

FOURTH BDS SYLLABUS

(INCLUDING 3RD BDS CLINICAL DENTISTRY SYLLABUS)

ORAL MEDICINE AND RADIOLOGY

LECTURE TOPICS (TO BE COVERED IN 3rd BDS) :

	ORAL MEDICINE TOPICS :
1	INTRODUCTION TO ORAL MEDICINE
2	PRINCIPLES OF ORAL DIAGNOSIS - DEFINITIONS. - CASE HISTORY AND COMPONENTS, PHYSICAL EXAMINATION METHODOLOGIES - GENERAL - EXTRAORAL AND NECK - INTRAORAL FORMULATION OF TREATMENT PLAN
3	PRINCIPLES, PROCEDURES, AND PROTOCOL FOR ASEPSIS, STERILISATION, INFECTION CONTROL
4	ORAL FOCI OF INFECTION AND EFFECTS ON GENERAL SYSTEMIC HEALTH
5	CERVICO-FACIAL LYMPHADENOPATHY
6	TEETH: DEVELOPMENTAL ABNORMALITIES, DISCOLOURATION OF TEETH
7	CHAIR SIDE INVESTIGATIONS
8	PULP AND PERIAPICAL DISEASES AND THEIR SEQUELAE
9	DIAGNOSIS OF CARIES & PERIODONTAL DISEASE
	ORAL RADIOLOGY TOPICS :
1	INTRODUCTION TO ORAL RADIOLOGY, DEFINITION AND SCOPE
2	RADIATION PHYSICS - PRODUCTION OF X-RAYS

3	RADIOGRAPHIC EQUIPMENT AND ACCESSORIES INCLUDING IMAGE RECEPTORS
4	PROPERTIES OF X-RAYS AND ELECTRO-PHYSICAL FACTORS
5	COLLIMATION AND FILTRATION
6	PROJECTION GEOMETRY
7	INTRA ORAL RADIOGRAPHY-PRINCIPLE & TECHNIQUE
8	OBJECT LOCALIZATION
9	PROCESSING OF X-RAY FILMS
10	RADIOGRAPHIC ARTEFACT
11	NORMAL RADIOGRAPHIC ANATOMY OF THE JAWS
12	PRINCIPLES OF RADIOGRAPHIC INTERPRETATION

LECTURE TOPICS (TO BE COVERED IN 4th BDS) :

	ORAL MEDICINE TOPICS :
1	INVESTIGATIONS -BIOPSY AND EXFOLIATIVE CYTOLOGY, HEMATOLOGICAL, MICROBIOLOGICAL, SEROLOGICAL TESTS
2	WHITE LESION OF ORAL MUCOSA
3	RED LESIONS OF ORAL MUCOSA
4	VESICULOBULLOUS LESIONS
5	ORAL ULCERS
6	DISEASE OF TONGUE
7	ORAL MANIFESTATION OF AIDS
8	OROFACIAL PIGMENTATION
9	DISEASE OF TMJ
10	DISEASE OF SALIVARY GLAND
11	OROFACIAL PAIN

12	PSYCHOSOMATIC ORAL MEDICINE
13	AUTOIMMUNE DISEASES OF ORAL CAVITY
14	ORAL PRECANCEROUS LESION& CONDITION
15	ORAL CANCER
16	FORENSIC ODONTOLOGY- MEDICOLEGAL ASPECTS OF ORO-FACIAL INJURIES
17	AGE ESTIMATION
18	IDENTIFICATION OF CADAVERS BY DENTAL APPLIANCES, RESTORATIONS AND TISSUE REMNANTS
19	IDENTIFICATION OF BITE MARKS, LIP PRINTS, PALATAL RUGAE
20	MANAGEMENT OF MEDICAL EMERGENCIES
21	BLEEDING AND CLOTTING DISORDERS
	ORAL RADIOLOGY TOPICS :
1	RADIOGRAPHIC INTERPRETATION AND DIAGNOSIS OF CARIES & PERIODONTITIS
2	PERIAPICAL RADIO-OPACITIES AND PERIAPICAL RADIOLUCENCY
3	BIOLOGIC EFFECT OF RADIATION
4	RADIATION PROTECTION
5	FIBRO-OSSEOUS DISEASE
6	UNITS OF RADIATION & DOSIMETRY
7	RADIOGRAPHIC FEATURES OF SYSTEMIC DISEASES
8	RADIOGRAPHIC FEATURES OF OSTEODYSTROPHIES
9	EXTRAORAL RADIOGRAPHY
10	IMAGING OF TEMPOROMANDIBULAR JOINT
11	IMAGING OF PARANASAL SINUSES
12	TRAUMA RADIOLOGY
13	DIGITAL RADIOGRAPHY

14	BASICS OF USG, CT, MRI
15	PANORAMIC RADIOGRAPHY
16	NUCLEAR IMAGING, CEPHALOMETRIC RADIOGRAPHY

CLINICAL EXERCISES :

1. RECORDING OF DETAILED CASE HISTORIES
2. INTRA-ORAL RADIOGRAPHS (PERIAPICAL , BITEWING , OCCLUSAL)
3. SALIVA DIAGNOSTIC CHECK AS ROUTINE PROCEDURE
4. DISCUSSION OF CLINICAL AND RADIOGRAPHIC SPOTTERS
5. DEMONSTRATION OF RADIOGRAPHIC ACCESSORIES
6. DEMONSTRATION OF CONE BEAM COMPUTED TOMOGRAPHY & EXTRAORAL RADIOGRAPHS

ORTHODONTICS AND DENTOFACIAL ORTHOPEDICS

LECTURE TOPICS

1. INTRODUCTION, DEFINITION, HISTORICAL BACKGROUND, AIMS AND OBJECTIVES OF ORTHODONTICS AND NEED FOR ORTHODONTIC CARE.
2. **GROWTH AND DEVELOPMENT:**
 - a. DEFINITION
 - b. GROWTH SPURTS AND DIFFERENTIAL GROWTH
 - c. FACTORS INFLUENCING GROWTH AND DEVELOPMENT
 - d. METHODS OF MEASURING GROWTH
 - e. GROWTH THEORIES (GENETIC, SICHER'S, SCOTT'S, MOSS, PETROVIC'S, MULTIFACTORIAL)
 - f. GENETIC AND EPIGENETIC FACTORS IN GROWTH
 - g. CEPHALO-CAUDAL GRADIENT IN GROWTH.
3. **MORPHOLOGIC DEVELOPMENT OF CRANIOFACIAL STRUCTURES**
 - a. METHODS OF BONE GROWTH

- b. PRENATAL GROWTH OF CRANIOFACIAL STRUCTURES
- c. POSTNATAL GROWTH AND DEVELOPMENT OF: CRANIAL BASE, MAXILLA, MANDIBLE, DENTAL ARCHES AND OCCLUSION.

4. FUNCTIONAL DEVELOPMENT OF DENTAL ARCHES AND OCCLUSION

- a. FACTORS INFLUENCING FUNCTIONAL DEVELOPMENT OF DENTAL ARCHES AND OCCLUSION.
- b. FORCES OF OCCLUSION
- c. WOLFF'S LAW OF TRANSFORMATION OF BONE
- d. TRAJECTORIES OF FORCES

5. CLINICAL APPLICATION OF GROWTH AND DEVELOPMENT

6. MALOCCLUSION-IN GENERAL

- a. CONCEPT OF NORMAL OCCLUSION
- b. DEFINITION OF MALOCCLUSION
- c. DESCRIPTION OF DIFFERENT TYPES OF DENTAL, SKELETAL AND FUNCTIONAL MALOCCLUSION.

7. CLASSIFICATION OF MALOCCLUSION

PRINCIPLE, DESCRIPTION, ADVANTAGES AND DISADVANTAGES OF CLASSIFICATION OF MALOCCLUSION BY ANGLE, SIMON, LISCHER AND ACKERMAN AND PROFIT SYSTEMS

8. NORMAL AND ABNORMAL FUNCTION OF STOMATOGNATHIC SYSTEM

9. ETIOLOGY OF MALOCCLUSION

- a. DEFINITION, IMPORTANCE, CLASSIFICATION, LOCAL AND GENERAL ETIOLOGICAL FACTORS.
- b. ETIOLOGY OF FOLLOWING TYPES OF MALOCCLUSION:
 - 1) MIDLINE DIASTEMA
 - 2) SPACING
 - 3) CROWDING
 - 4) CROSS-BITE: ANTERIOR/POSTERIOR
 - 5) CLASS III MALOCCLUSION
 - 6) CLASS II MALOCCLUSION
 - 7) DEEP BITE

8) OPEN BITE

10. DIAGNOSIS AND DIAGNOSTIC AIDS

- a. DEFINITION, IMPORTANCE AND CLASSIFICATION OF DIAGNOSTIC AIDS.
- b. IMPORTANCE OF CASE HISTORY AND CLINICAL EXAMINATION IN ORTHODONTICS
- c. STUDY MODELS: IMPORTANCE AND USES-PREPARATION AND PRESERVATION OF STUDY MODELS. MODEL ANALYSIS: PONT'S, ASHLEY HOWE'S, BOLTON, CAREYS, MOYER'S MIXED DENTITION ANALYSIS
- d. IMPORTANCE OF INTRA-ORAL X-RAYS IN ORTHODONTICS
- e. PANORAMIC RADIOGRAPHS: -PRINCIPLES, ADVANTAGES, DISADVANTAGES AND USES
- f. CEPHALOMETRICS: ITS ADVANTAGES, DISADVANTAGES, USES AND LIMITATIONS
 - 1. DEFINITION
 - 2. DESCRIPTION AND USE OF CEPHALOSTAT
 - 3. DESCRIPTION AND USES OF ANATOMICAL LANDMARKS LINES AND ANGLES USED IN CEPHALOMETRIC ANALYSIS
 - 4. ANALYSIS-STEINER'S, DOWN'S, TWEED'S, RICKET'S-E-LINE
- g. ELECTROMYOGRAPHY AND ITS USE IN ORTHODONTICS
- h. HAND-WRIST X-RAYS AND ITS IMPORTANCE IN ORTHODONTICS

11. GENERAL PRINCIPLES IN ORTHODONTIC TREATMENT PLANNING OF DENTAL AND SKELETAL MALOCCLUSIONS

12. ANCHORAGE IN ORTHODONTICS

13. BIOMECHANICAL PRINCIPLES IN ORTHODONTIC TOOTH MOVEMENT

- a. DIFFERENT TYPES OF TOOTH MOVEMENTS
- b. TISSUE RESPONSE TO ORTHODONTIC FORCE APPLICATION
- c. AGE FACTOR IN ORTHODONTIC TOOTH MOVEMENT
- d. METHODS OF FORCE APPLICATION

14. PREVENTIVE ORTHODONTICS

DEFINITION & DIFFERENT PROCEDURES & LIMITATIONS UNDERTAKEN IN PREVENTIVE ORTHODONTICS

15. INTERCEPTIVE ORTHODONTICS

- a. DEFINITION

- b. DIFFERENT PROCEDURES UNDERTAKEN IN INTERCEPTIVE ORTHODONTICS
- c. SERIAL EXTRACTIONS: DEFINITION, INDICATIONS, CONTRA-INDICATIONS, TECHNIQUES, ADVANTAGES AND DISADVANTAGES.
- d. ROLE OF MUSCLE EXERCISES AS AN INTERCEPTIVE PROCEDURE

16. CORRECTIVE ORTHODONTICS

- a. DEFINITION, FACTORS TO BE CONSIDERED DURING TREATMENT PLANNING
- b. METHODS OF GAINING SPACE IN THE ARCH: INDICATIONS, RELATIVE MERITS AND DEMERITS OF PROXIMAL STRIPPING, ARCH EXPANSION AND EXTRACTIONS
- c. EXTRACTIONS IN ORTHODONTICS-INDICATIONS AND SELECTION OF TEETH FOR EXTRACTION.

