises

2. Presentation of Clinical Exam CD patient's prosthesis including insertion

75 Marks

1.	Discussion on treatment plan and patient review
2.	Primary impression(One arch: maxillary or mandibular)
3.	Secondary impression(One arch: maxillary or mandibular)
4.	Tentative jaw relation records
5.	Face Bow – transfer
6.	Transferring it on articulators
7.	Extra oral tracing and securing centric and
	protrusive/lateral, record
8.	Transferring records on articulator and programming.
9.	Selection of teeth
10.	Arrangement of teeth
9.	Waxed up denture trial
10.	Check of Fit, insertion and instruction of previously
	processed characterised, anatomic complete denture
	Prosthesis

ALL STEPS WILL INCLUDE CHAIRSIDE, LAB AND VIVA VOCE

2. Fixed Partial Denture

35 Marks

- a. Case discussion including treatment planning and selection of patient for F.P.D.
- b. Abutment preparation isolation and fluid control
- c. Gingival retraction and impressions (conventional/ CAD/CAM impressions)
- d. Cementation of provisional restoration

3. Removable Partial Denture

25 Marks

- a. Surveying and designing of partial dentate cast.
- b. Discussion on components and material selection including occlusal schemes.

4. Implant supported prosthesis (2nd stage- protocol)

30 marks

- a. Case discussion including treatment planning and selection of patient for ISP
- b. II stage preparation, Abutment selection, placement, evaluation
- c. Implant impression and making of cast

2. Viva-voce: All examiners will conduct viva-voce conjointly on candidate's comprehension, analytical approach and expression, interpretation of data and communication skills. It includes all components of course contents. It includes presentation and discussion on dissertation also. Viva voce examination aims at assessing the depth of knowledge, logical reasoning, confidence and communication skill of the students.

3. Pedagogy: A topic shall be given to each candidate in the beginning of clinical examination. He/she is asked to make a presentation for micro teaching on the topic for 8-10 minutes.

DISTRIBUTION OF MARKS:

A. Practical / Clinical Examination: 200 Marks

B. B. Viva Voce and Pedagogy: 100 Marks

1) Viva-Voce examination: 80 marks

2) Pedagogy Exercise: 20 marks

TOTAL MARKS:

THEORY: Part I: 100 Marks

Part II: 300 Marks

CLINICAL: 300 Marks

ASSESSMENT PERFORMA'S AND LOG BOOK:

POST GRADUATE LOG BOOK

INDEX

ASSESSMENT PERFORMA'S AND LOG BOOK:

POSTGRADUATELOGBOOK

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SEMINAR MARKS

SL.NO	DATE	TOPIC	SIGNATURE
1			
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JOURNAL REVIEW

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PRECLINICAL WORK

SL.NO	PRECLINICAL EXERCISE	DATE	SIGNATURE
I	Complete Denture:		
1	Anatomical Landmarks: Maxilla and mandible		
2	Various Spacer Designs		
3	Special trays: Maxilla and mandible		
4	Teeth arrangement using mean value articulator		
a	Class I Arrangement(I)		
	Class I Arrangement(II)		
	Class I Arrangement(III)		
b	Class II Arrangement		
c	Class III Arrangement		
d	Cross Arch Arrangement		
5	Arrangement for anatomical articulation-Class I		
a	Processing with characterization of the same		
b	Lab remounting and selective grinding of the same		
II	Removable Partial Denture:		
1	Design for Kennedy's Classification:		
a	Class I		
b	Class II		
c	Class III		
d	Class IV		
2	Designing of various components of R.P.D		
3	Wax pattern on Cast		
a	Class I-Dental stone cast		
b	Class II-Refractory cast		
c	Class III- Refractory cast		
d	Class IV-Dental stone cast		
4	Casting and finishing of metal frameworks-Class III		
5	Casting and finishing of metal frameworks with teeth		

	Arrangement and acrylisation		
III	Fixed Partial Denture:		
1	Preparation on typodont teeth:		
	Full Veneer Crown:		
a	FVC for metal-Posterior teeth-36/46		
b	FVC for ceramic-Anterior teeth-11/21		
c	FVC for ceramic-Posterior teeth-16/26		
d	Porcelain Jacket Crown-Anterior teeth-11/21		
	Partial Veneer Crown :		
e	$\frac{3}{4}$ Crown(Canine and premolar)-13,23/14/24		
f	$\frac{7}{8}$ Crown-17/27		
g	Proximal half Crown-37/47		
h	Inlay-Class I,II-36/46		
i	Laminates-11/21		
2	Preparation of die system(Pindex) for full arch		
3	Fabrication of wax pattern on all prepared teeth		
4	Fabrication of wax pattern on trimmed occlusal surface of maxillary cast(Fullmouth)		
5	Pontic Design:		
a	Ridge lap-Anterior and Posterior		
b	Modified ridge lap-Anterior and posterior		
c	Sanitary		
d	Modified sanitary		
e	Spheroidal, Conical		
f	Ovate		
6	Fabrication of metal framework		
a	Full metal bridge for posterior(3unit)		
b	Coping for anterior(3unit)		
c	Full metal with ceramic facing		
d	Metal ceramic crown		
e	Full metal crown		
f	All ceramic crown with characterisation		