17. ORTHODONTIC APPLIANCES: GENERAL

- a. REQUISITES FOR ORTHODONTIC APPLIANCES
- b. CLASSIFICATION, INDICATIONS OF REMOVABLE, FIXED AND FUNCTIONAL APPLIANCE
- c. MATERIALS USED IN CONSTRUCTION OF VARIOUS ORTHODONTIC APPLIANCES - USE OF STAINLESS STEEL, TECHNICAL CONSIDERATIONS IN CURING OF ACRYLIC, PRINCIPLES OF WELDING AND SOLDERING, FLUXES AND ANTI-FLUXES.
- d. PRELIMINARY KNOWLEDGE OF ACID ETCHING AND DIRECT BONDING.

I. REMOVABLE ORTHODONTIC APPLIANCES

- 1) COMPONENTS OF REMOVABLE APPLIANCES
- 2) DIFFERENT TYPES OF CLASPS AND THEIR USES
- 3) DIFFERENT TYPES OF LABIAL BOWS AND THEIR USES
- 4) DIFFERENT TYPES OF SPRINGS AND THEIR USES
- 5) EXPANSION APPLIANCES IN ORTHODONTICS:
 - i) PRINCIPLES
 - ii) INDICATIONS FOR ARCH EXPANSION
 - iii) DESCRIPTION OF EXPANSION APPLIANCES AND DIFFERENT TYPES AND THEIR USES.
 - iv) RAPID MAXILLARY EXPANSION

II. FIXED ORTHODONTIC APPLIANCES

- 1) DEFINITION, INDICATIONS & CONTRAINDICATIONS
- 2) COMPONENT PARTS AND THEIR USES

- 3) BASIC PRINCIPLES OF DIFFERENT TECHNIQUES: EDGEWISE, BAG'S STRAIGHT WIRE.

III. EXTRA-ORAL APPLIANCES

- 1) HEADGEARS
- 2) CHIN CUP
- 3) REVERSE PULL HEADGEARS

IV. MYOFUNCTIONAL APPLIANCES

- 1) DEFINITION AND PRINCIPLES
- 2) MUSCLE EXERCISES AND THEIR USES IN ORTHODONTICS
- 3) FUNCTIONAL APPLIANCES: ACTIVATOR, ORALSCREENS, FRANKEL'S FUNCTION REGULATOR, BIONATOR, TWINBLOCK APPLIANCE, LIP BUMPER AND INCLINED PLANES.
- 4) FIXED FUNCTIONAL APPLIANCES

18. ORTHODONTIC MANAGEMENT OF CLEFT LIP AND PALATE

19. PRINCIPLES OF SURGICAL ORTHODONTICS & BRIEF KNOWLEDGE OF CORRECTION OF:

- a. MANDIBULAR AND MAXILLARY PROGNATHISM AND RETROGNATHISM
- b. SKELETAL ANTERIOR OPEN BITE AND DEEP BITE; CROSS BITE, FACIAL ASYMMETRY

20. ADULT ORTHODONTICS

PRINCIPLES INDICATIONS AND CONTRAINDICATIONS TREATMENT PLANNING/ RETENTION IN ADULT ORTHODONTICS

21. PRINCIPLE, DIFFERENTIAL DIAGNOSIS & METHODS OF TREATMENT OF:

1. MIDLINE DIASTEMA, CROSS BITE; OPEN BITE; DEEP BITE, SPACING, CROWDING
2. CLASS II -DIVISION 1, DIVISION2
3. CLASS III MALOCCLUSION-TRUE AND PSEUDO CLASS III

22. RETENTION AND RELAPSE

DEFINITION, NEED FOR RETENTION, CAUSES OF RELAPSE, METHODS OF RETENTION, DIFFERENT TYPES OF RETENTION DEVICES, DURATION OF RETENTION, THEORIES OF RETENTION.

23. ETHICS

PRACTICAL EXERCISES

1. BASIC WIRE BENDING EXERCISES

2. CLASPS

- a. "C" CLASPS ON MOLARS, (ONE WITH MESIAL TAG, ONE WITH DISTAL TAG)
- b. JACKSON'S CLASPS ON MOLAR
- c. TRIANGULAR CLASPS
- d. ADAM'S CLASP ON MOLAR
- e. ADAM'S CLASP ON INCISOR
- f. ADAM'S CLASP ON PREMOLAR

3. SPRINGS

- a. FINGER SPRING
- b. SINGLE CANTILEVER SPRING
- c. DOUBLE CANTILEVER SPRING
- d. CANTILEVER SPRING WITH GUARD
- e. SPRINGS FOR MESIAL MOVEMENT WITH GUARD
- f. SPRING FOR DISTAL MOVEMENT
- g. SINGLE CLOSED LOOP SPRING
- h. DOUBLE CLOSED LOOP SPRING

4. CANINE RETRACTOR

- a. HELICAL CANINE RETRACTOR
- b. BUCCAL CANINE RETRACTOR
- c. U-LOOP CANINE RETRACTOR
- d. PALATAL CANINE RETRACTOR

5. BOWS

- a. SHORT LABIAL BOW
- b. LONG LABIAL BOW
- c. ROBERT'S RETRACTOR
- d. BEGG'S TYPE
- e. LABIAL BOW WITH REVERSE LOOPS

CLINICAL TRAINING DURING 3rd BDS :

- MAKING OF U/L IMPRESSIONS AND STUDY MODEL PREPARATIONS
- MODEL ANALYSIS
- PONT'S ANALYSIS
- ASHLEY HOWE'S ANALYSIS
- CAREY'S ANALYSIS
- BOLTON'S ANALYSIS
- MOYER'S MIXED DENTITION ANALYSIS

CLINICAL TRAINING DURING 4th BDS :

1) PRESENTATION OF CLINICAL CASES WITH

1. DETAILED CASE HISTORY
2. CLINICAL EXAMINATION
3. MODEL ANALYSIS
4. SPACE ANALYSIS
5. DIAGNOSIS
6. TREATMENT OBJECTIVES
7. TREATMENT PLAN
8. DESIGN OF REMOVABLE APPLIANCE

CEPHALOMETRIC TRACINGS IN RADIOGRAPHS :

1. DOWN'S ANALYSIS
2. TWEED'S ANALYSIS
3. STEINER'S ANALYSIS

PUBLIC HEALTH DENTISTRY

1. INTRODUCTION TO DENTISTRY:

DEFINITION OF DENTISTRY, HISTORY OF DENTISTRY, SCOPE, AIMS AND OBJECTIVES OF DENTISTRY, INTRODUCTION TO PUBLIC HEALTH DENTISTRY.

2. PUBLIC HEALTH:

- a) HEALTH & DISEASE: - CONCEPTS, PHILOSOPHY, DEFINITION AND CHARACTERISTICS.
- b) PUBLIC HEALTH: -DEFINITION &CONCEPTS, HISTORY OF PUBLIC HEALTH.

- c) GENERAL EPIDEMIOLOGY: -DEFINITION, OBJECTIVES, EPIDEMIOLOGICAL PRINCIPLES AND METHODS.
- d) ENVIRONMENTAL HEALTH: -CONCEPTS, PRINCIPLES, PROTECTION, SOURCES, PURIFICATION OF WATER, ENVIRONMENTAL SANITATION, DISPOSAL OF WASTE AND ROLE IN MASS DISASTER.
- e) HEALTH EDUCATION: - DEFINITION, CONCEPTS, PRINCIPLES, METHODS, AND HEALTH EDUCATION AIDS
- f) PUBLIC HEALTH ADMINISTRATION - PRIORITY, ESTABLISHMENT, MANPOWER, PRIVATE PRACTICE MANAGEMENT, HOSPITAL MANAGEMENT.
- g) ETHICS AND JURISPRUDENCE: PROFESSIONAL LIABILITIES, NEGLIGENCE, MALPRACTICE, CONSENTS, EVIDENCE, CONTRACTS AND METHOD OF IDENTIFICATION IN FORENSIC DENTISTRY.
- h) NUTRITION IN ORAL HEALTH AND DISEASES.
- i) BEHAVIOURAL SCIENCES: DEFINITION OF SOCIOLOGY, ANTHROPOLOGY AND PSYCHOLOGY AND THEIR RELEVANCE IN DENTAL PRACTICE AND COMMUNITY, CHILD PSYCHOLOGY, BEHAVIOUR MANAGEMENT.
- j) HEALTH CARE DELIVERY SYSTEM: CENTRE AND STATE, ORAL HEALTH POLICY, PRIMARY HEALTH CARE, NATIONAL HEALTH PROGRAMS, HEALTH ORGANIZATIONS.

3. DENTAL PUBLIC HEALTH:

- a. DEFINITION AND DIFFERENCE BETWEEN COMMUNITY AND CLINICAL PRACTICE.
- b. EPIDEMIOLOGY OF DENTAL DISEASES: -DENTAL CARIES, PERIODONTAL DISEASES, MALOCCLUSION, DENTAL FLUOROSIS AND ORAL CANCER.
- c. SURVEY PROCEDURES: PLANNING, IMPLEMENTATION AND EVALUATION, WHO ORAL HEALTH SURVEY METHODS 1997, INDICES FOR DENTAL DISEASES.
- d. DELIVERY OF DENTAL CARE: DENTAL AUXILIARIES, OPERATIONAL AND NON-OPERATIONAL, INCREMENTAL AND COMPREHENSIVE HEALTH CARE, SCHOOL DENTAL HEALTH.
- e. PAYMENTS FOR DENTAL CARE: METHODS OF PAYMENTS AND DENTAL INSURANCE, GOVERNMENT PLANS.
- f. DENTISTS ACT 1948 WITH AMENDMENT, DENTAL COUNCIL OF INDIA AND STATE DENTAL COUNCILS, COMPOSITION AND RESPONSIBILITIES, INDIAN DENTAL ASSOCIATION, HEAD OFFICE, STATE AND LOCAL BRANCHES.
- g. PREVENTIVE DENTISTRY: DEFINITION, LEVELS, ROLE OF INDIVIDUAL, COMMUNITY AND PROFESSIONALS, FLUORIDES IN DENTISTRY, PLAQUE CONTROL PROGRAMMES.
- h. PIT & FISSURE SEALANTS, ART, DENTAL CARIES VACCINE, CARIES ACTIVITY TESTS.

4. RESEARCH METHODOLOGY AND DENTAL STATISTICS

- a. HEALTH INFORMATION: - BASIC KNOWLEDGE OF COMPUTERS, MS OFFICE, WINDOW 2000, STATISTICAL PROGRAMMES.
- b. RESEARCH METHODOLOGY: -DEFINITION, TYPES OF RESEARCH, DESIGNING A WRITTEN PROTOCOL.
- c. BIO-STATISTICS: - INTRODUCTION, COLLECTION OF DATA, PRESENTATION OF DATA, MEASURES OF CENTRAL TENDENCY, MEASURES OF DISPERSION, TESTS OF

SIGNIFICANCE, SAMPLING AND SAMPLING TECHNIQUES-TYPES, ERRORS, BIAS, BLIND TRIALS AND CALIBRATION.

5. DENTAL PRACTICE MANAGEMENT

- a. PLACE AND LOCALITY
- b. PREMISES AND LAYOUT
- c. SELECTION OF EQUIPMENTS
- d. MAINTENANCE OF RECORDS/ACCOUNTS/AUDIT

PRACTICALS/CLINICAL/FIELD PROGRAMMES

- a) DOCUMENT INCIDENCE AND PREVALENCE OF COMMON ORAL DISEASES LIKE DENTAL CARIES, PERIODONTAL DISEASE, ORAL CANCER, FLUOROSIS AT COMMUNITY CAMPS.
- b) PREPARATION OF ORAL HEALTH EDUCATION MATERIAL - POSTERS, MODELS SLIDES, LECTURES, PLAYS, ACTING/ SKITS ETC.
- c) ORAL HEALTH STATUS ASSESSMENT OF THE COMMUNITY USING INDICES AND WHO BASIC ORAL HEALTH SURVEY METHODS.
- d) VISIT TO PRIMARY HEALTH CENTRE-TO ACQUAINT WITH ACTIVITIES AND PRIMARY HEALTH CARE DELIVERY.
- e) VISIT TO WATER PURIFICATION PLANT/PUBLIC HEALTH LABORATORY/CENTRE FOR TREATMENT OF WASTE AND SEWAGE WATER.
- f) VISIT TO SCHOOLS-TO ASSESS THE ORAL HEALTH STATUS OF SCHOOL CHILDREN, EMERGENCY TREATMENT AND HEALTH EDUCATION INCLUDING POSSIBLE PREVENTIVE CARE AT SCHOOL (TOOTH BRUSHING TECHNIQUE DEMONSTRATION AND ORAL RINSE PROGRAM ETC)
- g) VISIT TO INSTITUTION FOR THE CARE OF HANDICAPPED, PHYSICALLY, MENTALLY, OR MEDICALLY, COMPROMISED PATIENTS.
- h) PREVENTIVE DENTISTRY: IN THE DEPARTMENT, APPLICATION OF PIT AND FISSURE SEALANTS, FLUORIDE GEL APPLICATION PROCEDURE, A.R.T RESTORATIONS

PERIODONTOLOGY

SL.NO.	TOPIC	
01	INTRODUCTION	DEFINITION OF PERIODONTOLOGY, PERIODONTICS PERIODONTIA. BRIEF HISTORICAL BACKGROUND AND SCOPE OF PERIODONTICS

02	NORMAL PERIODONTIUM	<ul style="list-style-type: none"> • DEVELOPMENT OF PERIODONTAL TISSUE, • MICRO-STRUCTURAL ANATOMY AND BIOLOGY OF PERIODONTAL TISSUES, • GINGIVA, PERIODONTAL LIGAMENT, CEMENTUM , ALVEOLAR BONE
03	DEFENSE MECHANISM IN THE ORAL CAVITY	<ul style="list-style-type: none"> • ROLE OF EPITHELIUM • GINGIVAL CREVICULAR FLUID • SALIVA • OTHER DEFENSE MECHANISMS IN THE ORAL ENVIRONMENT
04	AGE CHANGES IN TEETH AND PERIODONTIUM	AGE CHANGES IN PERIODONTAL STRUCTURES & THEIR SIGNIFICANCE IN PERIODONTAL DISEASES. GERIATRIC DENTISTRY
05	CLASSIFICATION OF PERIODONTAL DISEASES	<ul style="list-style-type: none"> • NEED FOR CLASSIFICATION • SCIENTIFIC BASIS OF CLASSIFICATION. • CLASSIFICATION OF GINGIVAL AND PERIODONTAL DISEASES AS DESCRIBED IN WORLD WORKSHOP 1999 • DRAWBACKS OF THE EARLIER CLASSIFICATION
06	EPIDEMIOLOGY OF PERIODONTAL DISEASE	<ul style="list-style-type: none"> • DEFINITION OF INDEX, INCIDENCE, PREVALENCE, ENDEMIC, EPIDEMIC AND PANDEMIC. • CLASSIFICATION OF INDICES. (IRREVERSIBLE & REVERSIBLE) • DEFICIENCIES OF EARLIER INDICES USED IN PERIODONTICS DETAILED UNDERSTANDING OF SILLNESS & LOE PLAQUE INDEX, LOE AND SILLNESS GINGIVAL INDEX, CPITN & CPI. • PREVALENCE OF PERIODONTAL DISEASES IN INDIA AND OTHER COUNTRIES. PUBLIC HEALTH SIGNIFICANCE
07	DIAGNOSIS	<ul style="list-style-type: none"> • ROUTINE PROCEDURES, METHODS OF PROBING TYPES OF PROBES. • HALITOSIS- ETIOLOGY AND TREATMENT. • ADVANCED DIAGNOSTIC AIDS
08	PERIODONTAL INSTRUMENTATION	<ul style="list-style-type: none"> • CLASSIFICATION OF PERIODONTAL INSTRUMENTS • PRINCIPLES OF PERIODONTAL INSTRUMENTATION • SONIC & ULTRASONIC INSTRUMENTATION
09	ETIOLOGY PERIODONTAL DISEASES	<ul style="list-style-type: none"> • DENTAL PLAQUE (BIOFLIM) DEFINITION, TYPES, COMPOSITION; • FORMATION: BACTERIAL COLONIZATION, GROWTH & MATURATION, • ROLE OF DENTAL PLAQUE IN PERIODONTAL DISEASE. PLAQUE MICROORGANISMS IN DETAIL BACTERIA ASSOCIATED WITH PERIODONTAL DISEASES. PLAQUE RETENTIVE FACTORS, MATERIA ALBA, FOOD DEBRIS, • DISCLOSING AGENTS.

		<ul style="list-style-type: none"> • CALCULUS: DEFINITION (TYPES, COMPOSITION, ATTACHMENT, THEORIES OF FORMATION) ROLE OF DENTAL CALCULUS IN DISEASE. • FOOD IMPACTION: DEFINITION, TYPES, ETIOLOGY, HIRSCHFELDS CLASSIFICATION, SIGNS, SYMPTOMS AND TREATMENT. • TRAUMA FROM OCCLUSION-DEFINITION, TYPES, HISTO PATHOLOGICAL CHANGES. ROLE OF TRAUMA FROM OCCLUSION IN PERIODONTAL DISEASE. MEASURES OF MANAGEMENT, IN BRIEF. • HABITS-THEIR PERIODONTAL SIGNIFICANCE. BRUXISM & PARAFUNCTIONAL HABITS, TONGUE THRUSTING, MOUTH BREATHING, LIP BITING, OCCUPATIONAL HABITS. • IATROGENIC FACTORS. CONSERVATIVE DENTISTRY- RESTORATIONS. CONTACT POINT, MARGINAL RIDGE, SURFACE ROUGHNESS, OVERHANGING RESTORATIONS, INTERFACE BETWEEN RESTORATION AND TEETH.PROSTHODONTIC INTERRELATIONSHIP-BRIDGES AND OTHER PROSTHESIS, PONTICS (TYPES), SURFACE CONTOUR, RELATIONSHIP OF MARGINS TO THE PERIODONTIUM
10	HOST RESPONSE	<ul style="list-style-type: none"> • MECHANISM OF INITIATION & PROGRESSION OF PERIODONTAL DISEASE, • BASIC CONCEPTS OF IMMUNOLOGY AND INFLAMMATION, DEFENSE CELLS, MAST CELLS, NEUTROPHILS, MACROPHAGES, LYMPHOCYTES, IMMUNOGLOBULINS, COMPLEMENT, IMMUNE MECHANISMS AND CYTOKINES IN BRIEF. • STAGES IN GINGIVITIS-INITIAL, EARLY ESTABLISHED, ADVANCED PERIODONTAL DISEASE ACTIVITY CONTINUOUS PARADIGM, RANDOM BURST AND ASYNCHRONOUS MULTIPLE BURST HYPOTHESIS
11	GINGIVAL DISEASES	<ul style="list-style-type: none"> • LOCALIZED & GENERALIZED GINGIVITIS. PAPILLARY, MARGINAL AND DIFFUSED GINGIVITIS. • ETIOLOGY, PATHOGENESIS CLINICAL SIGNS, SYMPTOMS AND MANAGEMENT OF-PLAQUE-ASSOCIATED GINGIVITIS. SYSTEMICALLY AGGRAVATED GINGIVITIS (SEX HORMONES, DRUGS AND SYSTEMIC DISEASES) <p>NECROTIZING ULCERATIVE GINGIVITIS</p> <ul style="list-style-type: none"> • DESQUAMATIVE GINGIVITIS ASSOCIATED WITH LICHEN PLANUS, PEMPHIGOID, PEMPHIGUS AND OTHER VESICULO-BULLOUS LESIONS. • ALLERGIC GINGIVITIS • INFECTIVE GINGIVITIS—HERPETIC, BACTERIAL AND CANDIDIAL AND PERICORONITIS. • GINGIVAL ENLARGEMENT (CLASSIFICATION AND DIFFERENTIAL DIAGNOSIS)
12	EXTENSION OF INFLAMMATION FROM GINGIVA	<ul style="list-style-type: none"> • MECHANISM OF SPREAD OF INFLAMMATION FROM GINGIVAL AREA TO DEEPER PERIODONTAL STRUCTURES. • FACTORS THAT MODIFY THE SPREAD

13	PERIODONTAL POCKET	DEFINITION, SIGNS & SYMPTOMS CLASSIFICATION, PATHOGENESIS & HISTOPATHOLOGY, ROOT SURFACE CHANGES AND CONTENTS OF THE POCKET.
14	RISK FACTORS	<ul style="list-style-type: none"> • DEFINITION, RISK FACTORS FOR PERIODONTAL DISEASE • RISK ASSESSMENT • GENETIC & ENVIRONMENTAL RISK FACTORS
15	PERIODONTITIS	<ul style="list-style-type: none"> • ETIOLOGY, HISTOPATHOLOGY, CLINICAL SIGNS & SYMPTOMS, DIAGNOSIS AND TREATMENT OF CHRONIC PERIODONTITIS • PERIODONTAL ABSCESS • CLASSIFICATION, PATHOGENESIS, DIFFERENTIAL DIAGNOSIS AND TREATMENT OF FURCATION INVOLVEMENT GLICKMAN 'S CLASSIFICATION, PROGNOSIS AND MANAGEMENT. • AGGRESSIVE PERIODONTITIS ASSOCIATED WITH SYSTEMIC DISEASES, REFRACTORY PERIODONTITIS.
16	PROGNOSIS	DEFINITION, TYPES, PURPOSE AND FACTORS TAKEN INTO CONSIDERATION
17	TREATMENT PLAN	FACTORS TO BE CONSIDERED
18	PERIODONTAL TREATMENT OF MEDICALLY COMPROMISED PATIENTS	<ul style="list-style-type: none"> • DIFFERENT SYSTEMIC CONDITIONS AND THEIR EFFECTS ON THE PERIODONTIUM. • MANAGEMENT OF PATIENTS WITH THE VARIOUS SYSTEMIC DISEASES/CONDITION • PERIODONTAL THERAPY IN FEMALE PATIENTS (PREGNANCY, PUBERTY, MENOPAUSE, HORMONE REPLACEMENT THERAPY, ORAL CONTRACEPTIVES
19	PERIODONTAL THERAPY	<ul style="list-style-type: none"> • GENERAL PRINCIPLES OF PERIODONTAL THERAPY. PHASE I , II, III, IV THERAPY. • DEFINITION OF PERIODONTAL REGENERATION, REPAIR, NEW ATTACHMENT, RE-ATTACHMENT. PLAQUE CONTROL MECHANICAL - TOOTH BRUSHES, INTER-DENTAL CLEANSING AIDS, DENTIFRICES CHEMICAL - CLASSIFICATION AND MECHANISM OF ACTION OF EACH, POCKET IRRIGATION.
20	POCKET ERADICATION	<ul style="list-style-type: none"> • SCALING AND ROOT PLANING PROCEDURES INDICATIONS, AIMS AND OBJECTIVES. ARMAMENTARIUM—AND PROCEDURE, HEALING FOLLOWING ROOT PLANING. • CURETTAGE AND PRESENT CONCEPTS- DEFINITION, INDICATION AIMS AND OBJECTIVES PROCEDURES AND HEALING • GINGIVECTOMY, GINGIVOPLASTY INCLUDING CROWN LENGTHENING PROCEDURE-DEFINITION INDICATION AND CONTRA INDICATION ARMAMENTARIUM, PROCEDURE AND HEALING.