g	Post and core		
h	Adhesive bridge for anterior		
7	Laminates		
IV	Maxillofacial Prosthodontics:		
a	Eye		
b	Ear		
c	Nose		
d	Obturator		
e	Finger Prosthesis		
V	Other exercises		
	1.TMJsplints-Stabilization Anterior repositioning splints 2.Overdenturecoping-33,43		
	Precision attachments-custom made (key and key way)		
VI	Implant supported prosthesis		
	Step by step procedures-laboratory phase		

Clinical Cases

SL.NO	CASES	DATE	O.P Number	Patient name	SIGNATURE
	Complete Denture(Minimum				
I	Neurocentric occlusion(Min1)				
1					
2					
II	Lingualised occlusion(Min1)				
1					
2					
III	Monoplane occlusion(Min1)				
1					
2					
IV	Characterized complete denture				
1					
2					
V	Complete denture with neutral zone concept				
1					
2					
VI	Balanced complete denture sing mean value articulator				
1					
VII	Anatomic articulation (using semi adjustable articulator, Min 5)				
1					
2					
3					

4					
5					
6					
7					
VIII	Single complete dentures(Min2)				
1					
2					
3					
4					
5					
IX	Over dentures(Min1)				
1					
2					
3					
X	Interim/immediate complete dentures(Min1)				
1					
2					
XI	Complete Dentures(Using mean value articulator)				
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					

13					
14					
15					
16					
17					
18					
19					
20					
XII	Relining and rebasing(Min2)				
1					
2					
3					
4					
	Removable Partial Dentures:				
I	Provisional Partial Denture				
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
II	Cast partial denture(Min 4 arches)				
1					
2					

3					
4					
5					
6					
III	Immediate removable partial dentures(Min2)				
1					
2					
3					
4					
	CROWNS(min40)				
I	Metal free ceramic crown (Min 5)				
1					
2					
3					
4					
5					
6					
7					
8					
	Cases treated using CAD/ CAM(Min 5)				
1					
2					
3					
4					
5					
II	PFM crowns(Posterior/Anterior,Min30)				
1					
2					
3					

4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
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28					
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37					

38					
39					
40					

III	FVC Metal Crown(Min5)				
1					
2					
3					
4					
5					
6					
7					
8					
IV	Laminates(Min2)				
1					
2					
3					
4					
5					
V	Intra radicular crowns/Post &Core(Anterir/Posterior)				
a	Prefabricated(Min2)				
1					
2					
3					
4					
5					
b	Custom made(Min3)				
1					
2					
3					
4					
5					

	FIXED	PARTIAL				
	DENTURE(Min20units)					
I	Metal free ceramic FPD(Min3					
	units)					
1						
2						
3						
4						
5						
6						
II	PFM(Anterior/Posterior,Min17					
	units)					
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						

23					
24					
25					
III	Precision and semi precision attachments(Min3)				
1					
2					
3					
4					
5					
	IMPLANTS				
I	Implant Prosthesis(Min6)				
1					
2					
3					
4					
5					
6					
	MAXILLOFACIAL PROSTHESIS				
I	Definitive Obturator(min1)				
2					
3					
II	Eye Prosthesis(Min1)				
1					
	Full mouth rehabilitation				
	TMJ Syndrome Management				
	Splints- Stabilizing and repositioning(min2)				
1					
2					
3					
4					

CASE PRESENTATION

SL.NO	DATE	CASE PRESENTED	SIGNATURE
1			
2			
3			
4			
5			

INTERNAL ASSESSMENT EXAMINATION MARKS

SL NO	Exam	Date	Marks obtained	Signature
1	Entry level bridge course exam			
2	Evaluation exam at the end of 1 st year			
	Paper I			
3	Evaluation exam at the end of 2 nd year			
	Paper I			
	Paper II			
4	Preparatory exam 3 rd year			
	Paper I			
	Paper II			
	Paper III			
	Clinical Exam:			