		<ul style="list-style-type: none"> • FLAP SURGERY DEFINITION OF FLAP; TYPES OF FLAP (DESIGN OF FLAP—PAPILLA PRESERVATION) POCKET ERADICATION, INDICATIONS, ARMAMENTARIUM, SURGICAL PROCEDURE AND HEALING
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21	OSSEOUS SURGERY	<ul style="list-style-type: none"> • OSSEOUS DEFECTS IN PERIODONTAL DISEASE CLASSIFICATION OF OSSEOUS DEFECT AND SURGERY. RESPECTIVE, ADDITIVE OSSEOUS SURGERY (OSSEOUS GRAFTS CLASSIFICATION OF GRAFTS) • GUIDED TISSUE REGENERATION.& ROOT CONDITIONING.
22	MUCOGINGIVAL SURGERY	<ul style="list-style-type: none"> • DEFINITION; MUCOGINGIVAL PROBLEMS, • ETIOLOGY & CLASSIFICATION OF GINGIVAL RECESSON (P.D. MILLER JR. AND SULLIVAN AND ATKINS) • INDICATIONS, OBJECTIVES. • GINGIVAL EXTENSION PROCEDURES LATERAL PEDICLE GRAFT, FREE GINGIVAL GRAFT, FRENECTOMY AND FRENOTOMY, CROWN LENGTHENING PROCEDURES
23	SPLINTS	PERIODONTAL SPLINTS - PURPOSE, CLASSIFICATION- PRINCIPLES OF SPLINTING
24	HYPERSENSITIVITY	CAUSES, THEORIES AND MANAGEMENT
25	IMPLANTS	<p>DEFINITION, TYPES, SCOPE, BIOMATERIALS USED.</p> <ul style="list-style-type: none"> • PERIODONTAL CONSIDERATIONS SUCH AS IMPLANT-TISSUE AND IMPLANT-BONE INTERFACE. • IMPLANT FAILURE • PERI-IMPLANTITIS AND MANAGEMENT
26	ADVANCED SURGICAL TECHNIQUES	MICRO SURGERY, ELECTRO SURGERY, CRYO SURGERY, LASER
27	PHARMACOTHERAPY	<ul style="list-style-type: none"> • PERIODONTAL DRESSING • ANTIBIOTIC, ANTI-INFLAMMATORY DRUG, LOCAL DRUG DELIVERY
28	SUPPORTIVE PERIODONTAL THERAPY	<ul style="list-style-type: none"> • DEFINITION, RATIONALE • PATIENT CLASSIFICATION • FACTORS AFFECTING SUPPORTIVE PERIODONTAL THERAPY • IMPLANT MAINTENANCE
29	ENDO PERIO LESIONS	<ul style="list-style-type: none"> • PULPO-PERIODONTAL INVOLVEMENT • ROUTES OF SPREAD OF INFECTION • SIMONS CLASSIFICATION • MANAGEMENT

30	PERIODONTAL MEDICINE	EFFECT OF PERIODONTAL DISEASES ON CARDIOVASCULAR SYSTEM, RESPIRATORY SYSTEM, DIABETES MELLITUS, PRE-TERM LOW BIRTH WEIGHT INFANTS ETC
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31	INFECTION CONTROL PROTOCOL	STERILIZATION & VARIOUS ASEPTIC PROCEDURES
32	ETHICS	ETHICS IN PERIODONTAL TREATMENT & INFORMED CONSENT
33	ADVANCED TREATMENT MODALITIES IN PERIODONTAL THERAPY	LASERS –PHYSICS, TYPES, APPLICATIONS IN PERIODONTICS PHOTODYNAMIC THERAPY – MECHANISM OF ACTION, PHOTOSENSITIZES, ADVANTAGES AND DISADVANTAGES, APPLICATIONS IN TREATMENT OF PERIODONTAL AND PERI-IMPLANT THERAPY

PRACTICAL/ CLINICAL EXERCISES :

1. CHAIR POSITION AND PRINCIPLES OF INSTRUMENTATION
2. INSTRUMENTS & THEIR MAINTENANCE
3. DETAILED CASE HISTORY AND DISCUSSION
4. ORAL PROPHYLAXIS – WITH HAND INSTRUMENTS
5. ORAL PROPHYLAXIS – WITH ULTRASONIC SCALER
6. MOTIVATION OF PATIENT —ORAL HYGIENE INSTRUCTIONS

PROSTHODONTICS CROWN & BRIDGE

LECTURE TOPICS –COMPLETE DENTURE PROSTHESIS

SI.NO.	TOPICS
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1	<p>BIOMECHANICS OF THE EDENTULOUS STATE</p> <ul style="list-style-type: none"> • MECHANISM OF TOOTH SUPPORT • MECHANISM OF COMPLETE DENTURE SUPPORT • MASTICATORY LOAD • MUCOSAL SUPPORT • RESIDUAL RIDGE • PSYCHOLOGICAL EFFECTS ON RETENTION • FUNCTIONAL AND PARA-FUNCTIONAL CONSIDERATIONS • OCCLUSION • FUNCTIONS— MASTICATION & SWALLOWING • MANDIBULAR MOVEMENTS • DISTRIBUTION OF STRESSES TO THE DENTURE SUPPORTING TISSUES • CHANGES ON THE MORPHOLOGICAL FACE HEIGHT AND THE TMJ —FACE HEIGHT CENTRIC RELATION • TMJ CHANGES • INDIVIDUAL BEHAVIOURAL OR ADAPTIVE RESPONSE—COSMETIC CHANGES, DIETARY CHANGES, ADAPTIVE & PSYCHOLOGICAL CHANGES, ADAPTIVE POTENTIAL OF THE PATIENT
2	<p>TISSUE RESPONSE TO COMPLETE DENTURE PROSTHESIS</p> <ul style="list-style-type: none"> • SOFT TISSUE CHANGES; SOFT TISSUE HYPERPLASIA • DENTURE STOMATITIS; TREATMENT OF DENTURE STOMATITIS; DENTURE SORE
3	<p>EFFECTS OF AGING</p> <ul style="list-style-type: none"> • ORAL CHANGES • MUCOSA AND SKIN • RESIDUAL BONE AND THE MAXILLO-MANDIBULAR RELATION • DISUSE ATROPHY; DEGENERATIVE CHANGES • CHANGES IN THE SIZE OF THE BASAL SEAT • TONGUE AND TASTE • SALIVARY FLOW AND NUTRITIONAL IMPAIRMENT • DIETARY PROBLEMS • PSYCHOLOGICAL CHANGES
4	<p>PREPARING THE PATIENT FOR COMPLETE DENTURE PROSTHESIS</p>

5	<p>DIAGNOSIS & TREATMENT PLANNING FOR PATIENT WITH SOME TEETH REMAINING</p> <ul style="list-style-type: none"> • DIAGNOSTIC PROCEDURES • HISTORY AND RECORDS • IMMEDIATE COMPLAINTS • SYSTEMIC EVALUATION • TMJ DISORDERS • INTRA-ORAL EXAMINATION • DIAGNOSTIC CAST • INTER-ARCH SPACE PROBLEMS • RADIOGRAPHS & OTHER INVESTIGATIONS • TREATMENT PLAN - DECIDING WHETHER TO EXTRACT THE REMAINING TEETH, PRE-EXTRACTION RECORD
6	<p>DIAGNOSIS OF PATIENT WITH NO REMAINING TEETH</p> <ul style="list-style-type: none"> • EXAMINATION CHARTS AND RECORDS • GENERAL OBSERVATIONS AFFECTING DIAGNOSIS- AGE, SEX, OCCUPATION, ETHNIC, GENERAL HEALTH AND NUTRITION, SOCIAL TRAINING, PATIENT COMPLAINTS, GAIT, LIP SUPPORT, LIP THICKNESS, LIP LENGTH, LIP FULLNESS, PROFILE AND CONTOUR OF FEATURES, TONE OF THE FACIAL TISSUES, VERTICAL FACE HEIGHT • RADIOGRAPHIC EXAMINATION - ADVANTAGES OF RADIOGRAPHIC EXAMINATION, AND INTRA ORAL EXAMINATION - COLOR, RESILIENCY AND ATTACHMENTS OF THE MUCOSA, ABRASIONS AND ULCERS, PATHOSES, MAXILLARY BASAL SEAT, TORUS PALATINES, MANDIBULAR BASAL SEAT, ARCH SIZE, RIDGE FORM, RIDGE RELATIONS , ARCH SHAPE, SAGITTAL PROFILE OF THE RESIDUAL RIDGE, SHAPE OF THE PALATAL VAULT, RELATION OF THE HARD AND SOFT PALATE, MUSCULAR DEVELOPMENT, SALIVA, CHEEKS AND LIPS, MUSCLE TONUS, MUSCULAR CONTROL, JAW MOVEMENTS, TONGUE SIZE AND POSITION, THROAT FORM, GAGGING • MENTAL ATTITUDE AND CLASSIFICATION - HOUSE CLASSIFICATION, APPLICATION OF HOUSE'S CLASSIFICATION
7	<p>DEVELOPMENT OF TREATMENT PLAN</p> <ul style="list-style-type: none"> • COMMUNICATION WITH THE PATIENT - NUTRITION CARE, NUTRITIONAL NEEDS AND STATUS OF THE ELDERLY, IMPACT OF WEARING DENTURES ON DIETARY INTAKE, CALCIUM AND BONE HEALTH, VITAMIN SUPPLEMENTATION, NUTRITION COUNSELING
8	<p>IDENTIFICATION AND MANAGEMENT OF THE PATIENT WITH PROBLEM</p>

9	<p>IMPROVING THE PATIENT'S DENTURE FOUNDATION AND RIDGE RELATIONS</p> <ul style="list-style-type: none"> • PRE-OPERATIVE EXAMINATION • INITIAL HARD TISSUE AND SOFT TISSUE PROCEDURE • SECONDARY HARD TISSUE AND SOFT TISSUE PROCEDURE • NON-SURGICAL METHODS • SURGICAL METHODS • CONGENITAL DEFORMITIES • POST-OPERATIVE PROCEDURE
10	<p>ARTICULATORS</p> <ul style="list-style-type: none"> • ARTICULATORS BASED ON THE THEORY OF OCCLUSION • ARTICULATORS BASED ON THE TYPE OF RECORD USED FOR THEIR ADJUSTMENTS • SELECTION OF ARTICULATORS FOR COMPLETE DENTURES
11	<p>PRINCIPLES OF RETENTION , SUPPORT AND STABILITY</p>
12	<p>IMPRESSIONS</p> <ul style="list-style-type: none"> • MUSCLES OF FACIAL EXPRESSION • BIOLOGICAL CONSIDERATIONS FOR MAXILLARY AND MANDIBULAR IMPRESSION INCLUDING ANATOMIC LANDMARKS AND THEIR INTERPRETATION • OBJECTIVES OF IMPRESSION MAKING • IMPRESSION MATERIALS AND IMPRESSION TECHNIQUES • MAXILLARY AND MANDIBULAR IMPRESSION PROCEDURES—PRELIMINARY AND FINAL IMPRESSIONS • LABORATORY STEPS INVOLVED WITH IMPRESSION MAKING - BEADING, BOXING AND CAST PREPARATION
13	<p>RECORD BASES AND OCCLUSION RIMS</p> <ul style="list-style-type: none"> • MATERIALS AND TECHNIQUES • USEFUL GUIDELINES AND IDEAL PARAMETERS • RECORDING AND TRANSFERRING BASES AND OCCLUSION RIMS
14	<p>BIOLOGICAL CONSIDERATION IN JAW RELATION AND JAW MOVEMENTS</p> <p>-CRANIOMANDIBULAR RELATIONS</p> <ul style="list-style-type: none"> • MANDIBULAR MOVEMENTS • MAXILLO-MANDIBULAR RELATION INCLUDING VERTICAL AND HORIZONTAL JAW RELATIONS; CONCEPT OF OCCLUSION
15	<p>RELATING THE PATIENT TO THE ARTICULATOR</p> <ul style="list-style-type: none"> • FACEBOW- TYPES AND USES • FACEBOW TRANSFER PROCEDURE

16	RECORDING MAXILLO MANDIBULAR RELATION <ul style="list-style-type: none"> • VERTICAL RELATION • CENTRIC RELATION RECORDS • ECCENTRIC RELATION RECORDS • LATERAL RELATION RECORDS
17	TOOTH SELECTION AND ARRANGEMENT <ul style="list-style-type: none"> • ANTERIOR TEETH • POSTERIOR TEETH • ESTHETIC AND FUNCTIONAL HARMONY
18	RELATING INCLINATION OF THE TEETH TO CONCEPT OF OCCLUSION <ul style="list-style-type: none"> • NEUTRO-CENTRIC CONCEPT • BALANCED OCCLUSAL CONCEPT
19	TRIAL DENTURES
20	LABORATORY PROCEDURES <ul style="list-style-type: none"> • WAX CONTOURING • INVESTING OF DENTURES • PREPARATION OR MOULD • PREPARING AND PACKING ACRYLIC RESIN • PROCESSING OF DENTURES • RECOVERY OF DENTURES • LAB REMOUNT PROCEDURES • FINISHING AND POLISHING THE COMPLETE DENTURES • PLASTER CAST FOR CLINICAL DENTURE REMOUNT PROCEDURE
21	DENTURE INSERTION <ul style="list-style-type: none"> • INSERTION PROCEDURES • CLINICAL ERRORS • CORRECTING OCCLUSAL DISHARMONY • SELECTIVE GRINDING PROCEDURES
22	TREATING PROBLEMS ASSOCIATED WITH DENTURE USE
23	TREATING ABUSED TISSUES
24	RELINING AND REBASING OF DENTURES <ul style="list-style-type: none"> • TREATMENT RATIONALE • DIAGNOSIS

	<ul style="list-style-type: none"> • CLINICAL PROCEDURE
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25	IMMEDIATE COMPLETE DENTURE CONSTRUCTION PROCEDURE <ul style="list-style-type: none"> • INDICATIONS & CONTRAINDICATIONS • DELAYED AND TRANSITIONAL DENTURES • TREATMENT PLANNING • CLINICAL PROCEDURES • SUBSEQUENT SERVICE FOR IMMEDIATE DENTURES
26	THE SINGLE COMPLETE DENTURE <ul style="list-style-type: none"> • MAXILLARY SINGLE DENTURES • CLINICAL AND LABORATORY PROCEDURE • SUBSEQUENT PROBLEMS WITH SINGLE DENTURES AGAINST NATURAL TEETH • MANDIBULAR SINGLE DENTURES • SUPPLEMENTAL PROSTHODONTIC PROCEDURES FOR THE EDENTULOUS PATIENT
27	OVERDENTURE <ul style="list-style-type: none"> • INDICATIONS & CONTRAINDICATIONS • SELECTION OF ABUTMENT TEETH • CLINICAL PROCEDURES
28	DENTAL IMPLANTS IN COMPLETE DENTURE <ul style="list-style-type: none"> • MALADAPTIVE DENTURE BEHAVIOUR • USE OF DENTAL IMPLANTS • PATIENT CONSIDERATIONS • TISSUE INTEGRATION IN THE EDENTULOUS PATIENT

LECTURE TOPICS - REMOVABLE PARTIAL DENTURE PROSTHESIS

Sl.NO	TOPICS
1	INTRODUCTION AND SCOPE
2	CLASSIFICATION
3	EXAMINATION, DIAGNOSIS AND TREATMENT PLANNING

4	<p>COMPONENTS OF REMOVABLE PARTIAL DENTURE</p> <ul style="list-style-type: none"> • MAJOR CONNECTORS-MAXILLARY & MANDIBULAR MAJOR CONNECTORS
5	<p>MINOR CONNECTORS</p> <ul style="list-style-type: none"> • FUNCTIONS; FORM AND LOCATION • TISSUE STOPS
6	<p>RESTS AND REST SEATS</p> <ul style="list-style-type: none"> • INTERPROXIMAL OCCLUSAL REST SEATS • INTERNAL REST SEATS • INCISAL RESTS AND REST SEATS • LINGUAL RESTS ON CANINES AND INCISORS • POSSIBLE MOVEMENTS OF PARTIAL DENTURE • SUPPORT FOR RESTS
7	<p>DIRECT RETAINERS</p> <ul style="list-style-type: none"> • INTERNAL ATTACHMENTS • EXTRA-CORONAL DIRECT RETAINERS • RELATIVE UNIFORMITY OF RETENTION • CRITERIA FOR SELECTING A GIVEN CLASP DESIGN • BASIC PRINCIPLES OF CLASP DESIGN • DESIGNS OF CLASP
8	<p>INDIRECT RETAINERS</p> <ul style="list-style-type: none"> • DENTURE ROTATION ABOUT AN AXIS • FACTORS INFLUENCING EFFECTIVENESS OF INDIRECT RETAINERS • AUXILIARY FUNCTIONS OF INDIRECT RETAINERS • FORMS OF INDIRECT RETAINERS • AUXILIARY OCCLUSAL RESTS • CANINE RESTS • CONTINUOUS BAR RETAINERS AND LINGUO-PLATES • MODIFICATION AREAS • RUGAE SUPPORT • DENTURE BASE CONSIDERATIONS • TOOTH SUPPORTED PARTIAL DENTURE BASE
9	<p>DISTAL EXTENSION PARTIAL DENTURE BASE</p> <p>FUNCTIONS OF DENTURE BASES</p> <p>METHODS OF ATTACHING DENTURE BASES</p>

	<p>IDEAL DENTURE BASE MATERIAL</p> <p>ADVANTAGES OF METAL BASES</p> <p>NEED FOR RELINING</p>
10	<p>STRESS BREAKERS</p> <ul style="list-style-type: none"> • TYPES OF STRESS BREAKERS • ADVANTAGES AND DISADVANTAGES OF STRESS BREAKERS • ADVANTAGES AND DISADVANTAGES OF RIGID DESIGN • STRESS BREAKING PRINCIPLES

11	<p>PRINCIPLES OF REMOVABLE PARTIAL DENTURE DESIGN</p> <ul style="list-style-type: none"> • BIOMECHANICAL CONSIDERATIONS • FACTORS INFLUENCING DESIGN • ESSENTIALS OF PARTIAL DENTURE DESIGN • COMPONENTS OF PARTIAL DENTURE DESIGN
12	<p>SURVEYING</p> <ul style="list-style-type: none"> • DESCRIPTION OF DENTAL SURVEYOR • PURPOSES OF A SURVEYOR • FACTORS THAT DETERMINE PATH OF PLACEMENT AND REMOVAL • SURVEYING OF DIAGNOSTIC CAST • RECORDING RELATION OF CAST TO SURVEYOR • SURVEYING OF MASTER CAST • MEASURING RETENTION AND BALANCING OF RETENTION • INFLUENCE OF SURVEY LINE IN DESIGNING OF CLASPS • BLOCKING OUT THE MASTER CAST
13	<p>MOUTH PREPARATION AND MASTER CAST</p>
14	<p>IMPRESSION MATERIALS AND PROCEDURES FOR REMOVABLE PARTIAL DENTURES</p> <ul style="list-style-type: none"> • RIGID MATERIALS, THERMOPLASTIC MATERIALS, ELASTIC MATERIALS • INDIVIDUAL IMPRESSION TRAYS • SUPPORT FOR THE DISTAL EXTENSION DENTURE BASE • FACTORS INFLUENCING THE SUPPORT OF DISTAL EXTENSION BASE • METHODS FOR OBTAINING FUNCTIONAL SUPPORT FOR DISTAL EXTENSION BASE
15	<p>PRELIMINARY JAW RELATION AND ESTHETIC TRY IN FOR SOME ANTERIOR REPLACEMENT TEETH</p>
16	<p>LABORATORY PROCEDURES FOR FRAME WORK CONSTRUCTION</p>

17	FITTING THE FRAMEWORK
18	COMPLETION OF THE PARTIAL DENTURE
19	TRY IN OF THE PARTIAL DENTURE
20	COMPLETION OF THE PARTIAL DENTURE
21	INSERTING THE REMOVABLE PARTIAL DENTURE
22	POST INSERTION OBSERVATIONS
23	TEMPORARY ACRYLIC PARTIAL DENTURES <ul style="list-style-type: none"> • APPEARANCE • SPACE MAINTENANCE • RE-ESTABLISHING OCCLUSAL RELATIONSHIPS • CONDITIONING TEETH AND RESIDUAL RIDGE • CONDITIONING THE PATIENT FOR WEARING A PROSTHESIS
24	IMMEDIATE REMOVABLE PARTIAL DENTURE
25	REMOVABLE PARTIAL DENTURES OPPOSING COMPLETE DENTURES
26	REPAIR AND ADDITIONS TO REMOVABLE PARTIAL DENTURE <ul style="list-style-type: none"> • BROKEN CLASPARMS • FRACTURE DO CCLUSAL RESTS • DISTORTION OR BREAKAGE OF OTHER COMPONENTS • LOSS OF TEETH NO TINVOLVED IN THE SUPPORT TO RETENTION OF THE RESTORATION • OTHER TYPES OF REPAIR • REPAIR BY SOLDERING
27	REMOVABLE PARTIAL DENTURE CONSIDERATIONS IN MAXILLOFACIAL <ul style="list-style-type: none"> • PROSTHODONTICS • MAXILLOFACIAL PROSTHODONTICS • INTRAORAL PROSTHESIS DESIGN CONSIDERATIONS • MAXILLARY PROSTHESIS • MANDIBULAR PROSTHESIS • TREATMENT PLANNING • FRAMEWORK DESIGN • CLASS I RESECTIONS • CLASS II RESECTIONS • MANDIBULAR FLANGE PROSTHESIS

LECTURE TOPICS : FIXED PARTIAL DENTURE PROSTHODONTICS

SL.NO	TOPICS
1	INTRODUCTION, DEFINITIONS, TERMINOLOGIES, INDICATIONS AND CONTRAINDICATIONS
2	EXAMINATION, DIAGNOSIS, TREATMENT PLANNING AND RADIOLOGICAL INTERPRETATIONS
3	FUNDAMENTALS OF OCCLUSION
4	TREATMENT PLANNING FOR SINGLE TOOTH RESTORATION
5	TREATMENT PLANNING FOR THE REPLACEMENT OF MISSING TEETH
6	SELECTION AND CHOICE OF ABUTMENT TEETH
7	FIXED PARTIAL DENTURE CONFIGURATION
8	BIOMECHANICAL PRINCIPLES OF TOOTH PREPARATION <ul style="list-style-type: none">• PRESERVATION OF TOOTH STRUCTURE• RETENTION AND RESISTANCE FORM• STRUCTURAL DURABILITY OF THE RESTORATION• MARGINAL INTEGRITY• PRESERVATION OF THE PERIODONTIUM
9	PREPARATION FOR FULL VENEER CROWNS <ul style="list-style-type: none">• ALL CERAMIC CROWNS• PORCELAIN FUSED TO METAL CROWNS & METAL CROWNS
10	PREPARATION FOR PARTIAL VENEER CROWNS <ul style="list-style-type: none">• POSTERIOR AND ANTERIOR THREE QUARTERS CROWN• PIN-MODIFIED THREE-QUARTER CROWN• SEVEN EIGHT CROWN• PROXIMAL HALF-CROWNS• INLAY• MOD ON-LAY
11	PREPARATION MODIFICATION FOR EXTENSIVELY DAMAGED TEETH
12	ENDODONTICALLY TREATED TEETH

13	FLUID CONTROL AND SOFT TISSUE MANAGEMENT
14	DEMONSTRATION AND HANDS ON PRACTICALS IN SOFT TISSUE MANAGEMENT OF GINGIVAL RETRACTION
15	DEMONSRATION AND HANDS ON PRACTICALS IN MAKING OF FIXED PARTIAL DENTURE IMPRESSIONS USING ELASTOMERIC IMPRESSION MATERIALS
16	DEMONSTRATION AND HANDS ON PRACTICALS ON MAKING PROVISIONAL RESTORATIONS
17	DEMONSTRATION OF DIE PREPARATIONS
18	WAX PATTERNS
19	PONTICS AND EDENTULOUS RIDGES
20	ESTHETIC CONSIDERATIONS
21	FINISHING AND CEMENTATION
22	MISCELLANEOUS <ul style="list-style-type: none"> • SOLDER JOINTS AND OTHER CONNECTORS • PREPARATIONS FOR INTRA-CORONAL RESTORATIONS • PREPARATIONS FOR PERIODONTALLY WEAKENED TEETH • THE FUNCTIONALLY GENERATED PATH TECHNIQUE • INVESTING AND CASTING • RESIN BONDED FIXED PARTIAL DENTURE • DEMONSTRATION AND USE OF CAD/CAM TECHNOLOGY IN FIXED PARTIAL DENTURE

LECTURE TOPICS : ESTHETIC DENTISTRY

SL.NO	TOPICS
1	INTRODUCTION AND SCOPE OF AESTHETIC DENTISTRY
2	ANATOMY AND PHYSIOLOGY OF SMILE
3	ROLE OF COLOR IN AESTHETIC DENTISTRY
4	SIMPLE PROCEDURES [ROUNDING OF CENTRAL INCISORS]
5	BLEACHING OF TEETH
6	VENEERS WITH VARIOUS MATERIALS
7	PREVENTIVE AND INTERCEPTIVE AESTHETICS

8	CERAMICS
9	SIMPLE GINGIVAL CONTOURING TO ENHANCE APPEARANCE

LECTURE TOPICS : ORAL IMPLANTOLOGY

SI.NO.	TOPICS
1	HISTORY OF IMPLANTS, THEIR DESIGN AND CHARACTERISTICS & OSSEOINTEGRATION
2	SCOPE OF ORAL & MAXILLOFACIAL IMPLANTOLOGY, TERMINOLOGIES
3	A BRIEF INTRODUCTION TO VARIOUS IMPLANT SYSTEMS IN PRACTICE
4	BONE BIOLOGY, MORPHOLOGY, CLASSIFICATION OF BONE AND ITS RELEVANCE TO IMPLANT TREATMENT AND BONE AUGMENTATION MATERIALS
5	SOFT TISSUE CONSIDERATIONS IN IMPLANT DENTISTRY
6	DIAGNOSIS AND TREATMENT PLANNING IN IMPLANT DENTISTRY
7	PRE-SURGICAL PREPARATION OF PATIENT
8	DEMONSTRATION OF IMPLANT PLACEMENT IN STYLOFORM JAWS
9	FIRST STAGE SURGERY—MAXILLA AND MANDIBLE
10	HEALING PERIO AND SECOND STAGE SURGERY
11	MANAGEMENT OF SURGICAL COMPLICATIONS AND FAILURES
12	GENERAL CONSIDERATIONS IN PROSTHODONTIC RECONSTRUCTION & BIOMECHANICS
13	PROSTHODONTIC COMPONENTS
14	IMPRESSION PROCEDURES AND PREPARATION OF MASTER CAST
15	JAW RELATION RECORDS AND CONSTRUCTION OF SUPRA-STRUCTURE WITH SPECIAL EMPHASIS ON OCCLUSION FOR OSSEO-INTEGRATED PROSTHESIS
16	MANAGEMENT OF PROSTHODONTIC COMPLICATIONS AND FAILURES
17	RECALL AND MAINTENANCE PHASE

CLINICAL EXERCISES / WORK :

1. TREATMENT FOR COMPLETELY EDENTULOUS PATIENTS AS PER QUOTE FIXED
TREATMENT FOR PARTIALLY EDENTULOUS PATIENTS AS PER QUOTA FIXED
2. FPD - TEETH PREPARATIONS TO RECEIVE VARIOUS TYPES OF CROWNS ON TYPHODONT TEETH
3. RELINING, REBASING, REPAIR— DEMONSTRATION
4. DENTAL IMPLANT , IMMEDIATE DENTURE & OBTURATOR – DEMONSTRATION

CONSERVATIVE DENTISTRY AND ENDODONTICS

LECTURE TOPICS FOR 3rd YEAR BDS :

SI.NO	TOPICS
1	<p>CLINICAL OPERATIVE DENTISTRY & ENDODONTICS: - INTRODUCTION, DEFINITION, SCOPE</p> <p>DIAGNOSIS, CASE SELECTION & TREATMENT PLANNING CASE HISTORY & PATIENT ASSESSMENT</p> <p>DIAGNOSIS: DEFINITION, AIM, AND TYPES: DIFFERENTIAL, PROVISIONAL & FINAL DIAGNOSIS; DIAGNOSTIC INVESTIGATIONS:</p> <p>a) CLINICAL INVESTIGATIONS: OBJECTIVE & SUBJECTIVE</p> <p>b) RADIOGRAPHIC INVESTIGATIONS: INDICATION, TYPES (IOPA, BITEWING, & OPG), RADIOGRAPHIC TECHNIQUES (PARALLELING, BISECTING ANGLE, CLARKS RULE), RVG (RADIO-VISUO-GRAPHY)</p>
2	<p>DIAGNOSIS OF DENTAL CARIES: METHODS & AIDS-CARIES DETECTOR DYES PULPAL DIAGNOSTIC TESTS:</p> <p>a) PULP SENSITIVITY TESTS: THERMAL TESTS: HOT & COLD TESTS; THEIR LIMITATIONS ELECTRIC PULP TEST(EPT): INTERPRETATION OF RESULTS</p> <p>b) PULP VITALITY TESTS: PULSE OXIMETRY & LASER DOPPLER FLOWMETRY OTHER TESTS: TEST CAVITY, TRANS ILLUMINATION DIAGNOSIS OF EMERGENCIES: -RESTORATIVE & ENDODONTIC</p> <p>TREATMENT PLANNING: CLASSIFICATION OF CARIES , BLACKS CLASSIFICATION</p> <p>PHASES INFORMED CONSENT, RECORD KEEPING, MEDICO LEGAL CONSIDERATIONS</p>

3	<p>BIOLOGICAL CONSIDERATIONS IN OPERATIVE DENTISTRY:</p> <p>DENTIN-PULP COMPLEX</p> <p>DENTAL PULP BIOLOGY</p> <p>DISEASES OF THE PULP</p>
4	<p>PULP THERAPY:</p> <p>VITAL PULP THERAPY & NON-VITAL PULP THERAPY: DEFINITION, CLASSIFICATION</p> <p><u>PULP CAPPING</u>: DEFINITION, TYPES: DIRECT & INDIRECT INDICATION, CONTRAINDICATIONS, APEXOGENESIS VS APEXIFICATION PULP CAPPING AGENTS: CALCIUM HYDROXIDE: MATERIAL/TECHNICAL & CLINICAL CONSIDERATIONS ZINC OXIDE EUGENOL, MTA & OTHER PULP CAPPING AGENTS</p>
5	<p>DENTIN SENSITIVITY & HYPERSENSITIVITY:</p> <ul style="list-style-type: none"> - THEORIES, ETIO-PATHOLOGY, MANAGEMENT & PREVENTION - HYDRODYNAMIC THEORY (SHORT NOTE) - MANAGEMENT OF ORO-FACIAL PAIN IN ENDODONTICS
6	<p>INFECTION CONTROL — AS RELATED TO CONSERVATIVE DENTISTRY & ENDODONTICS</p> <p>· INTRODUCTION, PRINCIPLES OF CROSS INFECTION CONTROL,</p> <p>· INFECTIOUS DISEASE OF CONCERN-HIV, HBV, TB ETC</p> <p>· CLASSIFICATION OF INFECTION CONTROL TECHNIQUES</p> <p>· STERILIZATION VS DISINFECTION: TERMINOLOGY & DEFINITION METHODS OF DISINFECTION: FOR OPERATORY, EQUIPMENTS & MATERIALS METHODS OF STERILIZATION OF INSTRUMENTS, EQUIPMENTS & MATERIALS.</p> <p>WASTE MANAGEMENT: INFECTIOUS & TOXIC WASTES; INCINERATION, DENTAL WATER LINES</p> <p>CONTACT DERMATITIS FOR DENTAL MATERIALS; LATEX ALLERGY- GLOVE, RUBBER DAM.</p> <p>MERCURY TOXICITY: FORMS OF MERCURY, MERCURY TOXICITY, -HYGIENE</p> <p>· RECOMMENDATIONS FOR-USAGE, STORAGE & DISPOSAL</p>
7	<p>GLASS IONOMER CEMENT BASED RESTORATIVES</p> <p>TECHNICAL ASPECTS: DISPENSING & MANIPULATION, MATRICES, SURFACE PROTECTION, FINISHING & POLISHING PROCEDURES – SANDWICH (BI-LAYERED RESTORATION) , MATERIAL & TECHNIQUES</p> <p>MODIFIED GLASS IONOMERS:</p> <p>METAL MODIFIED GLASS IONOMER: MIRACLE MIX, CERMET</p> <p>II) LIGHT CURED GLASS IONOMER: MATERIAL & TECHNICAL ASPECTS</p> <p>III) RESIN MODIFIED GLASS IONOMER(RMGIC)</p> <p>IV) COMPOMER (PMCR -POLYACID MODIFIED COMPOSITE RESINS)</p> <p>RECENT ADVANCES & NEWER MODIFICATIONS IN GLASS LONOMER</p> <p>CEMENTS TYPE IX & TYPE VII</p>

8A	<p>ADHESIVE DENTISTRY & ESTHETIC TOOTH COLORED RESTORATIVES:</p> <p>INTRODUCTION: -</p> <p>TERMINOLOGY: ADHESION & COHESION: DEFINITION & TYPES, ESTHETICS: DEFINITION, PRINCIPLES, GOLDEN PROPORTION PROPERTIES - INDICATION & CONTRAINDICATION; ADVANTAGES & DISADVANTAGES LIMITATIONS & DRAWBACKS</p> <p>PRE-OPERATIVE CONSIDERATIONS: ISOLATION (RUBBERDAM)</p> <ul style="list-style-type: none"> - SHADE SELECTION: COLOR MATCHING, - SURFACE PRE-TREATMENT (ETCHING & BONDING)
8B	<p>ACID ETCHING: DEFINITION, PURPOSE, MATERIAL & TECHNIQUES USED ETCHING PATTERNS, ETCHING VS CONDITIONING (FOR GIC) BONDING AGENTS: ENAMEL / DENTIN BONDING SYSTEMS</p> <ul style="list-style-type: none"> - BRIEF HISTORY OF DEVELOPMENT, CLASSIFICATION MATERIAL & TECHNICAL ASPECTS - RECENT ADVANCES & NEWER BONDING SYSTEMS. EG; SELF ETCHING PRIMERS <p>SMEAR LAYER: DEFINITION, DESCRIPTION, COMPONENTS & CLINICAL SIGNIFICANCE</p> <p>MICRO LEAKAGE: DEFINITION, CAUSES, METHODS TO STUDY/DETECT MICROLEAKAGE</p> <p>COMPOSITE RESIN SYSTEMS: DEFINITION, BRIEF HISTORY OF DEVELOPMENT, MATERIAL ASPECTS: COMPOSITION (INITIATORS, ACTIVATORS, PHOTOINITIATORS) FILLERS IN COMPOSITE RESINS: TYPE, PARTICLE SIZE PROPERTIES: ABRASION/WEAR RESISTANCE, STRENGTH, POLYMERIZATION SHRINKAGE, BIOCOMPATIBILITY</p> <p>POSTERIOR COMPOSITES: MATERIAL ASPECTS</p> <p>RECENT ADVANCES & NEWER COMPOSITES - PACKABLE, MICRO-FILLED, NANOFILLED</p>
9	<p>GINGIVAL TISSUE MANAGEMENT IN OPERATIVE DENTISTRY:</p> <ul style="list-style-type: none"> - INDICATION, METHODS & MATERIALS - GINGIVAL RETRACTION CORDS, - MEROCEL, EXPASYL

LECTURE TOPICS FOR 4th YEAR BDS :

SI.NO.	TOPICS
1	<p>ENDODONTICS</p> <p>DEFINITION, AIM & SCOPE OF ENDODONTICS</p>
2	<p>MAGNIFICATION AND ILLUMINATION DEFINITION</p> <p>ADVANTAGES OF MAGNIFICATION AND ILLUMINATION PARTS OF LOUPES</p> <p>USES OF LOUPES</p> <p>MISCONCEPTION OF MAGNIFICATION ERGONOMICS</p>

3	<p>RUBBER DAM IN DENTISTRY RUBBER DAM ISOLATION</p> <p>ADVANTAGES OF ISOLATION WITH RUBBER DAM PARTS OF RUBBER DAM</p> <p>TECHNIQUES OF RUBBER DAM APPLICATION-</p> <p>-SINGLE TOOTH ISOLATION</p> <p>-MULTIPLE TEETH/ ARCH ISOLATION</p>
4	<p>DISEASES OF PULP & PERIAPICAL TISSUES AND THEIR MANAGEMENT ETIOLOGY & PATHO-PHYSIOLOGY</p> <p>MANAGEMENT PULPAL AND PERIAPICAL DISEASES PULPITIS: REVERSIBLE & IRREVERSIBLE</p> <p>PULP NECROSIS</p> <p>PERIRADICULAR PERIODONTITIS, PERIRADICULAR ABSCESS</p> <p>PHOENIX ABSCESS, PERIAPICAL GRANULOMA & CYST, APICAL</p> <p>PERIODONTITIS CALCIFICATION: CAUSES, TYPES-DYSTROPIC, PULP STONES (TRUE & FALSE)</p>
5	<p>RATIONALE OF ENDODONTICS & PRINCIPLES, FISH'S THEORY (ZONES OF INFECTION) KRONFELD'S MOUNTAIN PASS THEORY</p>
6	<p>CLINICAL DIAGNOSTIC METHODS:</p> <p>CASE HISTORY RECORDING IN ENDODONTICS</p> <p>CLINICAL EXAMINATION USING VARIOUS DIAGNOSTIC TOOLS/AIDS DIAGNOSTIC AIDS:</p> <p>PULP TESTS: PULP SENSITIVITY: THERMAL & ELECTRIC PULP TEST (EPT)PULP VITALITY TESTS: PULSE OXIMETRY, LASER DOPPLER</p> <p>FLOWMETRY</p>
7	<p>DIAGNOSIS & MANAGEMENT OF OROFACIAL PAIN IN ENDODONTICS</p> <p>-CAUSES, TYPES</p> <p>PHARMACOLOGIC MANAGEMENT OF PULPAL & PERIAPICAL PAIN MANAGEMENT OF ENDODONTIC PAIN EMERGENCY</p> <p>NON-ODONTOGENIC TOOTH PAIN; REFERRED PAIN, PHANTOM PAIN, MPDS</p>
8	<p>CASE SELECTION & TREATMENT PLANNING IN ENDODONTICS: INDICATIONS AND CONTRA INDICATIONS OF ENDODONTICS THERAPY FACTORS INFLUENCING: LOCAL & SYSTEMIC FACTORS, TREATMENT OF VITAL/NON-VITAL PULP INFLAMED PULP</p>
9	<p>ENDODONTIC PRE-OPERATIVE CONSIDERATIONS:</p> <p>TOOTH ISOLATION: PRINCIPLES & RATIONALE, ARMAMENTARIUM, METHODS & AIDS IN RUBBER DAM PLACEMENT</p>

10	<p>ARMAMENTARIUM & STERILIZATION ENDODONTIC INSTRUMENTS:</p> <p>GENERAL CLASSIFICATION-HAND, ROTARY, ULTRASONIC/SONIC</p> <p>A) HAND INSTRUMENTS:</p> <p>STANDARDIZATION OF HAND/ENGINE DRIVEN INSTRUMENTS, BROACHES</p> <p>REAMERS</p> <p>K-FILES & H-FILES SPREADERS & PLUGGERS</p> <p>GATES-GLIDDEN & PEESO REAMER NICKEL TITANIUM</p> <p>b) ROTARY ENDODONTIC SYSTEMS: PROFILE, PRO-TAPER NEWER ROTARY ENDODONTIC SYSTEMS</p> <p>c) ULTRASONIC (ENDODONTIC) SONIC INSTRUMENTS MAINTENANCE: STERILIZATION & STORAGE OF ENDODONTIC INSTRUMENTS</p> <p>GLASS BEAD / HOT BEAD STERILIZER, AUTOCLAVE, GLUTERALDEHYDE, ETHYLENE OXIDE</p>
11	<p>MICROBIOLOGY IN ENDODONTICS</p> <p>PATHWAYS OF INFECTION MICROBIAL FLORA OF ROOT CANAL (INFECTED & NON-VITAL PULP) VARIOUS CULTURE TESTS/TECHNIQUES, CULTURE MEDIA, INTERPRETATION ANTIBIOTICS IN ENDODONTICS;</p> <p>SELECTION OF ANTIBIOTICS IN ENDODONTICS: PRINCIPLES, ANTIBIOTIC SENSITIVITY</p> <p>ANTIBIOTIC PROPHYLAXIS: AMA RECOMMENDATIONS COMPLICATIONS: ABSCESS, SPACE INFECTION & CELLULITIS; MANAGEMENT</p>
12	<p>TOOTH MORPHOLOGY & ACCESS CAVITY PREPARATION:</p> <p>A. ROOT CANAL ANATOMY: COMPONENTS OF THE ROOT CANAL SYSTEM.</p> <p>VARIATIONS IN ROOT CANAL CONFIGURATION: VERTUCCI'S CLASSIFICATION LATERAL & ACCESSORY CANALS APICAL FORAMEN, APICAL DELTA B. ACCESS CAVITY PREPARATION:</p> <ul style="list-style-type: none"> - OBJECTIVES & GUIDELINES(PRINCIPLES) - ISOLATION WITH RUBBER DAM: PURPOSE & ADVANTAGE <p>MECHANICAL PHASE OF ACCESS CAVITY PREPARATION ARMAMENTARIUM: MAGNIFICATION & ILLUMINATION ENDODONTIC HAND PIECES & ACCESS BURS</p> <p>ENDODONTIC EXPLORERS & ULTRASONIC TIPS ACCESS CAVITY PREPARATIONS</p> <p>ANTERIOR & POSTERIOR</p> <p>SPECIAL / CHALLENGING CASES: CALCIFIED, HEAVILY RESTORED TEETH ERRORS IN ACCESS CAVITY PREPARATION</p> <p>MORPHOLOGY & ACCESS CAVITY PREPARATION FOR INDIVIDUAL TEETH OUTLINE</p>

CLINICAL DEMONSTRATIONS

1. DIAGNOSTIC AIDS — VITALITY TESTS
2. ACCESS OPENING AND RUBBER DAM APPLICATIONS
3. WORKING LENGTH ESTIMATION—ELECTRONIC APEX LOCATORS
4. ENDODONTIC INSTRUMENTS
5. BIOMECHANICAL PREPARATION INCLUDING ROTARY ENDODONTICS
6. OBTURATION TECHNIQUE AND MATERIALS
7. ENDODONTIC SURGERY
8. POST ENDODONTIC RESTORATIONS INCLUDING POST AND CORE
9. COMPOSITE RESTORATIONS
10. LABORATORY FABRICATIONS OF CERAMIC AND METAL CERAMIC CROWNS

CLINICAL WORK

I.CASE HISTORY TAKING & MAINTAINING RECORDS
II.DEEP CARIES MANAGEMENT EXERCISE: PULP CAPPING
III.AMALGAM RESTORATIONS a) CLASS I - INCLUDING BUCCAL & LINGUAL EXTENSION b) CLASS II - MO/ DO & MOD
IV TOOTH COLORED RESTORATIONS a) GLASS IONOMER & COMPOSITE RESTORATIONS
V. ENDODONTIC EXERCISES ROOT CANAL TREATMENT -ANTERIOR TOOTH

ORAL AND MAXILLOFACIAL SURGERY

LECTURE TOPICS (COVERED IN 3rd YEAR BDS) -

I. INTRODUCTION -

- a) DEFINITION, HISTORY, INTRODUCTION, OBJECTIVES AND SCOPE.
- b) HISTORY TAKING, EXAMINATION OF THE PATIENTS, INVESTIGATIONS & DIAGNOSIS.

II. LOCAL ANESTHESIA

- a) NEUROLOGY OF FACIAL PAIN
- b) HISTORICAL ASPECTS, DEFINITION, TYPES OF L.A, INDICATIONS AND CONTRAINDICATION, ADVANTAGE & DISADVANTAGE.
- c) LOCAL ANESTHETIC DRUGS, CLASSIFICATION, IDEAL REQUIREMENTS OF L.A, COMPOSITION & ACTION.
- d) FACTORS TO BE CONSIDERED IN THE CHOICE OF PARTICULAR MODE OF ANESTHESIA.
- e) COMPLICATION OF L.A, ITS PREVENTION AND MANAGEMENT.
- f) MAXILLARY ANESTHESIA – TECHNIQUES , ANATOMY & COMPLICATIONS
- g) MANDIBULAR ANESTHESIS - TECHNIQUES , ANATOMY & COMPLICATIONS

III. EXODONTIA-

- a) GENERAL CONSIDERATIONS
- b) INDICATIONS & CONTRAINDICATIONS.
- c) METHODS OF EXTRACTIONS:
 - PRINCIPLES OF FORCEPS EXTRACTION.
 - INDICATIONS, PRINCIPLES AND SURGICAL PROCEDURE OF TRANS- ALVEOLAR EXTRACTION.
- d) PRINCIPLES AND USE OF ELEVATORS.
- e) COMPLICATIONS OF EXODONTIA AND MANAGEMENT.

LECTURE TOPICS (COVERED IN 4th YEAR BDS) -

I. IMPACTED TEETH-

- a) GENERAL FACTORS, INCIDENCE, ETIOLOGY, CLASSIFICATION, INDICATION FOR REMOVAL OF IMPACTED MOLARS
- b) ASSESSMENT: CLINICAL & RADIOLOGICAL.
- c) ANESTHETIC CONSIDERATIONS AND SURGICAL PROCEDURE.
- d) MAXILLARY THIRD MOLAR AND CANINE IMPACTIONS, INCIDENCE, INDICATION FOR REMOVAL, CLASSIFICATION, ASSESSMENT & LOCALIZATION, SURGICAL PROCEDURE.
- e) COMPLICATION OF SURGICAL REMOVAL OF IMPACTED TEETH SENT TO ENDODONTICS.

II. ENDODONTIC SURGERY-

- a) INTRODUCTION
- b) CLASSIFICATION
- c) APICOECTOMY
- d) REPLANTATION.

III. PRE-PROSTHETIC SURGERY–

- a) INTRODUCTION, AIMS OF PRE-PROSTHETIC SURGERY, CLASSIFICATION.
- b) CORRECTIVE PROCEDURES- HARD AND SOFT TISSUES.
- c) SULCUS EXTENSION PROCEDURES.
- d) RIDGE RECONSTRUCTION OR AUGMENTATION PROCEDURES.

IV. PRINCIPLES OF IMPLANTOLOGY

V. INFECTION OF ORAL CAVITY-

- a) INTRODUCTION.
- b) MICROBIOLOGY OF ODONTOGENIC INFECTIONS.
- c) ANATOMICAL CONSIDERATIONS AND FACIAL SPACES.
- d) SPREAD OF INFECTIONS.
- e) ACUTE DENTO-ALVEOLAR ABSCESS.
- f) ACUTE & CHRONIC INFECTIONS OF THE JAWS: CELLULITIS, LUDWIG'SANGINA, ACTINOMYCOSIS, OSTEOMYELITIS, OSTEORADIONECROSIS.
- g) MANAGEMENT OF INFECTIONS:
 - MEDICAL-ANTIBIOTICS, ANALGESICS, ANTI-INFLAMMATORY DRUGS-SURGICAL.
- h) HEPATITIS-B & H.I.V INFECTIONS.

VI. MAXILLARY SINUS DISEASES –

- a) APPLIED ANATOMY, ACUTE AND CHRONIC SINUSITIS, SURGICAL APPROACH TO SINUS.
- b) REMOVAL OF TOOTH OR ROOT FROM THE ANTRUM.
- c) ORO-ANTRAL FISTULA AND ITS MANAGEMENT.

VII. CYSTIC LESION OF THE JAWS –

- a) GENERAL FEATURES, DEFINITION, CLASSIFICATION.
- b) PATHOGENESIS, SIGNS & SYMPTOMS.
- c) CLINICAL, RADIOLOGICAL & OTHER INVESTIGATIONS.
- d) SURGICAL MANAGEMENT AND COMPLICATION OF EACH TYPE OF CYST.

VIII. DISORDERS OF TEMPORO MANDIBULAR JOINT(TMJ)–

- a) APPLIED ANATOMY.
- b) SUB-LUXATION & DISLOCATION OF THE TMJ.
- c) PAIN DYSFUNCTION SYNDROME.
- d) ANKYLOSIS OF THE JOINTS & MANAGEMENT.
- e) INFECTIONS OF THE TMJ.

IX. DISEASES OF SALIVARY GLANDS–

- a) GENERAL FEATURES, INVESTIGATIONS IN THE DIAGNOSIS OF SALIVARY GLAND DISEASES.
- b) ACUTE AND CHRONIC INFECTION.
- c) SALIVARY CALCULUS & ITS MANAGEMENT.
- d) TUMORS OF THE SALIVARY GLANDS & ITS MANAGEMENT.

X. NEUROGENIC DISORDERS –

- a) NERVE INJURIES.
- b) TRIGEMINAL NEURALGIA.
- c) GLOSSOPHARYNGEAL & FACIAL PARALYSIS.
- d) FACIAL NERVE PALSY

XI. FRACTURES OF THE JAWS–

- a) INTRODUCTION, APPLIED ANATOMY & TYPES OF FRACTURES.
- b) DENTO ALVEOLAR FRACTURES.
- c) MANDIBULAR FRACTURES:
 - CLASSIFICATION.
 - CLINICAL FEATURES & DIAGNOSIS –PRELIMINARY AND DEFINITIVE MANAGEMENT.
- d) ZYGOMATIC COMPLEX FRACTURES
- e) MIDDLE THIRD FRACTURES:
 - CLASSIFICATION.
 - CLINICAL FEATURES & DIAGNOSIS.
 - OUTLINE OF IMMEDIATE AND DEFINITIVE TREATMENT.
- f) ORBITAL FRACTURES
- g) NASAL FRACTURES
- h) ADVANCES IN MAXILLOFACIAL FRACTURE FIXATION

XII. DEVELOPMENTAL DEFORMITIES –

a) DEFORMITIES OF THE JAWS:

- BASIC FORMS OF DEFORMITIES, PROGNATHISM, RETROGNATHISM AND APERTOGNATHIA.
- REASONS FOR SURGICAL CORRECTION, PRE-OPERATIVE PLANNING.
- OUTLINE OF VARIOUS SURGICAL PROCEDURE IN MANDIBLE AND MAXILLA.

b) CLEFT LIP AND PALATE:

- ETIOLOGY, INCIDENCE, TIMING OF REPAIR.
- ROLE OF GENERAL DENTAL PRACTITIONER.

XIII. EMERGENCIES IN DENTAL PRACTICES

A) PRIMARY CARE OF MEDICAL EMERGENCIES IN DENTAL PRACTICE

- a) CARDIO-VASCULAR DISORDERS.
- b) RESPIRATORY DISORDERS.
- c) ENDOCRINE DISORDERS.
- d) DRUG ALLERGIES AND INTERACTIONS.

B) CPR , DEFIBRILLATION & TRACHEOSTOMY .

XIV. ORAL SURGICAL CONSIDERATIONS–

- a) SYSTEMIC DISEASES AND PATIENTS WITH MEDICALLY COMPROMISED CONDITIONS.
- b) IMMUNO COMPROMISED CONDITIONS, GERIATRIC PATIENTS.
- c) PREGNANT WOMAN.

XV. TUMORS OF THE ORAL CAVITY –

- a) GENERAL CONSIDERATIONS
- b) NON-ODONTOGENIC BENIGN TUMORS (FIBROMA, PAPILOMA, LIPOMA, OSSIFYING FIBROMA, MYXOMA)
- c) AMELOBLASTOMA
- d) CARCINOMA OF THE ORAL CAVITY
- e) BIOPSY
- f) TNM CLASSIFICATION
- g) OUTLINE OF MANAGEMENT OF CARCINOMA
- h) ROLE OF DENTAL SURGEONS IN EARLY DETECTION AND PREVENTION OF ORAL CANCER

XVI. RECENT ADVANCES –

- a) LASERS

- b) PIEZOSURGERY
- c) CRYOSURGERY
- d) STEM CELL AND TISSUE REGENERATION

CLINICAL EXERCISES :

1. CASE HISTORY TAKING & TREATMENT PLANNING IN MEDICALLY COMPROMISED PTNS
2. EXAMINATION OF THE PATIENT.
3. RECORDING BLOOD PRESSURE.
4. VARIOUS ANESTHETIC INJECTION TECHNIQUES.
5. USE OF DIFFERENT INSTRUMENT IN ORAL SURGERY.
6. CLOSED METHOD OF EXTRACTION (FORCEP EXTRACTION) – MINIMUM 80
7. TRANSALVEOLAR METHOD OF EXTRACTION – OBSERVE / ASSIST
8. IMPLANT SURGERY – OBSERVE / ASSIST
9. DEMONSTRATION OF CPR ON MANIKIN – OBSERVE & PERFORM
10. CLINICAL DISCUSSION ON –
 - i) MEDICALLY COMPROMISED PATIENTS ,
 - ii) DIAGNOSIS & TREATMENT PLANNING OF SWELLING & ORAL INFECTIONS.
 - iii) LOCAL ANESTHESIA TOXICITY
 - iv) EXTRAORAL RADIOGRAPHS

PEDIATRIC & PREVENTIVE DENTISTRY

LECTURE TOPICS FOR 3rd YEAR BDS :

1.	INTRODUCTION TO PEDIATRIC AND PREVENTIVE DENTISTRY DEFINITION, SCOPE, OBJECTIVES AND IMPORTANCE
2.	GROWTH AND DEVELOPMENT OF CRANIOFACIAL STRUCTURES - IMPORTANCE OF STUDY - PRENATAL AND POSTNATAL FACTORS IN GROWTH AND DEVELOPMENT - THEORIES OF GROWTH AND DEVELOPMENT - DEVELOPMENT OF MAXILLA AND MANDIBLE AND RELATED AGE CHANGES
3.	DEVELOPMENT OF OCCLUSION FROM BIRTH THROUGH ADOLESCENCE
4	DENTAL RADIOLOGY RELATED TO ENDODONTICS

5	DENTAL SURGICAL PROCEDURES IN CHILDREN
6	DENTAL CARIES <ul style="list-style-type: none"> - HISTORICAL BACKGROUND - DEFINITION, ETIOLOGY AND PATHOGENESIS - CARIES PATTERN IN PRIMARY, YOUNG PERMANENT AND PERMANENT TEETH IN CHILDREN - RAMPANT CARIES, EARLY CHILDHOOD CARIES AND EXTENSIVE CARIES. DEFINITION, ETIOLOGY, PATHOGENESIS, CLINICAL FEATURES, COMPLICATIONS AND MANAGEMENT - ROLE OF DIET AND NUTRITION IN DENTAL CARIES – DIETARY MODIFICATION AND DIET COUNSELING. - CARIES ACTIVITY TESTS, CARIES PREDICTION, CARIES SUSCEPTIBILITY
7	GINGIVAL AND PERIODONTAL DISEASES IN CHILDREN <ul style="list-style-type: none"> - NORMAL GINGIVA AND PERIODONTIUM IN CHILDREN - DEFINITION, ETIOLOGY, PATHOGENESIS - PREVENTION AND MANAGEMENT OF GINGIVAL AND PERIODONTAL DISEASES
8	CHILD PSYCHOLOGY <ul style="list-style-type: none"> - DEFINITION - THEORIES OF CHILD PSYCHOLOGY - PSYCHOLOGICAL DEVELOPMENT OF CHILD THROUGH ADOLESCENCE - PRINCIPLES OF PSYCHOLOGICAL GROWTH AND DEVELOPMENT WHILE MANAGING CHILD PATIENT - DENTAL FEAR AND ITS MANAGEMENT - FACTORS EFFECTING CHILD’S PSYCHOLOGY AND ITS CLINICAL APPLICATION.
9	BEHAVIOR MANAGEMENT. <ul style="list-style-type: none"> - DEFINITION - TYPES OF BEHAVIOR ENCOUNTERED IN THE DENTAL CLINIC - NON-PHARMACOLOGICAL AND PHARMACOLOGICAL METHODS OF BEHAVIOR MANAGEMENT.
10	PEDIATRIC OPERATIVE DENTISTRY <ul style="list-style-type: none"> - PRINCIPLES OF PEDIATRIC OPERATIVE DENTISTRY - MODIFICATIONS REQUIRED FOR CAVITY PREPARATION IN PRIMARY AND YOUNG PERMANENT TEETH - VARIOUS ISOLATION TECHNIQUES - RESTORATION OF PRIMARY AND YOUNG PERMANENT TEETH. - RESTORATIVE MATERIALS USED IN PEDIATRIC DENTISTRY.

11	PEDIATRIC ENDODONTICS <ul style="list-style-type: none"> - PRINCIPLES AND DIAGNOSIS - CLASSIFICATION OF PULPAL PATHOLOGY IN PRIMARY AND PERMANENT TEETH - MANAGEMENT OF PULPAL PATHOLOGY IN PRIMARY AND YOUNG PERMANENT TEETH
12.	TRAUMATIC INJURIES IN CHILDREN <ul style="list-style-type: none"> - CLASSIFICATION AND IMPORTANCE - SEQUELAE AND REACTION OF TEETH TO TRAUMA - MANAGEMENT OF TRAUMATIZED TEETH
13	PREVENTIVE AND INTERCEPTIVE ORTHODONTICS. <ul style="list-style-type: none"> - DEFINITION - PROBLEMS ENCOUNTERED DURING PRIMARY & MIXED DENTITION PHASES – THEIR MANAGEMENT - SERIAL EXTRACTIONS - SPACE MANAGEMENT
14	ORAL HABITS IN CHILDREN <ul style="list-style-type: none"> - DEFINITION, ETIOLOGY AND CLASSIFICATION - CLINICAL FEATURES; MANAGEMENT AND PREVENTION
15.	DENTAL CARE OF CHILDREN WITH SPECIAL CARE NEEDS <ul style="list-style-type: none"> - DEFINITION, ETIOLOGY, CLASSIFICATION, BEHAVIOURAL AND CLINICAL FEATURES AND MANAGEMENT OF CHILDREN WITH - PHYSICALLY HANDICAPPING CONDITIONS - MENTALLY COMPROMISING CONDITIONS - MEDICALLY COMPROMISING CONDITIONS - GENETIC DISORDERS
16.	CONGENITAL ABNORMALITIES IN CHILDREN -DEFINITION, CLASSIFICATION AND CLINICAL FEATURES AND MANAGEMENT
17.	DENTAL EMERGENCIES IN CHILDREN AND THEIR MANAGEMENT
18	DENTAL MATERIALS USED IN PEDIATRIC DENTISTRY
19	PREVENTIVE DENTISTRY <ul style="list-style-type: none"> - DEFINITION - PRINCIPLES AND SCOPE - TYPES OF PREVENTION & DIFFERENT PREVENTIVE MEASURES
20	DENTAL HEALTH EDUCATION AND SCHOOL DENTAL HEALTH PROGRAMME

21	FLUORIDES - HISTORICAL BACKGROUND - SYSTEMIC AND TOPICAL FLUORIDES & MECHANISM OF ACTION - TOXICITY AND MANAGEMENT - DEFLUORIDATION TECHNIQUES
22	CASE HISTORY RECORDING -OUTLINES OF PRINCIPLES OF EXAMINATION, DIAGNOSIS AND TREATMENT PLANNING
23.	SETTING UP OF PEDIATRIC CLINIC AND PRACTICE MANAGEMENT
24.	MEDICAL ETHICS
25.	INFANT ORAL HEALTH CARE
26.	SPORTS DENTISTRY
27	FORENSIC DENTISTRY
28	CHILD ABUSE
CLINICAL WORK FOR STUDENTS:	
1.	FABRICATION OF APPLIANCES • HAWLEY'S APPLIANCE • HABIT BREAKING APPLIANCE • ORAL SCREEN • SPACE MAINTAINER
3.	PARTICIPATING IN A SCHOOL DENTAL HEALTH PROGRAMME
4.	CASE HISTORY RECORDING AND TREATMENT PLANNING
5	ORAL PROPHYLAXIS
6	RESTORATION (SILVER AMALGAM, GLASS IONOMER, COMPOSITE RESTORATION) - NON-INVASIVE - INVASIVE
7	TOPICAL FLUORIDE APPLICATION
8	EXTRACTION OF DECIDUOUS TEETH

9	CLINICAL DEMONSTRATION 1. PULP THERAPY AND STAINLESS-STEEL CROWN FOR PRIMARY TEETH 2. FIXED SPACE MAINTAINERS, REGAINERS AND ERUPTION GUIDING APPLIANCE
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